Message

From: Hathaway, Margaret [Hathaway.Margaret@epa.gov]
Sent: 10/27/2020 7:26:14 PM
To: Jeffrey H Birk [jeffrey.birk@basf.com]; Dixon Monty USGR [monty.dixon@syngenta.com]; George Sabbagh [george.sabbagh@bayer.com]
CC: Echeverria, Marietta [Echeverria.Marietta@epa.gov]; Kenny, Daniel [Kenny.Dan@epa.gov]; Steven Callen [steven.callen@bayer.com]
Subject: RE: [EXT] RE: Concurrence Requested ASAP - Dicamba Bulletins Live Language

Thank you, Jeff.

Margaret Hathaway (Meg)
Senior Regulatory Specialist
U.S. Environmental Protection Agency
OCSPP: Office of Pesticide Programs
Registration Division – Herbicide Branch
hathaway.margaret@epa.gov
(703) 305-5076

From: Jeffrey H Birk <jeffrey.birk@basf.com>
Sent: Tuesday, October 27, 2020 3:25 PM
To: Hathaway, Margaret <Hathaway.Margaret@epa.gov>; Dixon Monty USGR <monty.dixon@syngenta.com>; George Sabbagh <george.sabbagh@bayer.com>
Cc: Echeverria, Marietta <Echeverria.Marietta@epa.gov>; Kenny, Daniel <Kenny.Dan@epa.gov>; Steven Callen <steven.callen@bayer.com>
Subject: RE: [EXT] RE: Concurrence Requested ASAP - Dicamba Bulletins Live Language

Hello Meg,

Not sure that you need to hear from BASF, but we understand the difference between the BLT and FIFRA language and concur.

Jeff

JEFFREY BIRK
Product Registration Manager

Phone: +1 919 547-2622, Mobile: +1-919-225-9220, Fax: +1 919 547-2850, Email: jeffrey.birk@basf.com
Postal Address: BASF Corporation, , 26 Davis Drive, 27709-3528 Research Triangle Park, United States

BASF
We create chemistry

BASF Corporation

From: Hathaway, Margaret <Hathaway.Margaret@epa.gov>
Sent: Tuesday, October 27, 2020 1:43 PM
To: Dixon Monty USGR <monty.dixon@syngenta.com>; George Sabbagh <george.sabbagh@bayer.com>
Cc: Echeverria, Marietta <Echeverria.Marietta@epa.gov>; Kenny, Daniel <Kenny.Dan@epa.gov>; Steven Callen

<steven.callen@bayer.com>; Jeffrey H Birk <jeffrey.birk@basf.com>
Subject: [EXT] RE: Concurrence Requested ASAP - Dicamba Bulletins Live Language

Thanks Monty for resending.

You are correct that the label statements and BLT language differs somewhat. This is purposeful. EFED did not perform an analysis to see if there are listed species on any fields except soy and cotton, and therefore EPA does not have an analysis to see if listed species could be on those fields if they were included in the buffers.

Margaret Hathaway (Meg)
Senior Regulatory Specialist
U.S. Environmental Protection Agency
OCSPP: Office of Pesticide Programs
Registration Division – Herbicide Branch
hathaway.margaret@epa.gov
(703) 305-5076

From: Dixon Monty USGR <monty.dixon@syngenta.com>
Sent: Tuesday, October 27, 2020 1:36 PM
To: Hathaway, Margaret <Hathaway.Margaret@epa.gov>; George Sabbagh <george.sabbagh@bayer.com>
Cc: Echeverria, Marietta <Echeverria.Marietta@epa.gov>; Kenny, Daniel <Kenny.Dan@epa.gov>; Steven Callen <steven.callen@bayer.com>; Jeffrey H Birk <jeffrey.birk@basf.com>
Subject: RE: Concurrence Requested ASAP - Dicamba Bulletins Live Language

Hello Meg,

The text is:

The following areas may be included in the buffer distance calculation when adjacent to field edges:

- Roads, paved or gravel surfaces, mowed grass areas, and areas of bare ground from recent plowing or grading that are contiguous to the treated field.
- Planted agricultural fields containing: corn, dicamba-tolerant cotton, dicamba-tolerant soybeans, sorghum, proso millet, small grains and sugarcane. If the applicator intends to include such crops as dicamba-tolerant cotton and/or dicamba-tolerant soybeans in the buffer distance calculation, the applicator must confirm the crops are in fact dicamba-tolerant and not conventional cotton and/or soybeans.
- Agricultural fields that have been prepared for planting.
- Areas covered by the footprint of a building, silo, or other man-made structure with walls and/or roof.

We are supportive of this language but just want to ensure the Agency is aware that the proposed BLT language is organized differently.

Thanks
Monty

From: Hathaway, Margaret <Hathaway.Margaret@epa.gov>
Sent: Tuesday, October 27, 2020 1:33 PM
To: Dixon Monty USGR <monty.dixon@syngenta.com>; George Sabbagh <george.sabbagh@bayer.com>
Cc: Echeverria, Marietta <Echeverria.Marietta@epa.gov>; Kenny, Daniel <Kenny.Dan@epa.gov>; Steven Callen

<steven.callen@bayer.com>; Jeffrey H Birk <jeffrey.birk@basf.com>
Subject: RE: Concurrence Requested ASAP - Dicamba Bulletins Live Language

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Hello Monty:
The image you included in your email appears to have been deleted by EPA's email server.

- Meg

From: Dixon Monty USGR <monty.dixon@syngenta.com>
Sent: Tuesday, October 27, 2020 1:28 PM
To: Hathaway, Margaret <Hathaway.Margaret@epa.gov>; George Sabbagh <george.sabbagh@bayer.com>
Cc: Echeverria, Marietta <Echeverria.Marietta@epa.gov>; Kenny, Daniel <Kenny.Dan@epa.gov>; Steven Callen <steven.callen@bayer.com>; Jeffrey H Birk <jeffrey.birk@basf.com>
Subject: RE: Concurrence Requested ASAP - Dicamba Bulletins Live Language

Hello Meg,

Thanks….just to clarify before I respond. It is my understanding the labels reads as follows. Should the BLT language match?

Thanks
Monty

From: Hathaway, Margaret <Hathaway.Margaret@epa.gov>
Sent: Tuesday, October 27, 2020 1:19 PM
To: George Sabbagh <george.sabbagh@bayer.com>
Cc: Dixon Monty USGR <monty.dixon@syngenta.com>; Echeverria, Marietta <Echeverria.Marietta@epa.gov>; Kenny, Daniel <Kenny.Dan@epa.gov>; Steven Callen <steven.callen@bayer.com>; Jeffrey H Birk <jeffrey.birk@basf.com>
Subject: Concurrence Requested ASAP - Dicamba Bulletins Live Language

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Dear George:

EPA requests concurrence asap with the following language regarding hooded sprayers for BLT language associated with the dicamba decision:

"To protect federally listed threatened and endangered species, both a 310-foot in-field wind-directional spray drift buffer and a 57-foot omnidirectional in-field buffer are required. **If applying with a qualified hooded sprayer**, both a 240-foot in-field wind-directional spray drift buffer and a 57-foot omnidirectional in-field buffer are required to protect federally listed threatened and endangered species. Please see **[URL]** for a list of qualified hooded sprayers.

The following areas may be included in the buffer distance composition when directly adjacent to the treated field edges:
• Roads, paved or gravel surfaces, mowed grassy areas adjacent to field, and areas of bare ground from recent plowing or grading that are contiguous with the treated field.
• Planted agricultural fields containing dicamba-resistant plantings of cotton and soybeans.
• Areas covered by the footprint of a building, silo, or other man made structure with walls and or roof."

Thank you,

Margaret Hathaway (Meg)
Senior Regulatory Specialist
U.S. Environmental Protection Agency
OCSPP: Office of Pesticide Programs
Registration Division – Herbicide Branch
hathaway.margaret@epa.gov
(703) 305-5076

ALL CONTENTS AND ATTACHMENTS TO THIS EMAIL CORRESPONDENCE ARE TO BE CONSIDERED DRAFT/INTERNAL/DELIBERATIVE ONLY, NOT TO BE SHARED UNLESS SPECIFICALLY AND EXPLICITLY STATED

This message may contain confidential information. If you are not the designated recipient, please notify the sender immediately, and delete the original and any copies. Any use of the message by you is prohibited. Syngenta seeks to preserve and promote competition and deter anticompetitive conduct. All our employees and partners are required to act in accordance with laws and Syngenta "Code of Conduct"

Message

From: Jeffrey H Birk [jeffrey.birk@basf.com]
Sent: 10/27/2020 7:25:09 PM
To: Hathaway, Margaret [Hathaway.Margaret@epa.gov]; Dixon Monty USGR [monty.dixon@syngenta.com]; George Sabbagh [george.sabbagh@bayer.com]
CC: Echeverria, Marietta [Echeverria.Marietta@epa.gov]; Kenny, Daniel [Kenny.Dan@epa.gov]; Steven Callen [steven.callen@bayer.com]
Subject: RE: [EXT] RE: Concurrence Requested ASAP - Dicamba Bulletins Live Language

Hello Meg,

Not sure that you need to hear from BASF, but we understand the difference between the BLT and FIFRA language and concur.

Jeff

JEFFREY BIRK
Product Registration Manager

Phone: +1 919 547-2622, Mobile: +1-919-225-9220, Fax: +1 919 547-2850, Email: jeffrey.birk@basf.com
Postal Address: BASF Corporation, , 26 Davis Drive, 27709-3528 Research Triangle Park, United States

We create chemistry

BASF Corporation

From: Hathaway, Margaret <Hathaway.Margaret@epa.gov>
Sent: Tuesday, October 27, 2020 1:43 PM
To: Dixon Monty USGR <monty.dixon@syngenta.com>; George Sabbagh <george.sabbagh@bayer.com>
Cc: Echeverria, Marietta <Echeverria.Marietta@epa.gov>; Kenny, Daniel <Kenny.Dan@epa.gov>; Steven Callen <steven.callen@bayer.com>; Jeffrey H Birk <jeffrey.birk@basf.com>
Subject: [EXT] RE: Concurrence Requested ASAP - Dicamba Bulletins Live Language

Thanks Monty for resending.

You are correct that the label statements and BLT language differs somewhat. This is purposeful. EFED did not perform an analysis to see if there are listed species on any fields except soy and cotton, and therefore EPA does not have an analysis to see if listed species could be on those fields if they were included in the buffers.

Margaret Hathaway (Meg)
Senior Regulatory Specialist
U.S. Environmental Protection Agency
OCSPP: Office of Pesticide Programs
Registration Division – Herbicide Branch
hathaway.margaret@epa.gov
(703) 305-5076

From: Dixon Monty USGR <monty.dixon@syngenta.com>
Sent: Tuesday, October 27, 2020 1:36 PM
To: Hathaway, Margaret <Hathaway.Margaret@epa.gov>; George Sabbagh <george.sabbagh@bayer.com>
Cc: Echeverria, Marietta <Echeverria.Marietta@epa.gov>; Kenny, Daniel <Kenny.Dan@epa.gov>; Steven Callen <steven.callen@bayer.com>; Jeffrey H Birk <jeffrey.birk@basf.com>
Subject: RE: Concurrence Requested ASAP - Dicamba Bulletins Live Language

Hello Meg,

The text is:

The following areas may be included in the buffer distance calculation when adjacent to field edges:

- Roads, paved or gravel surfaces, mowed grass areas, and areas of bare ground from recent plowing or grading that are contiguous to the treated field.
- Planted agricultural fields containing: corn, dicamba-tolerant cotton, dicamba-tolerant soybeans, sorghum, proso millet, small grains and sugarcane. If the applicator intends to include such crops as dicamba-tolerant cotton and/or dicamba-tolerant soybeans in the buffer distance calculation, the applicator must confirm the crops are in fact dicamba-tolerant and not conventional cotton and/or soybeans.
- Agricultural fields that have been prepared for planting.
- Areas covered by the footprint of a building, silo, or other man-made structure with walls and/or roof.

We are supportive of this language but just want to ensure the Agency is aware that the proposed BLT language is organized differently.

Thanks
Monty

From: Hathaway, Margaret <Hathaway.Margaret@epa.gov>
Sent: Tuesday, October 27, 2020 1:33 PM
To: Dixon Monty USGR <monty.dixon@syngenta.com>; George Sabbagh <george.sabbagh@bayer.com>
Cc: Echeverria, Marietta <Echeverria.Marietta@epa.gov>; Kenny, Daniel <Kenny.Dan@epa.gov>; Steven Callen <steven.callen@bayer.com>; Jeffrey H Birk <jeffrey.birk@basf.com>
Subject: RE: Concurrence Requested ASAP - Dicamba Bulletins Live Language

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Hello Monty:
The image you included in your email appears to have been deleted by EPA's email server.

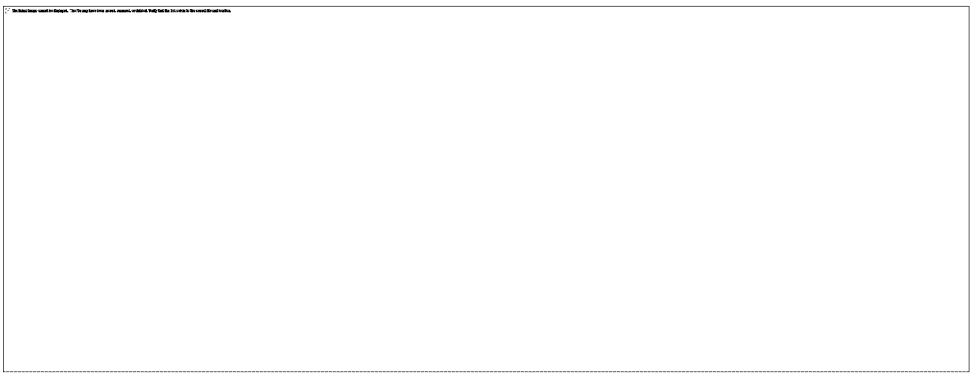
- Meg

From: Dixon Monty USGR <monty.dixon@syngenta.com>
Sent: Tuesday, October 27, 2020 1:28 PM
To: Hathaway, Margaret <Hathaway.Margaret@epa.gov>; George Sabbagh <george.sabbagh@bayer.com>
Cc: Echeverria, Marietta <Echeverria.Marietta@epa.gov>; Kenny, Daniel <Kenny.Dan@epa.gov>; Steven Callen <steven.callen@bayer.com>; Jeffrey H Birk <jeffrey.birk@basf.com>
Subject: RE: Concurrence Requested ASAP - Dicamba Bulletins Live Language

Hello Meg,

Thanks....just to clarify before I respond. It is my understanding the labels reads as follows. Should the BLT language match?

Thanks
Monty



From: Hathaway, Margaret <Hathaway.Margaret@epa.gov>
Sent: Tuesday, October 27, 2020 1:19 PM
To: George Sabbagh <george.sabbagh@bayer.com>
Cc: Dixon Monty USGR <monty.dixon@syngenta.com>; Echeverria, Marietta <Echeverria.Marietta@epa.gov>; Kenny, Daniel <Kenny.Dan@epa.gov>; Steven Callen <steven.callen@bayer.com>; Jeffrey H Birk <jeffrey.birk@basf.com>
Subject: Concurrence Requested ASAP - Dicamba Bulletins Live Language

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Dear George:
EPA requests concurrence asap with the following language regarding hooded sprayers for BLT language associated with the dicamba decision:

"To protect federally listed threatened and endangered species, both a 310-foot in-field wind-directional spray drift buffer and a 57-foot omnidirectional in-field buffer are required. **If applying with a qualified hooded sprayer**, both a 240-foot in-field wind-directional spray drift buffer and a 57-foot omnidirectional in-field buffer are required to protect federally listed threatened and endangered species. Please see **[URL]** for a list of qualified hooded sprayers.

The following areas may be included in the buffer distance composition when directly adjacent to the treated field edges:
• Roads, paved or gravel surfaces, mowed grassy areas adjacent to field, and areas of bare ground from recent plowing or grading that are contiguous with the treated field.
• Planted agricultural fields containing dicamba-resistant plantings of cotton and soybeans.
• Areas covered by the footprint of a building, silo, or other man made structure with walls and or roof."

Thank you,

Margaret Hathaway (Meg)
Senior Regulatory Specialist
U.S. Environmental Protection Agency

OCSPP: Office of Pesticide Programs
Registration Division – Herbicide Branch
hathaway.margaret@epa.gov
(703) 305-5076

ALL CONTENTS AND ATTACHMENTS TO THIS EMAIL CORRESPONDENCE ARE TO BE CONSIDERED DRAFT/INTERNAL/DELIBERATIVE ONLY, NOT TO BE SHARED UNLESS SPECIFICALLY AND EXPLICITLY STATED

This message may contain confidential information. If you are not the designated recipient, please notify the sender immediately, and delete the original and any copies. Any use of the message by you is prohibited. Syngenta seeks to preserve and promote competition and deter anticompetitive conduct. All our employees and partners are required to act in accordance with laws and Syngenta "Code of Conduct"

Message

From: Dixon Monty USGR [monty.dixon@syngenta.com]
Sent: 10/27/2020 5:57:16 PM
To: Hathaway, Margaret [Hathaway.Margaret@epa.gov]; George Sabbagh [george.sabbagh@bayer.com]
CC: Echeverria, Marietta [Echeverria.Marietta@epa.gov]; Kenny, Daniel [Kenny.Dan@epa.gov]; Steven Callen [steven.callen@bayer.com]; Jeffrey H Birk [jeffrey.birk@basf.com]
Subject: RE: Concurrence Requested ASAP - Dicamba Bulletins Live Language

Hello Meg,

Thanks for the clarification.

With Best Regards,
Monty

From: Hathaway, Margaret <Hathaway.Margaret@epa.gov>
Sent: Tuesday, October 27, 2020 1:43 PM
To: Dixon Monty USGR <monty.dixon@syngenta.com>; George Sabbagh <george.sabbagh@bayer.com>
Cc: Echeverria, Marietta <Echeverria.Marietta@epa.gov>; Kenny, Daniel <Kenny.Dan@epa.gov>; Steven Callen <steven.callen@bayer.com>; Jeffrey H Birk <jeffrey.birk@basf.com>
Subject: RE: Concurrence Requested ASAP - Dicamba Bulletins Live Language

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Thanks Monty for resending.

You are correct that the label statements and BLT language differs somewhat. This is purposeful. EFED did not perform an analysis to see if there are listed species on any fields except soy and cotton, and therefore EPA does not have an analysis to see if listed species could be on those fields if they were included in the buffers.

Margaret Hathaway (Meg)
Senior Regulatory Specialist
U.S. Environmental Protection Agency
OCSPP: Office of Pesticide Programs
Registration Division – Herbicide Branch
hathaway.margaret@epa.gov
(703) 305-5076

From: Dixon Monty USGR <monty.dixon@syngenta.com>
Sent: Tuesday, October 27, 2020 1:36 PM
To: Hathaway, Margaret <Hathaway.Margaret@epa.gov>; George Sabbagh <george.sabbagh@bayer.com>
Cc: Echeverria, Marietta <Echeverria.Marietta@epa.gov>; Kenny, Daniel <Kenny.Dan@epa.gov>; Steven Callen <steven.callen@bayer.com>; Jeffrey H Birk <jeffrey.birk@basf.com>
Subject: RE: Concurrence Requested ASAP - Dicamba Bulletins Live Language

Hello Meg,

The text is:

The following areas may be included in the buffer distance calculation when adjacent to field edges:

- Roads, paved or gravel surfaces, mowed grass areas, and areas of bare ground from recent plowing or grading that are contiguous to the treated field.
- Planted agricultural fields containing: corn, dicamba-tolerant cotton, dicamba-tolerant soybeans, sorghum, proso millet, small grains and sugarcane. If the applicator intends to include such crops as dicamba-tolerant cotton and/or dicamba-tolerant soybeans in the buffer distance calculation, the applicator must confirm the crops are in fact dicamba-tolerant and not conventional cotton and/or soybeans.
- Agricultural fields that have been prepared for planting.
- Areas covered by the footprint of a building, silo, or other man-made structure with walls and/or roof.

We are supportive of this language but just want to ensure the Agency is aware that the proposed BLT language is organized differently.

Thanks
Monty

From: Hathaway, Margaret <Hathaway.Margaret@epa.gov>
Sent: Tuesday, October 27, 2020 1:33 PM
To: Dixon Monty USGR <monty.dixon@syngenta.com>; George Sabbagh <george.sabbagh@bayer.com>
Cc: Echeverria, Marietta <Echeverria.Marietta@epa.gov>; Kenny, Daniel <Kenny.Dan@epa.gov>; Steven Callen <steven.callen@bayer.com>; Jeffrey H Birk <jeffrey.birk@basf.com>
Subject: RE: Concurrence Requested ASAP - Dicamba Bulletins Live Language

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Hello Monty:
The image you included in your email appears to have been deleted by EPA's email server.

- Meg

From: Dixon Monty USGR <monty.dixon@syngenta.com>
Sent: Tuesday, October 27, 2020 1:28 PM
To: Hathaway, Margaret <Hathaway.Margaret@epa.gov>; George Sabbagh <george.sabbagh@bayer.com>
Cc: Echeverria, Marietta <Echeverria.Marietta@epa.gov>; Kenny, Daniel <Kenny.Dan@epa.gov>; Steven Callen <steven.callen@bayer.com>; Jeffrey H Birk <jeffrey.birk@basf.com>
Subject: RE: Concurrence Requested ASAP - Dicamba Bulletins Live Language

Hello Meg,

Thanks....just to clarify before I respond. It is my understanding the labels reads as follows. Should the BLT language match?

Thanks
Monty

From: Hathaway, Margaret <Hathaway.Margaret@epa.gov>
Sent: Tuesday, October 27, 2020 1:19 PM
To: George Sabbagh <george.sabbagh@bayer.com>
Cc: Dixon Monty USGR <monty.dixon@syngenta.com>; Echeverria, Marietta <Echeverria.Marietta@epa.gov>; Kenny, Daniel <Kenny.Dan@epa.gov>; Steven Callen <steven.callen@bayer.com>; Jeffrey H Birk <jeffrey.birk@basf.com>
Subject: Concurrence Requested ASAP - Dicamba Bulletins Live Language

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Dear George:
EPA requests concurrence asap with the following language regarding hooded sprayers for BLT language associated with the dicamba decision:

"To protect federally listed threatened and endangered species, both a 310-foot in-field wind-directional spray drift buffer and a 57-foot omnidirectional in-field buffer are required. **If applying with a qualified hooded sprayer**, both a 240-foot in-field wind-directional spray drift buffer and a 57-foot omnidirectional in-field buffer are required to protect federally listed threatened and endangered species. Please see **[URL]** for a list of qualified hooded sprayers.

The following areas may be included in the buffer distance composition when directly adjacent to the treated field edges:
• Roads, paved or gravel surfaces, mowed grassy areas adjacent to field, and areas of bare ground from recent plowing or grading that are contiguous with the treated field.
• Planted agricultural fields containing dicamba-resistant plantings of cotton and soybeans.
• Areas covered by the footprint of a building, silo, or other man made structure with walls and or roof."

Thank you,

Margaret Hathaway (Meg)
Senior Regulatory Specialist
U.S. Environmental Protection Agency
OCSPP: Office of Pesticide Programs
Registration Division – Herbicide Branch
hathaway.margaret@epa.gov
(703) 305-5076

ALL CONTENTS AND ATTACHMENTS TO THIS EMAIL CORRESPONDENCE ARE TO BE CONSIDERED DRAFT/INTERNAL/DELIBERATIVE ONLY, NOT TO BE SHARED UNLESS SPECIFICALLY AND EXPLICITLY STATED

This message may contain confidential information. If you are not the designated recipient, please notify the sender immediately, and delete the original and any copies. Any use of the message by you is prohibited. Syngenta seeks to preserve and promote competition and deter anticompetitive conduct. All our employees and partners are required to act in accordance with laws and Syngenta "Code of Conduct"

Message

From: Hathaway, Margaret [Hathaway.Margaret@epa.gov]
Sent: 10/27/2020 5:43:25 PM
To: Dixon Monty USGR [monty.dixon@syngenta.com]; George Sabbagh [george.sabbagh@bayer.com]
CC: Echeverria, Marietta [Echeverria.Marietta@epa.gov]; Kenny, Daniel [Kenny.Dan@epa.gov]; Steven Callen [steven.callen@bayer.com]; Jeffrey H Birk [jeffrey.birk@basf.com]
Subject: RE: Concurrence Requested ASAP - Dicamba Bulletins Live Language

Thanks Monty for resending.

You are correct that the label statements and BLT language differs somewhat. This is purposeful. EFED did not perform an analysis to see if there are listed species on any fields except soy and cotton, and therefore EPA does not have an analysis to see if listed species could be on those fields if they were included in the buffers.

Margaret Hathaway (Meg)
Senior Regulatory Specialist
U.S. Environmental Protection Agency
OCSPP: Office of Pesticide Programs
Registration Division – Herbicide Branch
hathaway.margaret@epa.gov
(703) 305-5076

From: Dixon Monty USGR <monty.dixon@syngenta.com>
Sent: Tuesday, October 27, 2020 1:36 PM
To: Hathaway, Margaret <Hathaway.Margaret@epa.gov>; George Sabbagh <george.sabbagh@bayer.com>
Cc: Echeverria, Marietta <Echeverria.Marietta@epa.gov>; Kenny, Daniel <Kenny.Dan@epa.gov>; Steven Callen <steven.callen@bayer.com>; Jeffrey H Birk <jeffrey.birk@basf.com>
Subject: RE: Concurrence Requested ASAP - Dicamba Bulletins Live Language

Hello Meg,

The text is:

The following areas may be included in the buffer distance calculation when adjacent to field edges:

- Roads, paved or gravel surfaces, mowed grass areas, and areas of bare ground from recent plowing or grading that are contiguous to the treated field.
- Planted agricultural fields containing: corn, dicamba-tolerant cotton, dicamba-tolerant soybeans, sorghum, proso millet, small grains and sugarcane. If the applicator intends to include such crops as dicamba-tolerant cotton and/or dicamba-tolerant soybeans in the buffer distance calculation, the applicator must confirm the crops are in fact dicamba-tolerant and not conventional cotton and/or soybeans.
- Agricultural fields that have been prepared for planting.
- Areas covered by the footprint of a building, silo, or other man-made structure with walls and/or roof.

We are supportive of this language but just want to ensure the Agency is aware that the proposed BLT language is organized differently.

Thanks
Monty

From: Hathaway, Margaret <Hathaway.Margaret@epa.gov>
Sent: Tuesday, October 27, 2020 1:33 PM
To: Dixon Monty USGR <monty.dixon@syngenta.com>; George Sabbagh <george.sabbagh@bayer.com>
Cc: Echeverria, Marietta <Echeverria.Marietta@epa.gov>; Kenny, Daniel <Kenny.Dan@epa.gov>; Steven Callen <steven.callen@bayer.com>; Jeffrey H Birk <jeffrey.birk@basf.com>
Subject: RE: Concurrence Requested ASAP - Dicamba Bulletins Live Language

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Hello Monty:
The image you included in your email appears to have been deleted by EPA's email server.

- Meg

From: Dixon Monty USGR <monty.dixon@syngenta.com>
Sent: Tuesday, October 27, 2020 1:28 PM
To: Hathaway, Margaret <Hathaway.Margaret@epa.gov>; George Sabbagh <george.sabbagh@bayer.com>
Cc: Echeverria, Marietta <Echeverria.Marietta@epa.gov>; Kenny, Daniel <Kenny.Dan@epa.gov>; Steven Callen <steven.callen@bayer.com>; Jeffrey H Birk <jeffrey.birk@basf.com>
Subject: RE: Concurrence Requested ASAP - Dicamba Bulletins Live Language

Hello Meg,

Thanks....just to clarify before I respond. It is my understanding the labels reads as follows. Should the BLT language match?

Thanks
Monty

From: Hathaway, Margaret <Hathaway.Margaret@epa.gov>
Sent: Tuesday, October 27, 2020 1:19 PM
To: George Sabbagh <george.sabbagh@bayer.com>
Cc: Dixon Monty USGR <monty.dixon@syngenta.com>; Echeverria, Marietta <Echeverria.Marietta@epa.gov>; Kenny, Daniel <Kenny.Dan@epa.gov>; Steven Callen <steven.callen@bayer.com>; Jeffrey H Birk <jeffrey.birk@basf.com>
Subject: Concurrence Requested ASAP - Dicamba Bulletins Live Language

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Dear George:
EPA requests concurrence asap with the following language regarding hooded sprayers for BLT language associated with the dicamba decision:

"To protect federally listed threatened and endangered species, both a 310-foot in-field wind-directional spray drift buffer and a 57-foot omnidirectional in-field buffer are required. **If applying with a qualified hooded sprayer**, both a 240-foot in-field wind-directional spray drift buffer and a 57-foot omnidirectional in-field buffer are required to protect federally listed threatened and endangered species. Please see **[URL]** for a list of qualified hooded sprayers.

The following areas may be included in the buffer distance composition when directly adjacent to the treated field edges:
• Roads, paved or gravel surfaces, mowed grassy areas adjacent to field, and areas of bare ground from recent plowing or grading that are contiguous with the treated field.
• Planted agricultural fields containing dicamba-resistant plantings of cotton and soybeans.
• Areas covered by the footprint of a building, silo, or other man made structure with walls and or roof."

Thank you,

Margaret Hathaway (Meg)
Senior Regulatory Specialist
U.S. Environmental Protection Agency
OCSPP: Office of Pesticide Programs
Registration Division – Herbicide Branch
hathaway.margaret@epa.gov
(703) 305-5076

ALL CONTENTS AND ATTACHMENTS TO THIS EMAIL CORRESPONDENCE ARE TO BE CONSIDERED DRAFT/INTERNAL/DELIBERATIVE ONLY, NOT TO BE SHARED UNLESS SPECIFICALLY AND EXPLICITLY STATED

This message may contain confidential information. If you are not the designated recipient, please notify the sender immediately, and delete the original and any copies. Any use of the message by you is prohibited. Syngenta seeks to preserve and promote competition and deter anticompetitive conduct. All our employees and partners are required to act in accordance with laws and Syngenta "Code of Conduct"

Message

From: Dixon Monty USGR [monty.dixon@syngenta.com]
Sent: 10/27/2020 5:35:52 PM
To: Hathaway, Margaret [Hathaway.Margaret@epa.gov]; George Sabbagh [george.sabbagh@bayer.com]
CC: Echeverria, Marietta [Echeverria.Marietta@epa.gov]; Kenny, Daniel [Kenny.Dan@epa.gov]; Steven Callen [steven.callen@bayer.com]; Jeffrey H Birk [jeffrey.birk@basf.com]
Subject: RE: Concurrence Requested ASAP - Dicamba Bulletins Live Language

Hello Meg,

The text is:

The following areas may be included in the buffer distance calculation when adjacent to field edges:

- Roads, paved or gravel surfaces, mowed grass areas, and areas of bare ground from recent plowing or grading that are contiguous to the treated field.
- Planted agricultural fields containing: corn, dicamba-tolerant cotton, dicamba-tolerant soybeans, sorghum, proso millet, small grains and sugarcane. If the applicator intends to include such crops as dicamba-tolerant cotton and/or dicamba-tolerant soybeans in the buffer distance calculation, the applicator must confirm the crops are in fact dicamba-tolerant and not conventional cotton and/or soybeans.
- Agricultural fields that have been prepared for planting.
- Areas covered by the footprint of a building, silo, or other man-made structure with walls and/or roof.

We are supportive of this language but just want to ensure the Agency is aware that the proposed BLT language is organized differently.

Thanks
Monty

From: Hathaway, Margaret <Hathaway.Margaret@epa.gov>
Sent: Tuesday, October 27, 2020 1:33 PM
To: Dixon Monty USGR <monty.dixon@syngenta.com>; George Sabbagh <george.sabbagh@bayer.com>
Cc: Echeverria, Marietta <Echeverria.Marietta@epa.gov>; Kenny, Daniel <Kenny.Dan@epa.gov>; Steven Callen <steven.callen@bayer.com>; Jeffrey H Birk <jeffrey.birk@basf.com>
Subject: RE: Concurrence Requested ASAP - Dicamba Bulletins Live Language

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Hello Monty:
The image you included in your email appears to have been deleted by EPA's email server.

- Meg

From: Dixon Monty USGR <monty.dixon@syngenta.com>
Sent: Tuesday, October 27, 2020 1:28 PM
To: Hathaway, Margaret <Hathaway.Margaret@epa.gov>; George Sabbagh <george.sabbagh@bayer.com>
Cc: Echeverria, Marietta <Echeverria.Marietta@epa.gov>; Kenny, Daniel <Kenny.Dan@epa.gov>; Steven Callen

<steven.callen@bayer.com>; Jeffrey H Birk <jeffrey.birk@basf.com>
Subject: RE: Concurrence Requested ASAP - Dicamba Bulletins Live Language

Hello Meg,

Thanks....just to clarify before I respond. It is my understanding the labels reads as follows. Should the BLT language match?

Thanks
Monty

From: Hathaway, Margaret <Hathaway.Margaret@epa.gov>
Sent: Tuesday, October 27, 2020 1:19 PM
To: George Sabbagh <george.sabbagh@bayer.com>
Cc: Dixon Monty USGR <monty.dixon@syngenta.com>; Echeverria, Marietta <Echeverria.Marietta@epa.gov>; Kenny, Daniel <Kenny.Dan@epa.gov>; Steven Callen <steven.callen@bayer.com>; Jeffrey H Birk <jeffrey.birk@basf.com>
Subject: Concurrence Requested ASAP - Dicamba Bulletins Live Language

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Dear George:
EPA requests concurrence asap with the following language regarding hooded sprayers for BLT language associated with the dicamba decision:

"To protect federally listed threatened and endangered species, both a 310-foot in-field wind-directional spray drift buffer and a 57-foot omnidirectional in-field buffer are required. **If applying with a qualified hooded sprayer**, both a 240-foot in-field wind-directional spray drift buffer and a 57-foot omnidirectional in-field buffer are required to protect federally listed threatened and endangered species. Please see **[URL]** for a list of qualified hooded sprayers.

The following areas may be included in the buffer distance composition when directly adjacent to the treated field edges:
• Roads, paved or gravel surfaces, mowed grassy areas adjacent to field, and areas of bare ground from recent plowing or grading that are contiguous with the treated field.
• Planted agricultural fields containing dicamba-resistant plantings of cotton and soybeans.
• Areas covered by the footprint of a building, silo, or other man made structure with walls and or roof."

Thank you,

Margaret Hathaway (Meg)
Senior Regulatory Specialist
U.S. Environmental Protection Agency
OCSPP: Office of Pesticide Programs
Registration Division – Herbicide Branch
hathaway.margaret@epa.gov
(703) 305-5076

ALL CONTENTS AND ATTACHMENTS TO THIS EMAIL CORRESPONDENCE ARE TO BE CONSIDERED DRAFT/INTERNAL/DELIBERATIVE ONLY, NOT TO BE SHARED UNLESS SPECIFICALLY AND EXPLICITLY STATED

This message may contain confidential information. If you are not the designated recipient, please notify the sender immediately, and delete the original and any copies. Any use of the message by you is prohibited. Syngenta seeks to preserve and promote competition and deter anticompetitive conduct. All our employees and partners are required to act in accordance with laws and Syngenta "Code of Conduct"

Message

From: Hathaway, Margaret [Hathaway.Margaret@epa.gov]
Sent: 10/27/2020 5:12:41 PM
To: George Sabbagh [george.sabbagh@bayer.com]; Jeffrey H Birk [jeffrey.birk@basf.com]; Dixon Monty USGR [monty.dixon@syngenta.com]
CC: Kenny, Daniel [Kenny.Dan@epa.gov]; Thomas Orr [thomas.orr@bayer.com]; BCSReg_Archive [esepamailbox@bayer.com]; Echeverria, Marietta [Echeverria.Marietta@epa.gov]; Steven Callen [steven.callen@bayer.com]
Subject: RETRACTED - RE: Concurrence Requested ASAP: Bulletins Live Docs - PULAs - Dicamba

EPA REQUESTS THE RETRACTION OF THE EMAIL BELOW

From: Hathaway, Margaret
Sent: Tuesday, October 27, 2020 1:09 PM
To: George Sabbagh <george.sabbagh@bayer.com>; Jeffrey H Birk <jeffrey.birk@basf.com>; Dixon Monty USGR <monty.dixon@syngenta.com>
Cc: Kenny, Daniel <Kenny.Dan@epa.gov>; Thomas Orr <thomas.orr@bayer.com>; BCSReg_Archive <esepamailbox@bayer.com>; Echeverria, Marietta (Echeverria.Marietta@epa.gov) <Echeverria.Marietta@epa.gov>; Steven Callen <steven.callen@bayer.com>
Subject: Concurrence Requested ASAP: Bulletins Live Docs - PULAs - Dicamba

Hello George:
Regarding BLT language, the registrant-proposed language from last Friday is not acceptable to the Agency, but the text below is. Please provide concurrence as soon as possible.

"To protect federally listed threatened and endangered species, both a 310-foot in-field wind-directional spray drift buffer and a 57-foot omnidirectional in-field buffer are required. **If applying with a qualified hooded sprayer**, both a 240-foot in-field wind-directional spray drift buffer and a 57-foot omnidirectional in-field buffer are required to protect federally listed threatened and endangered species. Please see **[URL]** for a list of qualified hooded sprayers.

The following areas may be included in the buffer distance composition when directly adjacent to the treated field edges:
• Roads, paved or gravel surfaces, mowed and/or managed areas adjacent to field such as rights of way.
• Planted agricultural fields containing dicamba-resistant plantings of cotton and soybeans.
• Areas covered by the footprint of a building, silo, or other man made structure with walls and or roof."

Thank you,

Margaret Hathaway (Meg)
Senior Regulatory Specialist
U.S. Environmental Protection Agency
OCSPP: Office of Pesticide Programs
Registration Division – Herbicide Branch
hathaway.margaret@epa.gov
(703) 305-5076

ALL CONTENTS AND ATTACHMENTS TO THIS EMAIL CORRESPONDENCE ARE TO BE CONSIDERED DRAFT/INTERNAL/DELIBERATIVE ONLY, NOT TO BE SHARED UNLESS SPECIFICALLY AND EXPLICITLY STATED

From: George Sabbagh <george.sabbagh@bayer.com>
Sent: Friday, October 23, 2020 2:12 PM
To: Hathaway, Margaret <Hathaway.Margaret@epa.gov>; Jeffrey H Birk <jeffrey.birk@basf.com>; Dixon Monty USGR <monty.dixon@syngenta.com>; Steven Callen <steven.callen@bayer.com>
Cc: Kenny, Daniel <Kenny.Dan@epa.gov>; Thomas Orr <thomas.orr@bayer.com>; BCSReg_Archive

<esepamailbox@bayer.com>
Subject: RE: For Concurrence: Bulletins Live Docs - PULAs - Dicamba

Hi Meg,

The registrants (BASF, BAYER and Syngenta) reviewed the Live Bulletin documents you provided, and are asking to update the D1 section with the language below. The updates are to: (1) include hooded sprayer language, and (2) replace "Planted agricultural fields containing: corn, cotton, and soybeans." with "Planted agricultural fields containing crops for which dicamba has an approved use."

> *To protect federally listed threatened and endangered species, both a 310-foot in-field wind-directional spray drift buffer and a 57-foot omnidirectional in-field buffer are required.* ***If applying with a qualified hooded sprayer****, both a 240-foot in-field wind-directional spray drift buffer and a 57-foot omnidirectional in-field buffer are required to protect federally listed threatened and endangered species. Please see* ***[URL]*** *for a list of qualified hooded sprayers. Non-sensitive areas, defined below, may be included as part of all required buffers.*
>
> *Non-sensitive areas: The following areas may be included in the buffer distance calculation when directly adjacent to the treated field edges:*
>
> 1. *Roads, paved or gravel surfaces, mowed and/or managed areas adjacent to field such as rights-of-way.*
> 2. *Planted agricultural fields containing crops for which dicamba has an approved use.*
> 3. *Areas covered by the footprint of a building, silo, or other man-made structure with walls and/or roof.*

Please, let me know if you need additional information or have questions.

Freundliche Grüße / Best regards,

George Sabbagh, Ph.D.
Head Regulatory Engagements

Regulatory Engagement
Collaborating Across Organizations

Bayer US LLC
801 Pennsylvania Avenue, NW
Suite 900
Washington, DC 20004
Cel: +1 913 231 6291
E-mail: george.sabbagh@bayer.com
Web: http://www.bayercropscience.com

From: Hathaway, Margaret <Hathaway.Margaret@epa.gov>
Sent: Thursday, October 22, 2020 7:14 PM
To: George Sabbagh <george.sabbagh@bayer.com>; Jeffrey H Birk <jeffrey.birk@basf.com>; Dixon Monty USGR <monty.dixon@syngenta.com>
Cc: Kenny, Daniel <Kenny.Dan@epa.gov>
Subject: For Concurrence: Bulletins Live Docs - PULAs - Dicamba
Importance: High

Dear Dicamba Registrants:

Attached are files EPA plans to move forward with for posting to BLT in relation the dicamba registrations currently being considered by the Agency for use on dicamba-tolerant cotton and soybeans. **Concurrence is requested by noon tomorrow (Friday, October 23).**

EPA notes that the total number of counties with restrictions is 289. This is one county greater than previously noted because Palm Beach county, FL was inadvertently left off of the previous counts (it was included in 2018). Palm Beach county has minimal acreage of cotton grown, but it does include possible overlap with a listed species that could be affected.

Best regards,

Margaret Hathaway (Meg)
Senior Regulatory Specialist
U.S. Environmental Protection Agency
OCSPP: Office of Pesticide Programs
Registration Division – Herbicide Branch
hathaway.margaret@epa.gov
(703) 305-5076

ALL CONTENTS AND ATTACHMENTS TO THIS EMAIL CORRESPONDENCE ARE TO BE CONSIDERED DRAFT/INTERNAL/DELIBERATIVE ONLY, NOT TO BE SHARED UNLESS SPECIFICALLY AND EXPLICITLY STATED

The information contained in this e-mail is for the exclusive use of the intended recipient(s) and may be confidential, proprietary, and/or legally privileged. Inadvertent disclosure of this message does not constitute a waiver of any privilege. If you receive this message in error, please do not directly or indirectly use, print, copy, forward, or disclose any part of this message. Please also delete this e-mail and all copies and notify the sender. Thank you.

Message

From: Hathaway, Margaret [Hathaway.Margaret@epa.gov]
Sent: 10/27/2020 5:09:10 PM
To: George Sabbagh [george.sabbagh@bayer.com]; Jeffrey H Birk [jeffrey.birk@basf.com]; Dixon Monty USGR [monty.dixon@syngenta.com]
CC: Kenny, Daniel [Kenny.Dan@epa.gov]; Thomas Orr [thomas.orr@bayer.com]; BCSReg_Archive [esepamailbox@bayer.com]; Echeverria, Marietta [Echeverria.Marietta@epa.gov]; Steven Callen [steven.callen@bayer.com]
Subject: Concurrence Requested ASAP: Bulletins Live Docs - PULAs - Dicamba

Hello George:
Regarding BLT language, the registrant-proposed language from last Friday is not acceptable to the Agency, but the text below is. Please provide concurrence as soon as possible.

"To protect federally listed threatened and endangered species, both a 310-foot in-field wind-directional spray drift buffer and a 57-foot omnidirectional in-field buffer are required. **If applying with a qualified hooded sprayer**, both a 240-foot in-field wind-directional spray drift buffer and a 57-foot omnidirectional in-field buffer are required to protect federally listed threatened and endangered species. Please see **[URL]** for a list of qualified hooded sprayers.

The following areas may be included in the buffer distance composition when directly adjacent to the treated field edges:
• Roads, paved or gravel surfaces, mowed and/or managed areas adjacent to field such as rights of way.
• Planted agricultural fields containing dicamba-resistant plantings of cotton and soybeans.
• Areas covered by the footprint of a building, silo, or other man made structure with walls and or roof."

Thank you,

Margaret Hathaway (Meg)
Senior Regulatory Specialist
U.S. Environmental Protection Agency
OCSPP: Office of Pesticide Programs
Registration Division – Herbicide Branch
hathaway.margaret@epa.gov
(703) 305-5076

ALL CONTENTS AND ATTACHMENTS TO THIS EMAIL CORRESPONDENCE ARE TO BE CONSIDERED DRAFT/INTERNAL/DELIBERATIVE ONLY, NOT TO BE SHARED UNLESS SPECIFICALLY AND EXPLICITLY STATED

From: George Sabbagh <george.sabbagh@bayer.com>
Sent: Friday, October 23, 2020 2:12 PM
To: Hathaway, Margaret <Hathaway.Margaret@epa.gov>; Jeffrey H Birk <jeffrey.birk@basf.com>; Dixon Monty USGR <monty.dixon@syngenta.com>; Steven Callen <steven.callen@bayer.com>
Cc: Kenny, Daniel <Kenny.Dan@epa.gov>; Thomas Orr <thomas.orr@bayer.com>; BCSReg_Archive <esepamailbox@bayer.com>
Subject: RE: For Concurrence: Bulletins Live Docs - PULAs - Dicamba

Hi Meg,

The registrants (BASF, BAYER and Syngenta) reviewed the Live Bulletin documents you provided, and are asking to update the D1 section with the language below. The updates are to: (1) include hooded sprayer language, and (2) replace "Planted agricultural fields containing: corn, cotton, and soybeans." with "Planted agricultural fields containing crops for which dicamba has an approved use."

> *To protect federally listed threatened and endangered species, both a 310-foot in-field wind-directional spray drift buffer and a 57-foot omnidirectional in-field buffer are required.* ***If applying with a qualified hooded sprayer****,*

*both a 240-foot in-field wind-directional spray drift buffer and a 57-foot omnidirectional in-field buffer are required to protect federally listed threatened and endangered species. Please see **[URL]** for a list of qualified hooded sprayers. Non-sensitive areas, defined below, may be included as part of all required buffers.*

Non-sensitive areas: The following areas may be included in the buffer distance calculation when directly adjacent to the treated field edges:

1. *Roads, paved or gravel surfaces, mowed and/or managed areas adjacent to field such as rights-of-way.*
2. *Planted agricultural fields containing crops for which dicamba has an approved use.*
3. *Areas covered by the footprint of a building, silo, or other man-made structure with walls and/or roof.*

Please, let me know if you need additional information or have questions.

Freundliche Grüße / Best regards,

George Sabbagh, Ph.D.
Head Regulatory Engagements

Regulatory Engagement
Collaborating Across Organizations

Bayer US LLC
801 Pennsylvania Avenue, NW
Suite 900
Washington, DC 20004
Cel: +1 913 231 6291
E-mail: george.sabbagh@bayer.com
Web: http://www.bayercropscience.com

From: Hathaway, Margaret <Hathaway.Margaret@epa.gov>
Sent: Thursday, October 22, 2020 7:14 PM
To: George Sabbagh <george.sabbagh@bayer.com>; Jeffrey H Birk <jeffrey.birk@basf.com>; Dixon Monty USGR <monty.dixon@syngenta.com>
Cc: Kenny, Daniel <Kenny.Dan@epa.gov>
Subject: For Concurrence: Bulletins Live Docs - PULAs - Dicamba
Importance: High

Dear Dicamba Registrants:
Attached are files EPA plans to move forward with for posting to BLT in relation the dicamba registrations currently being considered by the Agency for use on dicamba-tolerant cotton and soybeans. **Concurrence is requested by noon tomorrow (Friday, October 23).**

EPA notes that the total number of counties with restrictions is 289. This is one county greater than previously noted because Palm Beach county, FL was inadvertently left off of the previous counts (it was included in 2018). Palm Beach county has minimal acreage of cotton grown, but it does include possible overlap with a listed species that could be affected.

Best regards,

Margaret Hathaway (Meg)
Senior Regulatory Specialist

U.S. Environmental Protection Agency
OCSPP: Office of Pesticide Programs
Registration Division – Herbicide Branch
hathaway.margaret@epa.gov
(703) 305-5076

ALL CONTENTS AND ATTACHMENTS TO THIS EMAIL CORRESPONDENCE ARE TO BE CONSIDERED DRAFT/INTERNAL/DELIBERATIVE ONLY, NOT TO BE SHARED UNLESS SPECIFICALLY AND EXPLICITLY STATED

The information contained in this e-mail is for the exclusive use of the intended recipient(s) and may be confidential, proprietary, and/or legally privileged. Inadvertent disclosure of this message does not constitute a waiver of any privilege. If you receive this message in error, please do not directly or indirectly use, print, copy, forward, or disclose any part of this message. Please also delete this e-mail and all copies and notify the sender. Thank you.

Message

From: Thomas Marvin [thomas.marvin@bayer.com]
Sent: 10/26/2020 11:19:35 PM
To: Echeverria, Marietta [Echeverria.Marietta@epa.gov]
CC: Kenny, Daniel [Kenny.Dan@epa.gov]; Nesci, Kimberly [Nesci.Kimberly@epa.gov]; Rosenblatt, Daniel [Rosenblatt.Dan@epa.gov]; Schmid, Emily [Schmid.Emily@epa.gov]
Subject: RE: New Draft Terms of Registration (Minus HRM)
Attachments: MASTER LABEL_XtendiMax_264-RERN_20201026_v2_redline.pdf; MASTER LABEL_XtendiMax_264-RERN_20201026_v2.pdf; Draft Terms of Registration - Bayer Rev 10-26-20 530pm.Revision.docx

All files attached with changes in redline. Changes limited to: edits discussed, typos, corrections, and minor clarifications. Please let me know if there is anything else you need from Bayer.

Thanks,

Tom

From: Thomas Marvin
Sent: Monday, October 26, 2020 6:55 PM
To: Echeverria, Marietta <Echeverria.Marietta@epa.gov>
Cc: Kenny, Daniel <Kenny.Dan@epa.gov>; Nesci, Kimberly <Nesci.Kimberly@epa.gov>; Rosenblatt, Daniel <Rosenblatt.Dan@epa.gov>; Schmid, Emily <Schmid.Emily@epa.gov>
Subject: RE: New Draft Terms of Registration (Minus HRM)

15 minutes, 20 tops.

From: Echeverria, Marietta <Echeverria.Marietta@epa.gov>
Sent: Monday, October 26, 2020 6:54 PM
To: Thomas Marvin <thomas.marvin@bayer.com>
Cc: Kenny, Daniel <Kenny.Dan@epa.gov>; Nesci, Kimberly <Nesci.Kimberly@epa.gov>; Rosenblatt, Daniel <Rosenblatt.Dan@epa.gov>; Schmid, Emily <Schmid.Emily@epa.gov>
Subject: Re: New Draft Terms of Registration (Minus HRM)

Tom, do you have an update?

Sent from my iPhone

> On Oct 26, 2020, at 5:35 PM, Thomas Marvin <thomas.marvin@bayer.com> wrote:
>
> Thanks Dan. We will get started now.
>
> Get Outlook for iOS
>
> ---
>
> **From:** Kenny, Daniel <Kenny.Dan@epa.gov>
> **Sent:** Monday, October 26, 2020 5:28:16 PM
> **To:** Thomas Marvin <thomas.marvin@bayer.com>
> **Cc:** Echeverria, Marietta <Echeverria.Marietta@epa.gov>; Nesci, Kimberly <Nesci.Kimberly@epa.gov>; Rosenblatt, Daniel <Rosenblatt.Dan@epa.gov>; Schmid, Emily <Schmid.Emily@epa.gov>
> **Subject:** New Draft Terms of Registration (Minus HRM)

Hi Tom. Sorry for the delay, there were questions from the team we had to work out before sending.

Here are the new draft terms. After you have dropped in the new HRM that we agreed upon, please send it back as soon as you can.

Thanks,
Dan

Daniel Kenny, Chief
Herbicide Branch
Registration Division
Office of Pesticide Programs
U.S. Environmental Protection Agency

The following draft terms of registration apply to XtendiMax with VaporGrip Technology (EPA File Symbol 264-RERN):

General Terms

1. The registration will expire on December 20, 2025.

Herbicide Resistance Management Plan

2. You must maintain, update and follow an Herbicide Resistance Management Plan (HRM) as described in Appendix D regarding ~~grower agreements,~~ field detection and remediation, education, evaluation, reporting, and best management practices (BMPs).

Tank Mixing, Spray Drift, and Volatility-Reduction Adjuvant Requirements

3. You must maintain a website at http://XtendiMaxapplicationrequirements.com. That website will include a list of products that have been tested pursuant to Appendix A and found, based upon such testing, not to adversely affect the spray drift properties of XtendiMax with VaporGrip Technology. The website will identify a testing protocol, consistent with Appendix A, that is appropriate for determining whether the tested product will adversely affect the drift properties of XtendiMax with VaporGrip Technology. The website must state that any person seeking to have a product added to the list of approved tank mix partners must perform a study either pursuant to the testing protocol identified on the website or another protocol that has been approved for the particular purpose by EPA, and must submit the test data and results, along with a certification that the studies were performed either pursuant to the testing protocols identified on the website or pursuant to another protocol(s) approved by EPA and that the results of the testing support adding the product to the list of products tested and found not to adversely affect the spray drift properties of XtendiMax with VaporGrip Technology, to Bayer. Bayer will determine whether the testing and results conform to the conditions prescribed in this protocol and, depending on the test conditions and results, will either post the product on the website at http://XtendiMaxapplicationrequirements.com or notify the third-party entity that the product did not meet the requirements for posting. Once notified by a third party, you will add appropriately certified products to the list no more than 90 days after you receive such notice. Testing of tank-mix products must be conducted in compliance with procedures as stated forth in Appendix A.
4. All test data relating to the impact of tank-mixing any product with XtendiMax with VaporGrip Technology on drift properties of XtendiMax with VaporGrip Technology generated by you or somebody working for you or submitted to Bayer by a third party, along with a certification indicating whether the study was performed either pursuant to the testing protocols identified on the website or pursuant to other protocols approved by EPA and whether the results of the testing support adding the product to the list of products tested and found not to adversely affect the spray drift properties of XtendiMax with VaporGrip Technology, must be retained by Bayer. Any and all such records must be submitted to the EPA's Office of Pesticide Programs upon request.
5. The prohibition of using products in a tank-mix with XtendiMax with VaporGrip Technology unless the product used is contained on the list http://XtendiMaxapplicationrequirements.com, and the identification of the website address, shall be included in educational and information materials developed for Bayer, including the materials identified in Appendix D, Section B(~~i~~).

6. Testing of any volatility-reduction adjuvant must be conducted in compliance with procedures as set forth in Appendices A and E. Any potential volatility-reduction adjuvant must demonstrate passing results for both wind tunnel testing as set forth in Appendix A and humidome testing set forth in Appendix E.
7. Bayer must maintain a Volatility-Reduction Adjuvant tab (may also be called Volatility Reduction Agent, pH-Buffering Adjuvant, or pH-Buffering Agent) on the website at http://XtendiMaxapplicationrequirements.com. The website must identify testing protocols, consistent with Appendices A and E. Products that have been tested pursuant to such testing protocol by Bayer and found, based upon such testing, to meet the passing requirements according to Appendices A and E may be added to the list of approved volatility-reduction adjuvant products on the website tab described above. Bayer must retain copies of all data and analysis from test performed by, or provided to, Bayer based on the Appendices A and E protocols. Upon the Agency's request, copies of such test data and analysis must be submitted to EPA's Office of Pesticide Programs, along with certification indicating whether the study was performed either pursuant to the testing protocols identified on the website or pursuant to other protocols approved by EPA and whether the results of the testing support adding the product(s) to the list of products tested and found to meet the passing requirements of the testing standard in Appendices A and E.
8. If a third party requests the addition of a volatility-reduction adjuvant, at the discretion of Bayer, the registrant will perform wind tunnel and humidome studies pursuant to the testing protocols in Appendices A and E or request the third-party to perform such studies. Should registrant decline to perform testing, the third-party entity or a testing facility on their behalf must perform a study pursuant to the testing protocol identified on the website and must submit to Bayer the test data and results, along with certification that the studies were performed pursuant to the testing protocols identified on the website and that the results of the testing support adding the product to the list of approved volatility-reduction adjuvants for XtendiMax with VaporGrip Technology. Bayer will determine whether the testing and results conform to the conditions prescribed in the protocols and, depending on the test conditions and results, will either post the product on the website at http://XtendiMaxapplicationrequirements.com or notify the third-party entity that the product did not meet the requirements for posting. Once notified by a third-party, you will add appropriately certified products to the list no more than 90 days after you receive such notice. Bayer will retain records related to this third-party testing and will supply these records to EPA upon their request.
9. The requirement that an approved volatility-reduction adjuvant must always be tank-mixed with XtendiMax with VaporGrip Technology, and the identification of the website address for http://XtendiMaxapplicationrequirements.com containing the list of approved volatility-reduction adjuvants shall be included in educational and information materials developed by or for Bayer, including materials identified in Appendix D, Section B(1).
10. So long as the XtendiMax registration continues to require use of a volatility-reduction adjuvant with every application, Bayer will:
    a. Take appropriate action(s) to ensure that a sufficient supply of VaporGrip Xtra or any other qualified volatility-reduction adjuvant is in the channels of trade for all XtendiMax applications each year, including quantities of XtendiMax contained in products produced by other registrants. To ensure the supply of qualified volatility-reduction adjuvant is sufficient throughout each season, Bayer will:
        i. Project and monitor distribution of XtendiMax
        ii. Monitor available VaporGrip Xtra/ volatility-reduction adjuvant in relevant channels of trade

iii. Make available additional supplies if needed to ensure sufficient quantities of VaporGrip Xtra/ volatility-reduction adjuvant are available to allow lawful application of the full quantity of XtendiMax that is available in the channels of trade; and

iv. Maintain capacity to produce additional VaporGrip Xtra/ volatility-reduction adjuvants (or to cause more VaporGrip Xtra/ volatility-reduction adjuvants to be produced) whenever any further need is anticipated.

b. Make arrangements through appropriate distribution networks to ensure that VaporGrip Xtra or other appropriate volatility-reduction adjuvants are timely available to applicators in all locations where XtendiMax will be applied, before any applicator would apply XtendiMax. Access to VaporGrip Xtra will either be through the same retail outlets as XtendiMax, or if necessary, in particular locations, available from other readily accessible sources. Registrant will timely make available to every applicator information on where VaporGrip Xtra can be ordered or purchased.

c. Ensure that all training materials clearly require the mandatory use of VaporGrip Xtra or another volatility-reduction adjuvant with every XtendiMax application. Work with State authorities to ensure that appropriate training occurs before any application of XtendiMax is made.

d. Registrant Recordkeeping: Bayer will keep records appropriate to document its compliance with its pH-buffering adjuvant quantity commitments. Bayer will make records available to EPA upon request.

Enhanced Reporting

Bayer must submit the information identified below to EPA's Office of Pesticide Programs under section 6(a)(2), or under 40 CFR 159.195, unless you have previously submitted that information to EPA's Office of Pesticide Programs. To the extent that this reporting requirement conflicts with or is more narrow than any reporting requirements of section 6(a)(2), 40 CFR part 159, or EPA's letter of March 27, 2020 pursuant to 40 CFR 159.195(c), the broader reporting requirement applies.

11. Information received by telephone or in writing regarding potential damage to non-target vegetation from use of dicamba during the 2021-2025 growing seasons regardless of any determination that the incident resulted from misuse (intentional or accidental). Information must be forwarded to EPA regardless of which dicamba product may have been used and/or whether or not the alleged damage resulted from a product being used according to label directions. Data must be organized by product and state to the extent practicable, and must include all available information regarding acreage involved, plant species involved, severity of damage, date and location (coordinates) of incident, known dicamba applications in vicinity of incident, location of application (coordinates), distance from application to incident, temperature and humidity data at time of application, and similar information received. Incident data must be submitted in narrative form and in a spreadsheet format. This information must be submitted with cumulative totals and be submitted annually by January 15 (beginning by January 15, 2022) and final report with all then available information due September 30, 2025.
12. Information received by telephone or in writing regarding reports of dicamba-resistant weeds, and cases of weed control failure and/or suspected resistance. All information must be forwarded to EPA regardless of which dicamba product may have been used and/or whether or not the alleged resistance occurred after an application made according to label directions. This information must be submitted annually by January 15 (beginning January 15, 2022) and final report with all then available information due September 30, 2025.
13. Any information received by Bayer or analysis conducted by Bayer finding that

foods/commodities contain dicamba residues that are not covered by a tolerance or exceed established tolerance levels. This information must be submitted annually by January 15 (beginning January 15,2022) and final report with all then available information due September 30, 2025.

Hooded Sprayer Qualification Requirement

14. Testing of hooded sprayers must be conducted in compliance with procedures as set forth in Appendix F.
15. If XtendiMax with VaporGrip Technology label provides for a reduced buffer when a qualified hooded sprayer is used, Bayer must maintain a hooded sprayer tab on the website at http://XtendiMaxapplicationrequirements.com identifying the qualified hooded sprayers. The website must identify a testing protocol, consistent with Appendix F, that is appropriate for determining whether spray drift of dicamba from the proposed hooded sprayer is equivalent to or less than (*i.e.*, not statistically greater than) that from the established baseline hooded sprayer in Appendix F. Hooded sprayers that have been tested pursuant to Appendix F by Bayer and found, based upon such testing, to reduce the spray drift of dicamba to a level that is equivalent to or less than that from the established baseline hooded sprayer identified in Appendix F may be added to the list of qualified hooded sprayers on the website tab described above. Bayer must retain copies of all data and analysis from tests performed by, or provided to, Bayer based on the Appendix F protocol. Upon the Agency's request, copies of such test data and analysis must be submitted to EPA's Office of Pesticide Programs, along with certification indicating whether the study was performed pursuant to the testing protocols identified on the website and whether the results of the testing support adding the tested hooded sprayer to the list of products tested and found to result in spray drift of dicamba to a level that is equivalent to or less than that from the established baseline hooded sprayer identified in Appendix F.
16. Additionally, the website must state that any other person or entity seeking to have a hooded sprayer added to Bayer's list of qualified hooded sprayers must contact Bayer prior to any testing for this purpose. At the discretion of Bayer, Bayer will either perform a study pursuant to the testing protocol herein or request the third-party to perform such study. Should Bayer decline to perform testing, the third-party entity or a testing facility on their behalf must perform a study pursuant to the testing protocol identified on the website and must submit to Bayer the test data and results, along with certification that the studies were performed pursuant to the testing protocol identified on the website and that the results of the testing support adding the hooded sprayer to the list of qualified hooded sprayers for dicamba. Bayer will certify that the testing and results conform to the conditions prescribed in this protocol and, pursuant to the test conditions and results, will either post the hooded sprayer on the website at http://XtendiMaxapplicationrequirements.com or notify the third-party entity that the hooded sprayer did not meet the requirements for posting. Bayer will retain records related to this third-party testing of hooded sprayers and will supply these records to EPA upon their request.
17. Dicamba application requirements when using qualified hooded sprayers, the listing of qualified hooded sprayers on the http://XtendiMaxapplicationrequirements.com website, and the identification of the website address shall be included in educational and information materials developed by or for Bayer, including the materials identified in Appendix D, Section B(i).

Appendix A

Testing of Tank Mix Products for Spray Drift Properties

Products proposed for tank-mixing with may be added to the list of products that will not adversely affect the spray drift properties of XtendiMax with VaporGrip Technology contained on the web site if a study is performed under the testing conditions set forth below; the test information is reported as set forth below; and the results are interpreted as set forth below and the interpretation supports adding the tested product to the list of products that will not adversely affect the spray drift properties of XtendiMax with VaporGrip Technology:

Testing Conditions

Spray chamber test using conditions described in ASTM E-2798-11; or Wind Tunnel test using conditions described in EPA Final Generic Verification Protocol for Testing Pesticide Application Spray Drift Reduction Technologies for Row and Field Crops (September, 2013)

Testing Media:	XtendiMax with VaporGrip Technology + XtendiMax with VaporGrip Technology Proposed Tank Mix Product
Test Nozzle:	Tee Jet® TTI 11004 at 63 psi
Number of Replicates:	3 for each tested medium

Reporting

Validation information as summarized in Appendix B

Full droplet spectrum to be reported for each replicate of each tested medium

Perform AGDISP (8.26) modeling run for each replicate droplet spectrum for each tested medium (AGDISP input parameters described in Appendix C)

Establish 110 foot (0.5 lb ae/A rate) spray drift deposition estimates from AGDISP run on each replicate for each tested medium

Establish mean and standard deviation of 110 foot (0.5 lb ae/A rate) deposition for the 3 replicates of each tested medium

One-tail (upper bound) t-test ($p=0.10$) to determine if proposed tank-mix product is statistically greater than XtendiMax with VaporGrip Technology 110 foot (0.5 lb ae/A rate) spray drift deposition.

Interpretation of Results

If mean 110 foot (0.5 lb ae/A rate) deposition for proposed tank-mix product is not statistically greater than mean 110 foot deposition for XtendiMax with VaporGrip Technology, proposed tank-mix product can be added to the list of products that will not adversely affect the spray drift properties of XtendiMax with VaporGrip Technology contained on the web site. If mean 110 foot (0.5 lb ae/A rate) deposition for proposed tank-mix product is statistically greater than mean 110 foot (0.5 lb ae/A rate) deposition

for XtendiMax with VaporGrip Technology, proposed tank-mix product cannot be added to the list of products on the web site.

Results from other testing protocols will be acceptable for adding products to the list of products that will not adversely affect the spray drift properties of XtendiMax with VaporGrip Technology provided that EPA has determined in writing that such other protocol is appropriate for such purpose.

Appendix B

Validation Criteria

a. Detailed information of instrument setting and measurements
- The distance from the nozzle tips to the laser settings
- Measurements of airspeed and flow rate of liquid

b. Detailed information of test substances
- Volume composition and density of XtendiMax with VaporGrip Technology formulation and tank mixes

c. Summary of the entire spray output distribution for each nozzle/tank mixes with statistical analysis of replicates.

d. Graphical outputs of Sympatec Helos laser diffraction particle size analyzer ~~FOR~~for individual

spectrum

e. Report of Dv0.1 (SD), Dv0.5 (SD), and DV0.9 (SD) as well as mean % fines of (< 141μmSD)

Appendix C

AGDISP Input Parameters

Parameter	Value	Comments
Application Method Section		
Method	Ground	
Nozzle Type	Flat fan (Default)	The direct use of the DSD overrides the use of "nozzle type"
Boom Pressure	63 psi	If nozzles/tank mixes were tested at 63 psi. It has to be consistent with tank mix as well as XtendiMax with VaporGrip Technology for both TeeJet® and AIXR nozzles
Release Height	3 ft	Default
Spray Lines	20	Default
Meteorology Section		
Wind Type	Single height	Default
Wind Speed	15 mph	Upper bound from label
Wind Direction	-90 deg	Worst-case and default
Temperature	65 F	Default
Relative Humidity	50%	Default
Surface Section		
Angles	0	Default
Canopy	None	Default
Surface Roughness	0.12 ft	Mean of "crops" cover type
Application Technique Section		
Nozzles	54, even spacing	Standard boom setup
DSD	From wind tunnel results, imported in library	
Atmospheric stability	Strong	Default
Swath Section		
Swath width	90 ft	Standard boom
Swath displacement	0 ft	Worst-case
Spray Material Section		
Spray volume rate	10 gal/A	From label
Volatile/nonvolatile fraction	M 1768 at 1.72% v/v	To calculate volatile/nonvolatile fraction in the tank mix for the model input, provide detailed information of the tested formulations and tank mixes. See sample calculation, below[1]

[1]The tested mixture was 1.72% (v/v) XtendiMax. XtendiMax has a density of 10.2 lb/gal and contains 42.8% (w/v) dicamba DGA salt (2.9 lb acid equivalent/gal).
For example, a 10-gallon batch would contain the following:
XtendiMax 1.71% * 10 gal = 0.172 gal ; 0.172 gal * 10.2 lb/gal = 1.753 lb
Water 10 gal (1280 fl oz) – 22 fl oz = 1258 fl oz = 82.0157 lb
Total weight 1.753 lb + 82.016 lb = 83.769 lb
Active ingredient fraction: 1.753 lb * 42.8% a.i. = 0.75 lb; 0.75 lb/83.769 lb = 0.00896 (dimensionless)
Non-volatile fraction: 0.00896/0.428 = 0.021 (dimensionless)

Commented [TM1]: 15 gal/A is what is on label, not 10.

Appendix D

HERBICIDE RESISTANCE MANAGEMENT PLAN

Bayer must develop a herbicide resistance management plan that includes all of the following elements: *(ADD TEXT HERE)*

A. Field Detection and Remediation Components:

1. Update and implement an education program for growers, as set forth under the "Educational / Informational Component," below, that identifies appropriate best management practices (BMPs), as set forth under the "Best Management Practices (BMPs) Component," below, to delay, contain, and/or control weed resistance. This plan must convey to growers the importance of complying with BMPs and addressing resistance concerns.
2. If any grower or user informs you of a lack of herbicide efficacy, then you or your representative must (unless denied access by the grower) evaluate the field for "likely resistance" to XtendiMax with VaporGrip Technology for each specific species for which lack of herbicide efficacy is reported by applying the criteria set forth in Norsworthy, *et al.*, "Reducing the Risks of Herbicide Resistance: Best Management Practices and Recommendations," Weed Science 2012 Special Issue: 31–62 (*hereinafter* "Norsworthy criteria")[1] in each specific state. If denied access, Bayer must document this denial of access ~~and provide records on request, including the location and contact information.~~

3. If Bayer ~~is informed~~ receives information of confirmed resistance to dicamba in a specific state for a specific weed species, then Bayer must immediately report such confirmation to EPA and applicable state and extension services. After that time, Bayer need no longer investigate new reports of lack of herbicide efficacy regarding that specific species in that specific state, but Bayer must continue to comply with A.2. above in regard to any other weed species in any such state and develop, submit to EPA, and implement a strategy to address the ongoing resistance. In addition, for each grower or user in any jurisdiction who reports a lack of efficacy, Bayer must continue to make available stewardship information about resistance management to the grower or user throughout their use of this product, regardless of whether resistance is confirmed.
4. Bayer must keep records of all field evaluations for "likely resistance" for a period of 3 years and make such copies available to EPA upon request.
5. In any case described in A.2. above where one or more of the Norsworthy criteria are met for a weed species not already confirmed to be resistant to dicamba in that specific state, Bayer must:

[1] The Norsworthy "likely herbicide resistance" criteria are: (1) failure to control a weed species normally controlled by the herbicide at the dose applied, especially if control is achieved on adjacent weeds; or (2) a spreading patch of uncontrolled plants of a particular weed species; or (3) surviving plants mixed with controlled individuals of the same species. The identification of any of these criteria in the field indicates that "likely herbicide resistance" is present.

Provide the grower with specific information and recommendations to control and contain likely resistant weeds, including retreatment and/or other non-chemical controls, as appropriate. If requested by grower, Bayer or its agent ~~must become actively involved in implementation of weed control measures/ and Bayer must provide to EPA upon request any written agreement provided to applicable customers.~~ will continue to provide information and recommendations in the implementation of weed control measures. At the time of the initial determination that one or more of the Norsworthy criteria are met, and prior to any application of alternative control practices, Bayer must request that the grower provide Bayer access to the relevant field(s) to collect sufficient specimens of the likely resistant weeds (potted specimens or seeds) to be able to effectively evaluate the suspected resistant weeds for resistance for further evaluation in the greenhouse or laboratory. Alternately, Bayer may request that the grower or user provide such specimens, at Bayer's expense. If access is granted, Bayer must promptly collect samples of the suspected resistant weeds if available. If viable specimens have been collected, Bayer must commence greenhouse or laboratory studies to confirm whether resistance is present as soon as practicable following sample collection.

B. Educational / Informational Component:

1. Bayer must develop, annually update, provide to EPA and make available to state and extension ~~agents~~ service, and implement an education program for growers and users that includes the following elements:
   a. The education program shall identify appropriate best management practices (BMPs), set forth under the "Best Management Practices (BMPs) Component," below, to delay, contain, and/or control weed resistance, and shall convey to growers the importance of complying with BMPs;
   b. The education program shall include at least one written communication regarding herbicide resistance management each year, directed to users of XtendiMax with VaporGrip Technology for use over-the-top on dicamba tolerant soybean or cotton; and
   c. Bayer must transmit the BMPs to all users of XtendiMax with VaporGrip Technology. In addition to the other requirements of these Terms and Conditions, this transmittal must describe to growers and users the commitments as described in section A.5 about investigations of suspected dicamba-resistant weeds.
   d. All Bayer herbicide sales representatives must have immediate access to the education program for distribution to growers, users, extension agents, neighboring landowners, and any other interested stakeholder.
2. Bayer must develop, annually update, provide to EPA, and implement an education program on label requirements for growers and users that includes the following elements:
   a. The education program must include information about how to determine the appropriate buffers so that users have a better understanding what constitutes a buffer on his/her field(s), and recommendations for weed control practices

in buffer zones. The education program must also include information on determination of sensitive areas and cutoff date restrictions.

b. Provide training on the use of broadcast hooded sprayers (e.g., what qualifies as hooded sprayer, appropriate uses, manufactures).
c. Training for sprayer cleanouts (before and after spraying as indicated on labels).
d. Training for Bulletins Live 2!.
e. Training on updated record keeping requirements.
f. Training should be modified to clearly prohibit the use of the dicamba products not intended for use on DT crops formulation for all application timings.
g. Training on the use of newly required pH buffering adjuvants (volatility-reduction adjuvants) and/or drift reduction adjuvants.
h. Training on how users/growers can report incidents and control failures to EPA and states.
i. Provide to EPA the original education program for dicamba users within three months of the issuance of this registration. Provide the educational materials to states that provide their own training. Provide any other stakeholder with educational materials upon request.

C. Evaluation Component:

1. Bayer will annually conduct a survey directed to users of XtendiMax with VaporGrip Technology for use over-the-top of dicamba tolerant soybean or cotton. This survey must be based on a statistically representative sample. The sample size and geographical resolution should be adequate to allow analysis of responses within regions, between regions, and across the United States. Bayer must submit the draft survey to EPA as well as the survey results. This survey shall evaluate, at a minimum, the following:
   a. Growers' and users' adherence to the terms of the XtendiMax with VaporGrip Technology Use Directions and Label Restrictions, if XtendiMax with VaporGrip Technology is used, and
   b. Whether growers have encountered any perceived issue with non-performance or lack of efficacy of XtendiMax with VaporGrip Technology and, if so, how growers have responded.
   c. Whether growers have reported any issues with non-performance of lack of efficacy of XtendiMax with VaporGrip Technology and how the company representatives have responded.
   d. A question asking about awareness of public records of resistance (e.g., any awareness of popular press or industry publications on dicamba resistance or suspected resistant biotypes).
   e. A question directed to asking about awareness of personal/neighbor reports of resistance.
   f. Application practices for dicamba product applied (rate, time, amount, etc.) to the fields planted with dicamba-resistant seed.
2. Utilize the results from the survey described in paragraph 1 of this section to annually review, and modify as appropriate for the upcoming growing season, the following elements of Bayer's resistance management plan:

a. Efforts aimed at achieving adoption of BMP's;
b. Responses to incidents of likely resistance and confirmed resistance; and
c. The education program and effectiveness of information dissemination. At the initiative of either EPA or Bayer, EPA and Bayer shall consult about possible modifications of the education program.

3. Bayer must annually report to EPA any changes to its resistance management plan made in response to survey results as provided in section D.1. ~~above~~below.

D. Reporting Component:

1. Submit annual reports to EPA by January 15 (beginning January 15, 2022) and final report with all then available information due September 30, 2025. Such reports shall include:
   a. Annual sales of XtendiMax with VaporGrip Technology by state and, if applicable, annual sales of (traited seed) by state, which shall be treated by EPA as confidential business information;
   b. The first annual report shall include the current education program and associated materials, and subsequent annual reports shall include updates of any aspect of the education program and associated materials that have materially changed since submission of the previous annual report, along with results of the survey as described in section C of this document;
   c. Summary of your efforts aimed at achieving implementation of BMP's by all growers and users;
   d. Summary of your determinations as to whether each reported lack of herbicide efficacy was "likely resistance," your follow-up actions taken, and, if available, the ultimate outcome (e.g., evaluation of success of additional weed control measures) regarding each case of "likely resistance." In the annual report, Bayer must list the cases of likely resistance by county and state.
   e. The results of the annual survey described in paragraph 1 under "Evaluation Component," above, including the extent to which growers are implementing herbicide resistance BMPs, and a summary of your annual review and possible modification – based on that survey – of the education program, , and response to reports of likely resistance, described in paragraph 2 under "Evaluation Component," above; and
   f. Summary of the status of any laboratory and greenhouse testing conducted pursuant to section A.5.~~e~~ following up on incidents of likely resistance, performed in the previous year. Data pertaining to such testing must be included in the annual reports. Any confirmed resistance will be reported through appropriate HRM channels, such as [HYPERLINK "http://www.weedscience.org"] or www.hracglobal.com.

   g. Report how many training sessions Bayer conducted, identifying

the dates, locations, and numbers of individuals trained per session. If Bayer supported or partnered with other entities to provide training, report the names of the entities and the number of training sessions conducted by each, identifying the dates, locations, and numbers of individuals trained per session.

Following your submission of the annual report, you shall meet with the EPA at EPA's request in order to evaluate and consider the information contained in the report.

E. Best Management Practices (BMPs) Component:

1. Best management practices (BMPs) must be identified in your education program. Growers and users must be advised of BMP's in product literature, educational materials and training. Bayer's transmittal of the BMPs must also describe to growers the commitments in this section of this document. Such BMPs must direct growers and users to scout fields before application to ensure proper weed identification and after application to confirm herbicide effectiveness, and that growers and users should report any incidence of lack of efficacy of this product against a particular weed species to Bayer or a Bayer representative.
2. The following are the additional elements and information that must be included in these BMPs:
   a. Regarding crop selection and cultural practices:
      i. Understand the biology of the weeds present.
      ii. Use a diversified approach toward weed management focused on preventing weed seed production and reducing the number of weed seeds in the soil seed-bank.
      iii. Emphasize cultural practices that suppress weeds by using crop competitiveness.
      iv. Plant into weed free fields, keep fields as weed free as possible, and note areas where weeds were a problem in prior seasons.
      v. Incorporate additional weed control practices whenever possible, such as mechanical cultivation, biological management practices, crop rotation, and weed-free crop seeds, aspart of an integrated weed control program.
      vi. Do not allow weed escapes to produce seeds, roots or tubers.
      vii. Manage weed seed at harvest and post-harvest to prevent a buildup of the weed seed-bank.
      viii. Prevent field-to-field and within-field movement of weed seed or vegetative propagules.
      ix. Thoroughly clean plant residues from equipment before leaving fields.
      x. Prevent an influx of weeds into the field by managing field borders.
      xi. Fields must be scouted before application to ensure that herbicides and application rateswill be appropriate for the weed species and weed sizes present.
      xii. Fields must be scouted after application to confirm herbicide effectiveness and to detect weed escapes.
      xiii. If resistance is suspected, treat weed escapes with an alternate mode of action

or use non-chemical methods to remove escapes.

b. Regarding herbicide selection:
   i. Use a broad spectrum soil applied herbicide with a mechanism of action that differs from this product as a foundation in a weed control program.
   ii. A broad spectrum weed control program should consider all of the weeds present in the field. Weeds should be identified through scouting and field history.
   iii. Difficult to control weeds may require sequential applications of herbicides with alternative mechanisms of action.
   iv. Fields with difficult to control weeds should be rotated to crops that allow the use of herbicides with alternative mechanisms of action.
   v. Apply full rates of this herbicide for the most difficult to control weed in the field. Applications should be made when weeds are at the correct size to minimize weed escapes.
   vi. Recommend the use of herbicides with multiple sites of action to manage resistance ~~not to use more than two applications in crop of this herbicide or any herbicide with the same mechanism of action, unless mixed with another mechanism of action herbicide with overlapping spectrum for the difficult to control weeds.~~
   vii. Report any incidence of lack of efficacy of this product against a particular weed species to Bayer or a Bayer representative.

Appendix E

Testing of Tank Mix Volatility-Reduction Adjuvants/Buffering Adjuvants Properties

Products proposed as [volatility-reduction adjuvants/buffering adjuvants] may be added to the list of approved products on http://XtendiMaxapplicationrequirements.com website if found, based upon such testing, that the Test Mixture results in a humidome airborne dicamba concentration are comparable to or less than the established Testing Standard as defined below.

Testing Conditions

Humidome test using conditions based on ASTM STP1587*, such as those outlined below. Testing is not required to be performed to GLP standards, but are expected to be well documented and validated, with associated record retention for potential future reference.

Testing Standard: [Dicamba Product] + Roundup PowerMAX + VaporGrip Xtra or Sentris (0.5 lb a.e./A + 1.125 lb a.e. glyphosate/A + XXX use rate)

Test Mixture: [Dicamba Product] + Roundup PowerMAX + Buffering Adjuvant (0.5 lb a.e. dicamba/A + 1.125 lb a.e. glyphosate/A + XXX use rate)
Water carrier rate: 15 GPA
Normal plastic humidome as specified in ASTM STP1587

Treated substrate: soil/soil blend as specified in ASTM STP1587 with 12-22% moisture

Temperature: 35 ± 5° C
Relative humidity: 40 ± 5% RH

Sample collection duration: 24 hours

Air sampling rate: 1.5-3.0 L/min

Air sampling filter: any substrate validated to capture >95% of dicamba (*e.g.*, fiberglass mesh + cotton pad, cellulose + PUF, MCE)

Replications: 3 minimum

Analysis: A one-tail (upper-bound) t-test ($\alpha = 0.10$) performed for all test mixtures relative to testing standard.

Passing result: If the Test Mixture mean was not statistically greater than that of the Testing Standard, then the [volatilityreduction adjuvant/buffering adjuvant] in the Test Mixture demonstrated the ability to reduce volatility equivalent to or better than that of [VaporGrip Xtra/Sentris].

---

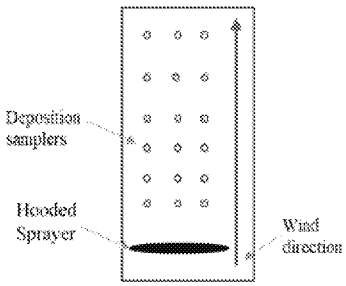
* Gavlick, W.K., D.R. Wright, A. MacInnes, J.W. Hemminghaus, J.K. Webb, V.I. Yermolenka, W. Su. 2016. A Method to Determine the Relative Volatility of Auxin Herbicide Formulations, Pesticide Formulation and Delivery Systems: 35th Volume, ASTM STP1587. pp. 24-32G. R. Goss, Ed. ASTM International, West Conshohocken, PA.

Appendix F

Protocol for Testing of Hooded Sprayers to Qualify for Reduced Downwind Spray Buffer Distances when Applying XtendiMax with VaporGrip Technology

Hooded sprayers proposed for in-crop (over-the-top) dicamba applications may be added to the list of qualified hooded sprayers on http://XtendiMaxapplicationrequirements.com website if found, based upon such testing, that it reduces the spray drift of dicamba to a level that is equivalent to or less than that from the established baseline hooded sprayer as defined below.

Testing Conditions



Testing is to be conducted in an Ambient Breeze Tunnel (ABT) controlled environment wind tunnel using the conditions outlined below, with guidance from US EPA (2016)[1]. A section of a hooded sprayer must be placed in the tunnel with the boom length perpendicular to the wind direction. Absorbent pads must line the floor of the ABT to prevent droplet bounce. Dicamba deposition samples must be collected at pre-determined distances downwind from the sprayer. After a 2-minute clear-out period, samples must be retrieved from the farthest to the closest distances relative to the sprayer for subsequent residue analysis to quantify dicamba deposition. Testing conditions are established herein with the express purpose of producing and comparing drift deposition curves between a baseline and a proposed hooded sprayer and are therefore not intended to be representative of field conditions.

Testing is not required to be performed to GLP standards but is expected to be well-documented and validated, with associated record retention for potential future reference. Results of testing must include a certification indicating whether the study was performed pursuant to this protocol and any deviations from it, and a conclusion stating whether the product tested meets the Passing Result criterion specified below.

Spray components:	Clarity® + Induce (0.5 lb a.e./A + 0.25% v/v)
Baseline hooded sprayer:	RedBall® 642E
Hooded sprayer tested:	TBD
Boom Configuration:	Contain a minimum of 4 nozzles with spacing according to manufacturer's use directions; fixed position; length perpendicular to wind direction; rear curtain of hood 3 inches above a simulated crop and, at the same boom height, above bare ground

[1] United States Environmental Protection Agency. 2016. Generic Verification Protocol for Testing Pesticide Application Spray Drift Reduction Technologies for Row and Field Crops

Nozzle/pressure:	TT 11003 at 50 psi
Spray rate:	15 GPA
Spray duration:	30 seconds
Wind speed:	Minimum 10 mph
Temperature:	10-35°C
Humidity:	20-80%
Deposition samplers:	Filter paper on blocks 3-in above ground
Number of samplers:	Minimum 3 at each downwind distance
Sampler distances:	Minimum 6 downwind distances for analysis purposes; distances should follow a geometric distribution (*e.g.*, 2, 4, 8, 20, 30, 60, and 120 feet) and cover out to 120 feet but may vary based on study considerations.
Drift simulations:	Minimum 3 per hooded sprayer
Analytical analysis:	Conducted per latest version of analytical method ME-1871 or another validated method[2]
Analysis:	Appropriate non-linear and/or generalized linear models will be fit to the drift deposition measurements of each hooded sprayer evaluated. After an appropriate model is selected, deposition estimates will be made at 2, 4, 8, 20, 30, 60, and 120 feet for both the baseline and proposed hooded sprayer. The boom orientation (crop canopy or bare ground) that gives the highest overall deposition for the baseline sprayer will be used for analysis. Deposition for the baseline hooded sprayer must be determined for each day's test in the ABT.
Passing result:	If a comparison of the deposition values for the proposed hooded sprayer to the baseline hooded sprayer at 20 feet, using a one-tailed t-test (assuming equal variances, upper bound, alpha=0.10), is not statistically different, then the proposed hooded sprayer functions equivalent to the baseline hooded sprayer.

[2] A study conducted with a validated analytical method other than ME-1871 must be accompanied with a report containing the environmental chemistry method, describing in full the analytical method that was used and validated, as well as an independent laboratory validation of the method.

RESTRICTED USE PESTICIDE
To be used by certified applicators only; NOT to be used by uncertified persons working under the supervision of a certified applicator, except that uncertified persons may transport containers.

This labeling expires on 12/20/2025. DO NOT use or distribute this product after 12/20/2025.

DICAMBA	GROUP	4	HERBICIDE

XtendiMax® With VaporGrip® Technology

ABN: M1768 Herbicide

For weed control in cotton with XtendFlex® Technology (dicamba-tolerant cotton) and soybean with Roundup Ready 2 Xtend® Technology or XtendFlex® Technology (dicamba-tolerant soybean).

XtendiMax® With VaporGrip® Technology is approved by U.S. EPA for use in dicamba-tolerant cotton and dicamba-tolerant soybeans only in the following states, subject to county restrictions as noted: Alabama, Arkansas, Arizona, Colorado, Delaware, Florida (excluding Palm Beach County), Georgia, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maryland, Michigan, Minnesota, Mississippi, Missouri, Nebraska, New Jersey, New Mexico, New York, North Carolina, North Dakota, Oklahoma, Ohio, Pennsylvania, South Carolina, South Dakota, Tennessee (excluding Wilson County), Texas, Virginia, West Virginia, Wisconsin.

Check the registration status of each product in each state before using.

ACTIVE INGREDIENT: Dicamba
Diglycolamine salt of dicamba (3,6-dichloro-*o*-anisic acid)* **42.80%**
OTHER INGREDIENTS: **57.20%**
TOTAL: **100.00%**
*Contains 29.0% 3,6-dichloro-*o*-anisic acid (2.9 pounds acid equivalent per U.S. gallon or 350 grams per liter)

EPA Reg. No. 264-RERN **EPA Est. No.**

CAUTION
KEEP OUT OF REACH OF CHILDREN

For MEDICAL and TRANSPORTATION Emergencies ONLY Call 24 Hours a Day 1-800-334-7577

For PRODUCT USE Information Call 1-866-99BAYER (1-866-992-2937)

For Incidence of Non-performance or Off-Target Movement or for Questions Regarding Buffer Requirements or Sensitive Crop Registries Call 1-844-RRXTEND (1-844-779-8363)

Please refer to [back panel] [booklet] for additional precautionary statements and directions for use. [Note to reviewer: Location of additional precautionary statements and directions for use will vary between those listed, depending on container type/size.]

Net Contents:

FIRST AID	
IF IN EYES:	• Hold eye open and rinse slowly and gently with water for 15 to 20 minutes. • Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. • Call a poison control center or doctor for treatment advice.

IF SWALLOWED:	• Call a poison control center or doctor immediately for treatment advice. • Have person sip a glass of water if able to swallow. • DO NOT induce vomiting unless told to do so by a poison control center or doctor. • DO NOT give anything by mouth to an unconscious person.
IF ON SKIN OR CLOTHING:	• Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15 to 20 minutes. • Call a poison control center or doctor for treatment advice.
In case of emergency, call the toll-free Bayer Emergency Response telephone number: 1-800-334-7577. Have the product container or label with you when calling a poison control center or doctor or when going for treatment.	

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION

- Causes moderate eye irritation.
- Avoid contact with eyes or clothing.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

All mixers, loaders, applicators, and other handlers must wear:

- Long-sleeved shirt and long pants
- Waterproof gloves
- Shoes plus socks

Follow the manufacturer's instructions for cleaning and maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

ENGINEERING CONTROLS

When handlers use closed systems, or enclosed cabs in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240 (d) (4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

IMPORTANT: When reduced PPE is worn because a closed system is being used, handlers must be provided all PPE specified above for "all mixers, loaders, applicators, and other handlers" and have such PPE immediately available for use in an emergency, such as a spill or equipment breakdown.

USER SAFETY RECOMMENDATIONS
User should: • Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet. • Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. • Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

ENVIRONMENTAL HAZARDS

DO NOT apply directly to water, or to areas where surface water is present, or to intertidal areas below the mean high-water mark. DO NOT contaminate water when disposing of equipment washwaters or rinsate. Apply this product only as directed on the label.

Ground Water Advisory: This chemical is known to leach through soil into ground water under certain conditions as a result of agricultural use. Use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in ground water contamination.

GROUND AND SURFACE WATER PROTECTION

Point source contamination: To prevent point source contamination, DO NOT mix or load this pesticide product within 50 feet of wells (including abandoned wells and drainage wells), sink holes, perennial or intermittent streams and rivers, and natural or impounded lakes and reservoirs. DO NOT apply pesticide product within 50 feet of wells. This setback does not apply to properly capped or plugged abandoned wells and does not apply to impervious pad or properly diked mixing/loading areas as described below.

Mixing, loading, rinsing, or washing operations performed within 50 feet of a well are allowed only when conducted on an impervious pad constructed to withstand the weight of the heaviest load that may be on or move across the pad. The pad must be self-contained to prevent surface water flow over or from the pad. The pad capacity must be maintained at 110% that of the largest pesticide container or application equipment used on the pad and have sufficient capacity to contain all product spills, equipment or container leaks, equipment washwaters, and rainwater that may fall on the pad. The containment capacity does not apply to vehicles delivering pesticide shipments to the mixing/loading site. States may have in effect additional requirements regarding wellhead setbacks and operational containment.

Care must be taken when using this product to prevent: a) back siphoning into wells, b) spills, or c) improper disposal of excess pesticide, spray mixtures, or rinsates. Check valves or anti-siphoning devices must be used on all mixing equipment.

Movement by surface runoff or through soil: DO NOT apply under conditions that favor runoff. DO NOT apply if soil is saturated with water or when rainfall that may exceed soil field capacity is forecasted to occur within 48 hours.

Under some conditions, dicamba has the potential for runoff several days after application. Poorly draining, wet, or erodible soils with readily visible slopes toward adjacent sensitive areas are more prone to produce runoff. When used on erodible soils, best management practices for minimizing runoff should be employed. Consult your local Soil Conservation Service for recommendations in your use area.

Ground water contamination may occur in areas where soils are permeable or coarse and ground water is near the surface. DO NOT apply to impervious substrates such as paved or highly compacted surfaces in areas with high potential for ground water contamination. DO NOT apply to soils classified as sand with less than 3% organic matter and where ground water depth is shallow.

Movement by water erosion of treated soil: DO NOT apply or incorporate this product through any type of irrigation equipment nor by flood or furrow irrigation. Ensure treated areas have received at least one-half inch rainfall (or irrigation) before using tailwater for subsequent irrigation of other fields.

PROTECTING ENDANGERED SPECIES / PESTICIDE USE LIMITATION AREAS

The use of any pesticide in a manner that may kill or otherwise harm an endangered species or adversely modify their habitat is a violation of federal law. Use of this product in a manner inconsistent with its labeling may pose a hazard to endangered or threatened species. **When using this product, you must follow the measures contained in the Endangered Species Protection Bulletin for the area in which you are applying the product.** To obtain Bulletins, no more than six months before using this product, consult https://www.epa.gov/endangered-species/bulletins-live-two-view-bulletins or call 1-844-447-3813. You must use the Bulletin valid for the month in which you will apply the product.

It is a Federal offense to use any pesticide in a manner that results in the death of an endangered species.

PHYSICAL OR CHEMICAL HAZARDS

DO NOT store or heat near oxidizing agents as a hazardous chemical reaction may occur.

DIRECTIONS FOR USE

RESTRICTED USE PESTICIDE

Only for retail sale to and use by Certified Applicators. NOT to be used by uncertified persons working under the supervision of a certified applicator, except that uncertified persons may transport containers.

It is a violation of Federal law to use this product in any manner inconsistent with its labeling. This labeling must be in the user's possession during application. Read the entire label before using this product.

DO NOT apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

For important crop safety information, refer to the "Specific Use Directions" section for each crop.

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. This standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses and of handlers of agricultural pesticides. It contains requirements for training, decontamination, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about Personal Protective Equipment (PPE), notification to workers, and restricted-entry intervals. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

DO NOT enter or allow worker entry into treated areas during the restricted-entry interval **(REI) of 24 hours.** **PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water is:** • Coveralls worn over short-sleeved shirt and short pants • Chemical-resistant footwear plus socks • Waterproof gloves • Chemical-resistant headgear for overhead exposure • Protective eyewear

PRODUCT INFORMATION

XtendiMax® With VaporGrip® Technology is:

- a water-soluble formulation intended for control and suppression of many annual, biennial, and perennial broadleaf weeds listed in the "Weeds Controlled or Suppressed" section of this label. This product may be used for control of these weeds in cotton with XtendFlex® Technology and soybean with Roundup Ready 2 Xtend® Technology or XtendFlex® Technology.
- a contact, systemic herbicide, with limited soil activity on small seeded broadleaf weeds, including waterhemp, lambsquarters, and Palmer pigweed.
- readily absorbed by plants through shoot and root uptake, translocates throughout the plant's system, and accumulates in areas of active growth. XtendiMax® With VaporGrip® Technology interferes with plant growth hormones (auxins) resulting in death of many broadleaf weeds.

Additional state restrictions and requirements may apply. The user must comply with any additional state requirements and restrictions.

Refer to the specific use directions and restrictions in each crop table. Follow all requirements and restrictions on www.xtendimaxapplicationrequirements.com.

APPLICATION REQUIREMENTS OVERVIEW

Read and follow all applicable restrictions, precautions, and directions on the container label and booklet and at www.xtendimaxapplicationrequirements.com. For product questions or inquiries and/or to report any nonperformance of this product against any particular weed species, call 1-844-RRXTEND (1-844-779-8363). It is recommended that the certified applicator visit www.xtendimaxapplicationrequirements.com to obtain a copy of the Overview of Application Requirements for reference prior to and during application.

REQUIREMENTS	LABEL SECTIONS
Mandatory Training: ☐ Prior to applying, applicator must complete dicamba-specific training. Only certified applicators may apply this product; NOT to be used by uncertified persons working under the supervision of a certified applicator, except that uncertified persons may transport containers.	➢ Training (pp. 5-6)
Record Keeping: ☐ Records must be created within 72 hours of every application. Records must be kept for a period of two years.	➢ Record Keeping (p. 6)
Application: ☐ For EVERY application of XtendiMax® With VaporGrip® Technology, an approved **Volatility Reduction Adjuvant (VRA)** must be included in the spray solution. An approved **Drift Reduction Adjuvant (DRA)** must also be included in the spray solution, unless otherwise indicated on www.xtendimaxapplicationrequirements.com. Refer to the website for a list of approved DRAs and VRAs. ☐ *Rate and Timing*: Apply 22 fluid ounces per acre (0.5 lb. a.e. dicamba) for any single pre-emergent or in-crop application in: ○ Cotton with XtendFlex® Technology up to and including July 30 (DO NOT apply after July 30 regardless of growth stage), and ○ Soybean with Roundup Ready 2 Xtend® Technology or XtendFlex® Technology up to and including June 30. Applications occurring after R1 are prohibited as crop response may occur and in no event can applications be made after June 30 regardless of growth stage. ○ For details, see the "Specific Use Directions" section. ☐ *Spray volume:* Apply in a minimum of 15 gallons of spray solution per acre. ☐ *Tank mixing*: Use only approved tank-mix partners found at www.xtendimaxapplicationrequirements.com.	➢ Tank Mix Partners (p. 9) ➢ Specific Use Directions (pp. 12-14) ➢ Specific Use Directions (pp. 12-14) ➢ Tank Mix Partners (p. 9)

○ Refer to all product labels to determine mix order or perform a mix compatibility test.	
Application Equipment: ☐ *Spray system equipment cleanout*: Ensure entire sprayer system is properly cleaned before and after application. ☐ *Nozzles*: Use only approved nozzles within specified pressures found at www.xtendimaxapplicationrequirements.com. ☐ *Spray boom height*: Maximum boom height is 24 inches above target pest or crop canopy. ☐ *Ground speed*: DO NOT exceed 15 mph.	➢ Equipment Requirements (pp. 7-8)
Environmental Conditions: ☐ *Wind speed*: Apply when wind speed, measured at boom height, is 3-10 mph. ☐ *Inversions*: DO NOT spray during an inversion; only spray between one hour after sunrise and two hours before sunset. ☐ *Rainfall*: DO NOT apply this product if rain that may exceed soil field capacity and result in soil runoff is forecasted in the next 48 hours.	➢ Environmental Requirements (p. 7)
Downwind Requirements: ☐ *Sensitive crops and certain plants downwind*: DO NOT apply if sensitive crops and/or certain plants, as defined below in this label, are planted on an adjacent downwind field or area. ☐ *Downwind buffer*: After determining no adjacent sensitive crops and/or certain plants are downwind, maintain a 240-ft downwind buffer. ☐ *Endangered species*: Consult Endangered Species Protection Bulletins for ESA counties and restrictions.	➢ Adjacent Sensitive Crops and Certain Plants (p. 8) ➢ Buffer Requirements (p. 8) ➢ Protecting Endangered Species (p. 3)
Drift Reduction Technology: ☐ See "Optional Use of Drift Reduction Technology" section for details on application requirements and the potential to qualify for reduced use restrictions.	➢ Optional Use of Drift Reduction Technology (pp. 8-9)

USE RESTRICTIONS

- DO NOT USE ANY TANK MIX PRODUCT OR ANY NOZZLE AND PRESSURE COMBINATION WITH XTENDIMAX® WITH VAPORGRIP® TECHNOLOGY THAT IS NOT IDENTIFIED ON THE LIST OF APPROVED PRODUCTS FOUND AT www.xtendimaxapplicationrequirements.com.
- DO NOT TANK MIX AMMONIUM SULFATE (AMS) WITH THIS PRODUCT.
- DO NOT EXCEED 88 FLUID OUNCES (2 POUNDS ACID EQUIVALENT (A.E.) DICAMBA) OF XTENDIMAX® WITH VAPORGRIP® TECHNOLOGY PER ACRE PER YEAR.
- DO NOT EXCEED 88 FLUID OUNCES (2 POUNDS A.E. DICAMBA) PER ACRE PER YEAR FROM ALL DICAMBA APPLICATIONS IF MORE THAN ONE DICAMBA-CONTAINING PRODUCT IS APPLIED TO THE SAME SITE WITHIN THE SAME YEAR.
- DO NOT MAKE APPLICATION OF THIS PRODUCT IF RAIN IS EXPECTED IN THE NEXT 48 HOURS THAT MAY EXCEED SOIL FIELD CAPACITY AND RESULT IN SOIL RUNOFF.
- DO NOT APPLY THROUGH ANY TYPE OF IRRIGATION EQUIPMENT. DO NOT TREAT IRRIGATION DITCHES OR WATER USED FOR CROP IRRIGATION OR DOMESTIC PURPOSES.
- DO NOT APPLY TO CROPS UNDER STRESS DUE TO LACK OF MOISTURE, HAIL DAMAGE, FLOODING, HERBICIDE INJURY, MECHANICAL INJURY, INSECTS, OR WIDELY FLUCTUATING TEMPERATURES AS INJURY MAY RESULT.
- DO NOT APPLY THIS PRODUCT IF SENSITIVE CROPS AND CERTAIN PLANTS ARE PLANTED ON AN ADJACENT DOWNWIND FIELD OR AREA.
- DO NOT APPLY THIS PRODUCT AERIALLY.
- Restricted Entry Interval (REI): 24 hours.

USE PRECAUTIONS

- In case material is released or spilled: dike and contain the spill with inert material (sand, earth, etc.) and transfer liquid and solid diking material to separate containers for disposal. Remove contaminated clothing and wash affected skin areas with soap and water. Wash clothing before re-use. Keep the spill out of all sewers and open bodies of water.
- Rainfast period: This product is rainfast four (4) hours after application to most weed species. Rainfall or irrigation occurring within four (4) hours after application may necessitate retreatment or may otherwise result in reduced weed control.

TRAINING

Prior to using this product, users must complete dicamba-specific training to obtain certification. Once completed, dicamba-specific training is then required every other year for all users of this product. If state-specific training is required by the state where the applicator intends to apply this product, the applicator must complete training from the state or state-authorized provider. Otherwise, the applicator

may complete dicamba-specific training provided either by the state/state-authorized provider or by a registrant of a dicamba product approved for in-crop use with dicamba-tolerant crops.

RECORD KEEPING

The following records must be generated as soon as practical but **no later than 72 hours after application**. The certified applicator must keep these records for a period of **two years**. Records must be made available to State Pesticide Control Official(s), USDA, and EPA upon request. See www.xtendimaxapplicationrequirements.com for an example form summarizing record keeping requirements.

Keep records of the following items for each application of XtendiMax® With VaporGrip® Technology:

1. All Items required by 7 CFR Part 110 (RECORDKEEPING ON RESTRICTED USE PESTICIDES BY CERTIFIED APPLICATORS), including:
    a. The brand or product name
    b. The EPA registration number
    c. The total amount applied
    d. The month, day, and year of application
    e. The location of the application
    f. The crop, commodity, stored product, or site of application
    g. The size of treated area
    h. The name of the certified applicator
    i. The certification number of the certified applicator
2. *Training*: Completion date and provider of required training and proof of completion.
3. *Receipts of Purchase*: Receipts or copies for the purchase of this product.
4. *Product Label*: A copy of this product label and any state special local needs label that supplements this label.
5. *Sensitive Crops and Certain Plants Awareness*:
    a. Document that a sensitive crop registry was consulted. At a minimum, documentation must include the name of the sensitive crop registry and the date it was consulted.
    b. Record of a survey of adjacent areas documenting the sensitive crops and/or certain plants (as defined below in the "Adjacent Sensitive Crops and Certain Plants" section of this label) surrounding the field prior to application. At a minimum, records must include documentation of adjacent sensitive crops and/or certain plants and the date the survey was conducted.
6. *Buffer Requirement*: Record of the buffer distance implemented as directed in the "Spray Drift Management" and "Optional Use of Drift Reduction Technology" sections of this label.
7. *Start and Finish Times of Each Application*: Record of the time at which the application started and finished.
8. *Application Timing*: Record of the type of application (for example: preemergence, postemergence) and the number of days after planting if postemergence.
9. *Air Temperature*: Record of the air temperature in degrees Fahrenheit at the start and completion of each application.
10. *Wind Speed and Direction*: Record of the wind speed and direction (the direction from which the wind is blowing) at boom height at the start and completion of each application.
11. *Nozzle and Pressure*: Record of the spray nozzle manufacturer/brand, type, orifice size, and operating pressure used during each application of this product.
12. *Tank Mix Products*: Record of the brand names and EPA registration numbers (if applicable) for all products that were tank mixed with this product for each application, as well as a record of the volume of each added to the tank prior to application.
13. ***Mandatory Volatility and Drift Reduction Adjuvants***: Receipts or copies for the purchase of an approved volatility reduction adjuvant, as well as a record of the volume added to the tank prior to application. Receipts or copies for the purchase of an approved DRA and a record of the volume added to the tank prior to application, unless otherwise indicated on www.xtendimaxapplicationrequirements.com.
14. *Spray System Cleanout*: At a minimum, records must include confirmation that the spray system was clean before using this product and that the post-application cleanout was completed in accordance with the "Proper Spray System Equipment Cleanout" section of this label.

HERBICIDE RESISTANCE MANAGEMENT RECOMMENDATIONS

The dicamba active ingredient in XtendiMax® With VaporGrip® Technology is a Group 4 herbicide. Any weed population may contain or develop plants naturally resistant to XtendiMax® With VaporGrip® Technology and other Group 4 herbicides. The resistant biotypes may dominate the weed population if these herbicides are used repeatedly in the same field. Appropriate resistance management strategies should be followed.

To delay herbicide resistance, take one or more of the following steps:

- Limit cultivation and/or mechanical tillage within 7 days after application, as this may result in reduced efficacy and promote regrowth of treated weeds.
- Rotate the use of XtendiMax® With VaporGrip® Technology within a growing season and among growing seasons with different herbicide groups (other than Group 4) that control the same weeds.
- Use tank mixtures with herbicides from a different herbicide Group if such use is permitted.
- Adopt an integrated weed-management program for herbicide use that includes scouting and uses historical information related to herbicide use and crop rotation and that considers tillage (or other mechanical control methods), cultural (*e.g.*, higher crop seeding rates; precision fertilizer application method and timing to favor the crop and not the weeds), biological (weed-competitive crops or varieties), and other management practices.
- Scout after herbicide application to monitor weed populations for early signs of resistance development. Indicators of possible herbicide resistance include: (1) failure to control a weed species normally controlled by the herbicide at the dose applied,

especially if control is achieved on adjacent weeds; (2) a spreading patch of non-controlled plants of a particular weed species; (3) surviving plants mixed with controlled individuals of the same species. If resistance is suspected, prevent weed seed production in the affected area by an alternative herbicide from a different group or by a mechanical method such as hoeing or tillage. Prevent movement of resistant weed seeds to other fields by cleaning harvesting and tillage equipment when moving between fields and by planting clean seed.

- If a weed pest population continues to progress after treatment with this product, switch to another management strategy or herbicide with an effective mode of action, if available, and contact Bayer at 1-844-RRXTEND (1-844-779-8363).
- Contact your local extension specialist or certified crop advisors for additional pesticide resistance-management and/or integrated weed-management recommendations for specific crops and weed biotypes.
- For further information or to report suspected resistance contact Bayer at 1-844-RRXTEND (1-844-779-8363).

Management of Dicamba-Resistant Biotypes

Appropriate testing is critical in order to determine if a weed is resistant to dicamba. Contact your Bayer representative to determine if resistance in any particular weed biotype has been confirmed in your area or visit www.iwilltakeaction.com or www.weedscience.org.

The following good agronomic practices can reduce the spread of confirmed dicamba-resistant biotypes, particularly if pursued as soon as signs of resistance are observed:

- If a naturally occurring resistant biotype is present in your field, this product may be tank mixed or applied sequentially with an appropriately labeled herbicide with a different mode of action to achieve control (read "Tank Mixing" section for more information).
- Cultural and mechanical control practices (*e.g.*, crop rotation or tillage) can also be used as appropriate.
- Scout treated fields after herbicide application and control weed escapes, including resistant biotypes, before they set seed.
- Thoroughly clean equipment, as practical, for all weed seeds before leaving fields known to contain resistant biotypes.

SPRAY DRIFT MANAGEMENT

THE APPLICATOR IS RESPONSIBLE FOR AVOIDING OFF-SITE SPRAY DRIFT TO THE EXTENT CONSISTENT WITH APPLICABLE LAW. The applicator is responsible for compliance with state and local pesticide regulations, including any state or local pesticide drift regulations. DO NOT allow herbicide solution to mist, drip, drift, or splash onto desirable vegetation because severe injury or destruction to desirable broadleaf plants could result.

Applications using larger droplets reduces drift potential but will not prevent drift if the application is made improperly or under unfavorable environmental conditions. The interaction of weather-related factors and equipment must be monitored to maximize performance and on-target spray deposition. The applicator is responsible for considering all these factors when making a spray decision to the extent consistent with applicable law. BE AWARE OF NEARBY NON-TARGET SITES AND CHANGING ENVIRONMENTAL CONDITIONS (see the "Temperature Inversions" section of this label).

Environmental Requirements

Wind Speed

Wind speed must be measured in the field of application at boom height prior to and after application. Only apply when wind speed at boom height is between 3 MPH and 10 MPH during application.

Temperature Inversions

DO NOT apply this product during a temperature inversion as the off-target movement potential is high.

Applications of this product may ONLY occur one hour after sunrise through two hours before sunset. In general, temperature inversions are more likely during nighttime hours.

- Temperature inversions are characterized by increasing temperature with altitude and are common on nights with limited cloud cover and light to no wind.
- The presence of an inversion can be indicated by ground fog or, if fog is not present, by the movement of smoke from a ground source or an aircraft smoke generator. Smoke that layers and moves laterally in a concentrated cloud (under low wind conditions) indicates an inversion, while smoke that moves upward and rapidly dissipates indicates good vertical air mixing.

Equipment Requirements

DO NOT APPLY THIS PRODUCT USING AERIAL SPRAY EQUIPMENT.

Nozzle Type

To produce minimal amounts of fine spray particles, the applicator must use an approved nozzle within a specified pressure range as found at www.xtendimaxapplicationrequirements.com. DO NOT use any other nozzle and pressure combination not specifically listed on this website.

Equipment Ground Speed

DO NOT exceed a ground speed of 15 miles per hour. Select a ground speed that will deliver the desired spray volume while maintaining the desired spray pressure. Slower speeds generally result in better spray coverage and deposition on the target area. Provided the applicator can maintain the required nozzle pressure, it is recommended that tractor speed is reduced to 5 miles per hour at field edges.

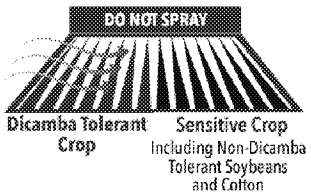
Spray Boom Height

Use the minimum boom height appropriate for spray pattern overlap based on nozzle selection and spacing, according to manufacturer recommendations, or 24 inches above canopy, whichever is smaller.

Adjacent Sensitive Crops and Certain Plants

DO NOT SPRAY this product when wind is blowing toward adjacent sensitive crops and certain plants, as defined immediately below.

It is important for the applicator to be aware that wind direction may vary during the application. If wind direction shifts such that the wind is blowing toward adjacent sensitive crops and/or certain plants, the applicator **must STOP** the application.



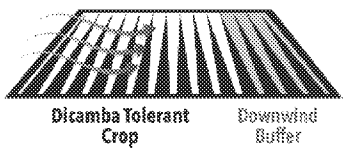
Before making an application, 1) consult a sensitive crop registry (such as FieldWatch or state/federal registry), 2) survey adjacent fields and areas, and 3) confirm the type or variety of plants and crops surrounding the field prior to application. At a minimum, records must include the name of the sensitive crop registry, the date it was consulted, documentation of adjacent plants and crops/areas surrounding the field of application, and the date the survey was conducted.

Dicamba-sensitive crops and/or certain plants include, but are not limited to, non-dicamba-tolerant soybeans and cotton, tomatoes and other fruiting vegetables (EPA crop group 8), fruit trees, cucurbits (EPA crop group 9), grapes, beans, flowers, ornamentals, peas, potatoes, sunflower, tobacco, and other broadleaf plants, including if these plants are in a greenhouse. Severe injury or destruction could occur if any contact between this product and these plants occurs. Sensitive crop registries can provide additional information about sensitive crops and sensitive areas.

If you have questions regarding sensitive crop registries contact Bayer at 1-844-RRXTEND (1-844-779-8363) **prior to application**.

Buffer Requirements

After determining no adjacent sensitive crops and/or certain plants are downwind, the applicator **must always maintain a 240-foot downwind buffer** between the last treated row and the nearest downwind field edge when applying using broadcast open-boom equipment. For reduced downwind buffer distances, refer to "Optional Use of Drift Reduction Technology" section of this label.



The following areas may be included in the buffer distance composition when directly adjacent to the treated field edges:

- Roads, paved or gravel surfaces, mowed grassy areas adjacent to field, and areas of bare ground from recent plowing or grading that are contiguous with the treated field
- Planted agricultural fields containing: corn, dicamba-tolerant cotton, dicamba-tolerant soybean, sorghum, proso millet, small grains, sugarcane, and other crops for which dicamba has a post-emergent approved use. If the applicator intends to include such crops as dicamba-tolerant cotton and/or dicamba-tolerant soybeans in the buffer distance composition, the applicator must confirm the crops are in fact dicamba-tolerant.
- Agricultural fields that have been prepared for planting
- Areas covered by the footprint of a building, silo, or other man-made structure with walls and/or roof

If you have questions regarding Buffer Requirement, contact Bayer at 1-844-RRXTEND (1-844-779-8363) **prior to application**.

Optional Use of Drift Reduction Technology

This product may be optionally applied using a hooded/shielded broadcast sprayer or other types of drift reduction technology (DRT) for postemergence weed control as well as residual control of susceptible weeds. The applicator must use an approved nozzle within a specified pressure range as found at www.xtendimaxapplicationrequirements.com. Use of drift reduction technology (DRT) in combination with approved nozzles is recommended to further reduce drift potential.

Applications of this product may qualify for reduced use restrictions, such as a reduced downwind buffer distance, provided a **qualified DRT** listed on www.xtendimaxapplicationrequirements.com is used and operated according to the directions and limitations provided at www.xtendimaxapplicationrequirements.com.

Hooded/Shielded Broadcast Sprayer:

For hooded/shielded sprayers, all application nozzles must be contained within the enclosed area. Shielding the boom or individual nozzles can reduce the effects of wind. However, it is the responsibility of the applicator to verify that the shields are preventing drift and

not interfering with uniform deposition of the product. Applicators must ensure the sprayer system is off or controlled during turns to further prevent spray drift. Refer to the hooded/shielded sprayer manufacturer use specifications prior to use.

Requirements for Reduced Use Restrictions with Optional Hooded/Shielded Sprayer: ONLY **qualified** hooded/shielded sprayers listed on www.xtendimaxapplicationrequirements.com are eligible for reduced use restrictions when applying this product. When using a **qualified** hooded/shielded sprayer, the applicator **must always maintain a minimum 110-foot downwind buffer** between the last treated row and the nearest downwind field edge. Consult Endangered Species Protection Bulletins for ESA counties and restrictions. While this product may be applied with other (non-qualified) hooded/shielded sprayers, no reduction in use restrictions is associated with their use.

TANK MIX PARTNERS

Tank Mixing

It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions, limitations, and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.

All applications of this product require the inclusion of a volatility reduction adjuvant (VRA), such as a VaporGrip® Xtra Agent product or an approved VRA equivalent, in the tank mix. The inclusion of a **drift reduction adjuvant (DRA) is also required** in the tank mix, unless otherwise indicated on www.xtendimaxapplicationrequirements.com. Only tank mix products that have been tested and found to not adversely affect the offsite movement potential of XtendiMax® With VaporGrip® Technology may be tank mixed with XtendiMax® With VaporGrip® Technology. The applicator must check the website found at www.xtendimaxapplicationrequirements.com for a list of approved tank mix products no more than 7 days before applying XtendiMax® With VaporGrip® Technology.

DO NOT tank mix any product with XtendiMax® With VaporGrip® Technology unless:

1. The intended tank mix product is identified on the list of tested products found at www.xtendimaxapplicationrequirements.com;
2. The intended products are not prohibited on either this label or the label of the tank mix product; and
3. All requirements and restrictions on www.xtendimaxapplicationrequirements.com are followed.

NOTE: DO NOT use PVA (polyvinyl acetate) packets in a tank mix with products that contain boron or release free chlorine. The resultant reaction of PVA and boron or free chlorine is a plastic that is not soluble in water or solvents.

APPLICATION INSTRUCTIONS

APPLY THIS PRODUCT USING PROPERLY MAINTAINED AND CALIBRATED EQUIPMENT CAPABLE OF DELIVERING THE REQUIRED VOLUMES.

DO NOT APPLY THIS PRODUCT USING AERIAL SPAY EQUIPMENT.

XtendiMax® With VaporGrip® Technology can be applied to actively growing weeds as broadcast, band, or spot spray applications using water as a carrier. For best results, treat weeds early when they are relatively small (less than 4 inches). Timely application to small weeds early in the season will improve control and reduce weed competition.

Ground Application (Broadcast)

Water Volume: Use a minimum of 15 gallons of spray solution per broadcast acre for optimal performance. Use 20 gallons per acre or greater when treating dense weed canopy/vegetation.

Ground Application (Hooded In-Row and Directed Layby)

Using a hooded sprayer or other drift reduction technology in combination with approved nozzles may further reduce drift potential. When applying XtendiMax® With VaporGrip® Technology by hooded in-row or layby sprayers, determine the amount of herbicide and water volume needed using the following formula:

$$\frac{\text{band width (inches)}}{\text{row width (inches)}} * \text{broadcast rate per acre} = \text{rate per treated acre}$$

$$\frac{\text{band width (inches)}}{\text{row width(inches)}} * \text{broadcast spray volume per acre} = \text{spray volume per treated acre}$$

SPRAY SYSTEM EQUIPMENT CLEANOUT

You must ensure that the spray system used to apply this product is clean before using this product. Failure to properly clean the entire spray system can result in inadvertent contamination of the spray system. Contamination of the spray system may cause injury to non-dicamba-tolerant soybeans and other sensitive crops.

Inadvertent contamination can also occur in equipment used for bulk product handling and mixing prior to use in the spray system. Care should be taken to reduce contamination not only in the spray system but in any equipment used to transfer or deliver product. For example, bulk handling and mixing equipment containing this product should be segregated when possible to reduce potential for cross-

contamination. Consider using block and check valves to avoid backflow during transfer. Piping should be reviewed to ensure there is not potential for product build-up. Dedicated nurse trucks and tender equipment should be used when possible.

Clean equipment **immediately after using** this product, using a **triple rinse** procedure as follows:

1. After spraying, drain the sprayer (including boom and lines) immediately. DO NOT allow the spray solution to remain in the spray boom lines overnight prior to flushing.
2. Fill tank with clean water (at least 10% volume) and flush tank, hoses, boom, and nozzles. Ensure agitation for 15 minutes and then spray out solution through boom. If equipped, open boom ends and flush.
3. Inspect and clean all strainers, screens, and filters.
4. Fill tank with clean water (at least 10% of volume) and prepare a cleaning solution with a commercial detergent or sprayer cleaner or ammonia according to the manufacturer's directions.
5. Take care to wash all parts of the tank, including the inside top surface. Start agitation in the sprayer and thoroughly recirculate the cleaning solution for at least 15 minutes. All visible deposits must be removed from the spraying system.
6. Flush hoses, spray lines, and nozzles for at least 1 minute with the cleaning solution.
7. Remove nozzles, screens, and strainers and clean separately in the cleaning solution after completing the above procedures.
8. Drain pump, filter, and lines.
9. Repeat steps 2 and 3.
10. Rinse the complete spraying system with clean water.
11. Clean and wash off the outside of the entire sprayer and boom.
12. All rinse water must be disposed of in compliance with local, state, and federal guidelines.

ROTATIONAL CROPS

When counting days from the application of this product, do not count days when the ground is frozen. Moisture is essential for the degradation of this herbicide in soil. If dry weather prevails, use cultivation to allow herbicide contact with moist soil.

No rotational cropping restrictions apply when rotating to soybean with Roundup Ready 2 Xtend® Technology or XtendFlex® Technology or to cotton seed with XtendFlex® Technology (including Bollgard® 3 XtendFlex® Cotton, Bollgard II® XtendFlex® Cotton, or XtendFlex® Cotton). For other crops, the interval between application and planting rotational crop is given below. Planting at intervals less than specified below may result in crop injury.

For application rates of this product of **22 fluid ounces per acre per year:**

- No planting restrictions apply beyond 120 days after application.
- East of the Mississippi River:
  - Wait a minimum of 30 days for 22 fluid ounces applied per acre before planting.
- West of the Mississippi River:
  - Wait a minimum of 45 days for 22 fluid ounces applied per acre before planting.
  - In areas with less than 30 inches of annual rainfall wait a minimum of 100 days before planting (furrow and/or overhead irrigation can be included in rainfall determination).

For application rates of this product of **44 to 88 fluid ounces per acre per year:**

- In areas with less than 30 inches of annual rainfall:
  - Wait a minimum of 180 days before planting crops (furrow and/or overhead irrigation can be included in rainfall determination).
- In areas with 30 inches or more annual rainfall:
  - Wait a minimum of 120 days after application before planting.

WEEDS CONTROLLED OR SUPPRESSED

General Weed List, Including ALS-, Glyphosate-, and Triazine-Resistant Biotypes

ANNUAL WEEDS		
Alkanet	Flixweed	Pusley, Florida
Amaranth, Palmer, Powell, Spiny	Fumitory	Radish, Wild
Aster, Slender	Goosefoot, Nettleleaf	Ragweed, Common, Giant (Buffaloweed), Lance-Leaf
Bedstraw, Catchweed	Hempnettle	Rocket, London, Yellow
Beggarweed, Florida	Henbit	Rubberweed, Bitter (Bitterweed)
Broomweed, Common	Jacobs-Ladder	Salsify
Buckwheat, Tartary, Wild	Jimsonweed	Senna, Coffee
Buffalobur	Knawel (German Moss)	Sesbania, Hemp
Burclover, California	Knotweed, Prostrate	Shepherdpurse
Burcucumber	Kochia	Sicklepod
Buttercup, Corn, Creeping, Roughseed, Western Field	Ladysthumb	Sida, Prickly (Teaweed)
Carpetweed	Lambsquarters Common	Smartweed, Green, Pennsylvania
Catchfly, Nightflowering	Lettuce, Miners, Prickly	Sneezeweed, Bitter
Chamomile, Corn	Mallow, Common, Venice	Sowthistle, Annual, Spiny
Chevil, Bur	Marestail (Horseweed)	Spanish Needles
Chickweed, Common	Mayweed	Spikeweed, Common
Clovers	Morningglory, Ivyleaf, Tall	Spurge, Prostrate, Leafy
Cockle, Corn, Cow, White	Mustard, Black, Blue, Tansy, Treacle, Tumble, Wild, Yellowtops	Spurry, Corn
Cocklebur, Common	Nightshade, Black, Cutleaf	Starbur, Bristly
Copperleaf, Hophornbeam	Pennycress, Field (Fanweed, Frenchweed, Stinkweed)	Starwort, Little
Cornflower (Bachelor Button)	Pepperweed, Virginia (Peppergrass)	Sumpweed, Rough
Croton, Tropic, Woolly	Pigweed, Prostrate, Redroot (Carelessweed), Rough, Smooth, Tumble	Sunflower, Common (Wild), Volunteer
Daisy, English	Pineappleweed	Thistle, Russian
Dragonhead, American	Poorjoe	Velvetleaf
Eveningprimrose, Cutleaf	Poppy, Red-horned	Waterhemp, Common, Tall
Falseflax, Smallseed	Puncturevine	Waterprimrose, Winged
Fleabane, Annual	Purslane, Common	Wormwood

BIENNIAL WEEDS		
Burdock, Common	Gromwell	Starthistle, Yellow
Carrot, Wild (Queen Anne's Lace)	Knapweed, Diffuse, Spotted	Sweetclover
Cockle, White	Mallow, Dwarf	Teasel
Eveningprimrose, Common	Plantain, Bracted	Thistle, Bull, Milk, Musk, Plumeless
Geranium, Carolina	Ragwort, Tansy	

PERENNIAL WEEDS		
Alfalfa	Garlic, Wild	Smartweed, Swamp
Artichoke, Jerusalem	Goldenrod, Canada, Missouri	Snakeweed, Broom
Aster, Spiny, Whiteheath	Goldenweed, Common	Sorrel, Red (Sheep Sorrel)
Bedstraw, Smooth	Hawkweed	Sowthistle, Perennial
Bindweed, Field, Hedge	Henbane, Black	Spurge, Leafy
Blueweed, Texas	Horsenettle, Carolina	Sundrops
Bursage, Woollyleaf (Bur Ragweed, Povertyweed)	Ironweed	Thistle, Canada, Scotch
Buttercup, Tall	Knapweed, Black, Diffuse, Russian, Spotted	Toadflex, Dalmatian
Campion, Bladder	Milkweed, Climbing, Common, Honeyvine, Western Whorled	Tropical Soda Apple
Chickweed, Field, Mouseear	Nettle, Stinging	Trumpetcreeper (Buckvine)
Chicory	Nightshade, Silverleaf (White Horsenettle)	Vetch
Clover, Hop	Onion, Wild	Waterhemlock, Spotted
Dandelion, Common	Plantain, Broadleaf, Buckhorn	Waterprimrose, Creeping
Dock Broadleaf (Bitterdock), Curly	Pokeweed	Woodsorrel, Creeping, Yellow
Dogbane, Hemp	Ragweed, Western	Wormwood, Absinth, Louisiana
Dogfennel (Cypressweed)	Redvine	Yankeeweed
Fern, Bracken	Sericia Lespedeza	Yarrow, Common

SPECIFIC USE DIRECTIONS

CROPS WITH XTEND® TECHNOLOGY

Cotton with XtendFlex® Technology (including Bollgard II® XtendFlex® COTTON, Bollgard® 3 XtendFlex® COTTON, or XtendFlex® COTTON) and soybean with Roundup Ready 2 Xtend® Technology or XtendFlex® Technology CONTAIN A PATENTED GENE THAT PROVIDES TOLERANCE TO DICAMBA, THE ACTIVE INGREDIENT IN THIS PRODUCT. THIS PRODUCT WILL CAUSE SEVERE CROP INJURY OR DESTRUCTION AND YIELD LOSS IF APPLIED TO COTTON AND SOYBEAN THAT ARE NOT DICAMBA TOLERANT, INCLUDING COTTON AND SOYBEAN WITH A TRAIT ENGINEERED TO CONFER TOLERANCE TO AUXIN HERBICIDES OTHER THAN DICAMBA. FOLLOW THE REQUIREMENTS SET FORTH HEREIN TO PREVENT SEVERE CROP INJURY OR DESTRUCTION AND YIELD LOSS. CONTACT WITH FOLIAGE, GREEN STEMS, OR FRUIT OF CROPS, OR ANY DESIRABLE PLANTS THAT DO NOT CONTAIN A DICAMBA TOLERANCE GENE OR ARE NOT NATURALLY TOLERANT TO DICAMBA, COULD RESULT IN SEVERE PLANT INJURY OR DESTRUCTION.

XtendiMax® With VaporGrip® Technology is approved by U.S. EPA for use in cotton with XtendFlex® Technology and in soybean with Roundup Ready 2 Xtend® Technology or XtendFlex® Technology only in the following states, subject to county restriction as noted: Alabama, Arkansas, Arizona, Colorado, Delaware, Florida (excluding Palm Beach County), Georgia, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maryland, Michigan, Minnesota, Mississippi, Missouri, Nebraska, New Jersey, New Mexico, New York, North Carolina, North Dakota, Oklahoma, Ohio, Pennsylvania, South Carolina, South Dakota, Tennessee (excluding Wilson County), Texas, Virginia, West Virginia, Wisconsin.

Information on cotton with XtendFlex® Technology and on soybean with Roundup Ready 2 Xtend® Technology or XtendFlex® Technology can be obtained from your seed supplier or Bayer representative. Cotton with XtendFlex® Technology and soybean with Roundup Ready 2 Xtend® Technology or XtendFlex® Technology must be purchased from an authorized licensed seed supplier.

Cotton with XtendFlex® Technology, soybean with Roundup Ready 2 Xtend® Technology or XtendFlex® Technology, and methods of controlling weeds and applying dicamba in cotton with XtendFlex® Technology and in soybean with Roundup Ready 2 Xtend® Technology or XtendFlex® Technology are protected under U.S. patent law. No license to use cotton with XtendFlex® Technology or soybean with Roundup Ready 2 Xtend® Technology or XtendFlex® Technology is granted or implied with the purchase of this herbicide product. Cotton with XtendFlex® Technology and soybean with Roundup Ready 2 Xtend® Technology or XtendFlex® Technology are owned by Bayer and a license must be obtained from Bayer before using it. Contact your Authorized Bayer Retailer for information on obtaining a license to use cotton with XtendFlex® Technology and soybean with Roundup Ready 2 Xtend® Technology or XtendFlex® Technology.

COTTON WITH XTENDFLEX® TECHNOLOGY	
Application Rate	• **Burndown/Early Preplant, Preplant, At-Planting, Preemergence:** Apply ONLY 22 fluid ounces (0.5 lb. acid equivalent (a.e.) dicamba) per acre for a single burndown/early preplant, preplant, at-planting, or preemergence application. • **Postemergence (in-crop):** For any single, in-crop application, apply ONLY 22 fluid ounces (0.5 lb. a.e. dicamba) per acre.
Maximum Annual Rates	• *Total of all Burndown/Early Preplant, Preplant, At-Planting, and Preemergence applications*: 44 fluid ounces per acre (1.0 lb. a.e. dicamba per acre)

	• *Total of all in-crop applications*: 44 fluid ounces per acre (1.0 lb. a.e. dicamba per acre) • *Combined total per year for all applications*: 88 fluid ounces per acre (2.0 lb. a.e. dicamba per acre)
Application Timing	• **Burndown/Early Preplant, Preplant, At-Planting, Preemergence:** This product may be applied before, during, or immediately after planting. • **Postemergence (in-crop):** This product may be applied in-crop up to and including July 30.
Number of Applications	• Sequential applications of this product may be necessary to control new flushes of weeds or on tough-to-control weeds. Allow at least 7 days between applications. • A maximum of **two** burndown/early preplant, preplant, at-planting, and preemergence and **two** in-crop applications may be made.
Spray Volume	• Apply this product in a minimum of 15 gallons of spray solution per acre as a broadcast application. • Use 20 gallons per acre or greater when treating dense weed canopy/vegetation.
Preharvest Interval	• Allow a minimum of 7 days between application and harvest.
Livestock Grazing or Feeding	• Permitted.
Use Precautions	• Refer to the "Weeds Controlled or Suppressed" section of this label for specific weeds controlled. • For best performance, control weeds early when they are less than 4 inches. • Postemergence applications of this product mixed with adjuvants may cause a leaf response to cotton with XtendFlex® Technology. The symptoms usually appear as necrotic spots on fully expanded leaves. EC-based products that are tank mixed with products containing dicamba may increase the severity of the leaf damage. • For postemergence applications with a hooded in-row sprayer, cotton must be a minimum of 15 inches tall at the time of application. • For postemergence applications with a directed layby sprayer, the release point for the herbicide must not be more than 10 inches from the soil and cotton must be at least 20 inches in height. Spray tip must be angled downward to the soil making sure no spray droplets remain in the air.
Use Restrictions	• DO NOT apply **less than** 22 fluid ounces (0.5 lb. a.e. dicamba) per acre. • DO NOT apply **more than** 22 fluid ounces (0.5 lb. a.e. dicamba) per acre. • DO NOT exceed two pre-emergent applications. • DO NOT exceed two post-emergent applications. • DO NOT exceed 88 fluid ounces per acre (2.0 lb. a.e. dicamba per acre) per year.

SOYBEAN WITH ROUNDUP READY 2 XTEND® TECHNOLOGY OR XTENDFLEX® TECHNOLOGY	
Application Rate	• **Burndown/Early Preplant, Preplant, At-Planting, Preemergence:** Apply ONLY 22 fluid ounces (0.5 lb. acid equivalent (a.e.) dicamba) per acre for a single burndown/early preplant, preplant, at-planting, or preemergence application. • **Postemergence (in-crop):** For any single, in-crop application, apply ONLY 22 fluid ounces (0.5 lb. a.e. dicamba) per acre.
Maximum Annual Rates	• *Total of all Burndown/Early Preplant, Preplant, At-Planting, and Preemergence applications*: 44 fluid ounces per acre (1.0 lb. a.e. dicamba per acre) • *Total of all in-crop applications*: 44 fluid ounces per acre (1.0 lb. a.e. dicamba per acre) • *Combined total per year for all applications*: 88 fluid ounces per acre (2.0 lb. a.e. dicamba per acre)
Application Timing	• **Burndown/Early Preplant, Preplant, At-Planting, Preemergence:** This product may be applied before, during, or immediately after planting. • **Postemergence (in-crop):** This product may only be applied in-crop up to and including June 30. Applications occurring after R1 are prohibited as crop response may occur.
Number of Applications	• A second application may be necessary to control new flushes of weeds. Allow at least 7 days between applications. For best results, apply after some weed re-growth has occurred. • A maximum of **two** burndown/early preplant, preplant, at-planting, and preemergence and **two** in-crop applications may be made.
Spray Volume	• Apply this product in a minimum of 15 gallons of spray solution per acre as a broadcast application. • Use 20 gallons per acre or greater when treating dense weed canopy/vegetation.
Preharvest Interval	• Allow a minimum of 7 days between application and harvest.
Livestock Grazing or Feeding	• Permitted.
Use Precautions	• Refer to the "Weeds Controlled or Suppressed" section of this label for specific weeds controlled. • For best performance, control weeds early when they are less than 4 inches. • Postemergence application under stressful environments may cause temporary loss of turgor, a response commonly described as leaf droop in soybean with Roundup Ready 2 Xtend® Technology or XtendFlex® Technology. Typically, affected plants recover in 1-3 days depending on the level of droop and environmental conditions. • For postemergence applications with a hooded in-row sprayer, soybeans must be a minimum of 15 inches tall at the time of application. • For postemergence applications with a directed layby sprayer, the release point for the herbicide must not be more than 10 inches from the soil and soybeans must be at least 20 inches in height. Spray tip must be angled downward to the soil making sure no spray droplets remain in the air

Use Restrictions	• DO NOT apply **less than** 22 fluid ounces (0.5 lb. a.e. dicamba) per acre. • DO NOT apply **more than** 22 fluid ounces (0.5 lb. a.e. dicamba) per acre. • DO NOT exceed two pre-emergent applications. • DO NOT exceed two post-emergent applications. • DO NOT exceed 88 fluid ounces per acre (2.0 lb. a.e. dicamba per acre) per year.

STORAGE AND DISPOSAL

Proper pesticide storage and disposal are essential to protect against exposure to people and the environment due to leaks and spills, excess product or waste, and vandalism. Do not allow this product to contaminate water, foodstuffs, feed or seed by storage or disposal.

Pesticide storage
Store pesticides away from food, pet food, feed, seed, fertilizers, and veterinary supplies. Keep container closed to prevent spills and contamination.

Pesticide disposal
To avoid wastes, use all material in this container, including rinsate, by application according to label directions. If wastes cannot be avoided, offer remaining product to a waste disposal facility or pesticide disposal program. Such programs are often run by state or local governments or by industry. All disposal must be in accordance with applicable federal, state, and local regulations and procedures.

Container handling and disposal
[*Insert appropriate Container Handling and Disposal Statement and Refilling Limitation from the following options*]

[*CONTAINER HANDLING AND DISPOSAL STATEMENT AND REFILLING LIMITATION FOR NONREFILLABLE RIGID CONTAINERS OF LESS THAN 1-GALLON CAPACITY*]
Nonrefillable container. Do not reuse or refill this container.

[*Alternative container statement:* Nonrefillable container. Do not reuse this container to hold materials other than pesticides or dilute pesticides (rinsate). After emptying and cleaning, it may be allowable to temporarily hold rinsate or other pesticide-related materials in this container. Contact your state regulatory agency to determine allowable practices in your state.]

Triple rinse this container promptly after emptying.

Triple rinse as follows: Empty the remaining contents into application equipment or mix-tank and continue to drain for 10 seconds after the flow begins to drip. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or mix-tank, or store rinsate for later use or disposal. Continue to drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times.

Once properly rinsed, some plastic [*Optional text:* agricultural] pesticide containers can be taken to a container collection site or picked up for recycling. [*Alternative container disposal statement:* Then offer the container for recycling, if available.]

[*Optional container disposal statement:* To find the nearest collection site, contact your chemical dealer or Bayer at 1-866-99BAYER (1-866-992-2937).]
If recycling is not available, dispose of in accordance with federal, state and local regulations and procedures, which may include puncturing the properly rinsed container and disposing in a sanitary landfill.

[*CONTAINER HANDLING AND DISPOSAL STATEMENT AND REFILLING LIMITATION FOR NONREFILLABLE RIGID PLASTIC 2.5-GALLON CONTAINER AND OTHER NONREFILLABLE CONTAINERS OF GREATER THAN 1-GALLON BUT EQUAL TO OR LESS THAN 5-GALLON CAPACITY*]
Nonrefillable container. Do not reuse this container to hold materials other than pesticides or dilute pesticides (rinsate). After emptying and cleaning, it may be allowable to temporarily hold rinsate or other pesticide-related materials in this container. Contact your state regulatory agency to determine allowable practices in your state.

[*Alternative container statement:* Nonrefillable container. Do not reuse or refill this container.]

Triple rinse or pressure rinse (or equivalent) this container promptly after emptying.

Triple rinse as follows: Empty the remaining contents into application equipment or mix-tank and continue to drain for 10 seconds after the flow begins to drip. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or mix-tank, or store rinsate for later use or disposal. Continue to drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times.

Pressure rinse as follows: Empty the remaining contents into application equipment or mix-tank and continue to drain for 10 seconds after the flow begins to drip. Place container so that it can drain directly into application equipment or mix-tank while rinsing, or collect

rinsate for later use or disposal. Insert pressure rinsing nozzle into the side of the container and rinse at about 40 PSI for at least 30 seconds. Continue to drain for 10 seconds after the flow begins to drip.

Once properly rinsed, some plastic [*Optional text:* agricultural] pesticide containers can be taken to a container collection site or picked up for recycling. [*Alternative container disposal statement:* Then offer the container for recycling, if available.]

[*Optional container disposal statement:* To find the nearest collection site, contact your chemical dealer or Bayer at 1-866-99BAYER (1-866-992-2937).]

If recycling is not available, dispose of in accordance with federal, state and local regulations and procedures, which may include puncturing the properly rinsed container and disposing in a sanitary landfill.

[*CONTAINER HANDLING AND DISPOSAL STATEMENT AND REFILLING LIMITATION FOR NONREFILLABLE RIGID PLASTIC 30-GALLON CONTAINER AND OTHER NONREFILLABLE CONTAINERS OF GREATER THAN 5-GALLON CAPACITY*]
Nonrefillable container. Do not reuse or refill this container.

[*Alternative container statement:* Nonrefillable container. Do not reuse this container to hold materials other than pesticides or dilute pesticides (rinsate). After emptying and cleaning, it may be allowable to temporarily hold rinsate or other pesticide-related materials in this container. Contact your state regulatory agency to determine allowable practices in your state.]

Triple rinse or pressure rinse (or equivalent) this container promptly after emptying.

[*Optional label text:* For containers not equipped with pumping systems,] Triple rinse as follows: Empty the remaining contents into application equipment or mix-tank. Fill the container ¼ full with water. Replace and tighten closures. Tip the container on its side and roll it back and forth for 30 seconds, ensuring at least one complete revolution. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or mix-tank, or store rinsate for later use or disposal. Repeat this procedure two more times.

[*Alternative or additional triple rinsing instructions for large containers equipped with pumping systems:* [*Optional label text:* For large containers equipped with pumping systems,] Triple rinse as follows: Empty the remaining contents into application equipment or mix-tank. Fill the container about 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times.]

Pressure rinse as follows: Empty the remaining contents into application equipment or mix-tank and continue to drain for 10 seconds after the flow begins to drip. Place container so that it can drain directly into application equipment or mix-tank while rinsing, or collect rinsate for later use or disposal. Insert pressure rinsing nozzle into the side of the container and rinse at about 40 PSI for at least 30 seconds. Continue to drain for 10 seconds after the flow begins to drip.

Once properly rinsed, some plastic [*Optional text:* agricultural] pesticide containers can be taken to a container collection site or picked up for recycling. [*Alternative container disposal statement:* Then offer the container for recycling, if available.]

[*Optional container disposal statement:* Some container manufacturers offer container recycling. See additional information regarding manufacturer recycling programs attached to this container, if available. If no recycling information is available on this container, contact your chemical dealer or Bayer at 1-866-99BAYER (1-866-992-2937) to find the nearest recycling location.]

[*Optional container disposal statement:* To find the nearest collection site, contact your chemical dealer or Bayer at 1-866-99BAYER (1-866-992-2937).]

If recycling is not available, dispose of in accordance with federal, state and local regulations and procedures, which may include puncturing the properly rinsed container and disposing in a sanitary landfill.

[*Optional container disposal statement:* Return Properly Rinsed Container to Bayer for Recycling – Call 1-866-99BAYER (1-866-992-2937).]

[*Optional additional container disposal statement:* IBC EMPTY? – FREE CALL – 1-888-SCHUETZ (1-888-724-8389) www.schuetz.net/ticket; Schuetz ticket service]

[*Optional additional container disposal statement:* FREE IBC PICKUP] [For continental USA and Canada only.]

[*Optional additional container disposal statement:* RETURNnet SYSTEM – To return empty IBC's Email or Call – www.returnnetsystem.com – 1-888-758-SHIP (1-888-758-7447) – United States and Canada – IBCNA – Clarkston, Michigan – USA]

[*CONTAINER HANDLING AND DISPOSAL STATEMENT AND REFILLING LIMITATION FOR ALL REFILLABLE CONTAINERS, EXCEPT TRANSPORT VEHICLES*]
Refillable container. Refill this container with pesticide only. Do not reuse this container for any other purpose.

Cleaning this container before refilling is the responsibility of the refiller. Cleaning this container before final disposal is the responsibility of the person disposing of the container.

To clean this container before final disposal, empty the remaining contents from the container into application equipment or mix-tank. Fill the container about 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times.

[*Optional container disposal statement:* Then offer the container for recycling, if available.]

[*Optional container disposal statement:* Some container manufacturers offer container recycling. See additional information regarding manufacturer recycling programs attached to this container, if available. If no recycling information is available on this container, contact your chemical dealer or Bayer at 1-866-99BAYER (1-866-992-2937) to find the nearest recycling location.]

[*Optional additional container disposal statement:* IBC EMPTY? – FREE CALL – 1-888-SCHUETZ (1-888-724-8389) www.schuetz.net/ticket; Schuetz ticket service]

[*Optional additional container disposal statement:* FREE IBC PICKUP] [For continental USA and Canada only.]

[*Optional additional container disposal statement:* RETURNnet SYSTEM – To return empty IBC's Email or Call – www.returnnetsystem.com – 1-888-758-SHIP (1-888-758-7447) – United States and Canada – IBCNA – Clarkston, Michigan – USA]

[*Optional container disposal statement:* To obtain information about recycling refillable containers, contact Bayer at 1-866-99BAYER (1-866-992-2937).]

[*Optional container disposal statement:* Return Properly Rinsed Container to Bayer for Recycling – Call 1-866-99BAYER (1-866-992-2937).]

[*Optional additional container label statements for the CUBE refillable packaging system only:*

CUBE Bayer Refillable Delivery System
FEATURES INCLUDE:
- Automatic Venting
- Heavy duty one-way 2-inch camloc ball valve with protective shield door
- Complete coated steel protective enclosure
- Durable 4-way plastic pallet
- Lift door to access one-way valve]

CONDITIONS OF SALE AND LIMITATIONS OF WARRANTY AND LIABILITY

Read the entire Directions for Use, Conditions, Disclaimer of Warranties, and Limitations of Liability before buying or using this product. If terms are not acceptable, return the unopened product container at once.

By using this product, user or buyer accepts the following Conditions, Disclaimer of Warranties, and Limitations of Liability.

CONDITIONS: The directions for use of this product are believed to be adequate and must be followed carefully. However, it is impossible to eliminate all risks associated with the use of this product. Crop injury, ineffectiveness, or other unintended consequences may result because of such factors as weather conditions, presence of other materials, or the manner of use or application inconsistent with this label (including conditions noted on the label , such as unfavorable soil conditions, unfavorable climate conditions, etc.), all of which are beyond the control of Bayer CropScience LP ("Bayer") or the seller. To the extent consistent with applicable law, all such risks shall be assumed by the user or buyer. Buyer and all users shall promptly notify Bayer of any claims whether based in contract, negligence, strict liability, other tort or otherwise

DISCLAIMER OF WARRANTIES: Subject to risks as set forth in the Conditions above, Bayer warrants that this product is reasonably fit for the purposes stated on the label when used for the purposes stated on the label when used in accordance with directions. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, BAYER MAKES NO OTHER WARRANTIES, EXPRESS OR IMPLIED, OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE OR OTHERWISE. BAYER MAKES NO RECOMMENDATION OR WARRANTY HEREIN REGARDING THE USE OF ANY PRODUCTS THAT MAY APPEAR ON THE WEBSITE REFERENCED IN THE TANK MIXING INSTRUCTIONS HEREIN, REGARDLESS OF WHETHER SUCH PRODUCT IS USED ALONE OR IN A TANK MIX WITH XtendiMax® With VaporGrip® Technology. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, BAYER DISCLAIMS ANY LIABILITY WHATSOEVER FOR SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, FOR IN-CROP (OVER-THE-TOP) USES ON CROPS WITH XTEND® TECHNOLOGY, CROP SAFETY AND WEED CONTROL PERFORMANCE ARE NOT WARRANTED BY BAYER WHEN THIS PRODUCT IS USED IN CONJUNCTION WITH "BROWN BAG" OR "BIN RUN" SEED SAVED FROM PREVIOUS YEAR'S PRODUCTION AND REPLANTED. FURTHER, TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, BAYER DOES NOT WARRANT THE WEED CONTROL PERFORMANCE OF DICAMBA-RESISTANT WEED BIOTYPES.

LIMITATIONS OF LIABILITY: To the extent consistent with applicable law, the exclusive remedy of the user or buyer for any and all losses, injuries, or damages resulting from the use or handling of this product, whether in contract, warranty, tort, negligence, strict liability or otherwise, shall not exceed the purchase price paid, or at Bayer's election, the replacement of product.

These Conditions of Sales, Disclaimer of Warranties and Limitations of Liability cannot be varied by any written or verbal statements or agreements. No employee or sales agent of Bayer or seller is authorized to vary or exceed the terms of the Disclaimer of Warranties or Limitations of Liability in any manner.

Bollgard II®, Bollgard®, Degree Xtra®, Field Master®, Harness®, Roundup Ready®, Roundup Ready 2 Xtend®, Roundup PowerMAX®, RT 3®, Roundup WeatherMAX®, XtendiMax®, XtendFlex®, and VaporGrip® are registered trademarks of Bayer Technology LLC. All other trademarks are the property of their respective owners.

PRODUCED FOR

Bayer CropScience

Bayer CropScience LP
800 N. Lindbergh Blvd.
St. Louis, MO 63167
1-866-99BAYER (1-866-992-2937)

XTENDIMAX® WITH VAPORGRIP® TECHNOLOGY (PENDING) 10/26/2020

RESTRICTED USE PESTICIDE
To be used by certified applicators only; NOT to be used by uncertified persons working under the supervision of a certified applicator, except that uncertified persons may transport containers.

This labeling expires on 12/20/2025. DO NOT use or distribute this product after 12/20/2025.

DICAMBA	GROUP	4	HERBICIDE

XtendiMax® With VaporGrip® Technology

ABN: M1768 Herbicide

For weed control in cotton with XtendFlex® Technology (dicamba-tolerant cotton) and soybean with Roundup Ready 2 Xtend® Technology or XtendFlex® Technology (dicamba-tolerant soybean).

XtendiMax® With VaporGrip® Technology is approved by U.S. EPA for use in dicamba-tolerant cotton and dicamba-tolerant soybeans only in the following states, subject to county restrictions as noted: Alabama, Arkansas, Arizona, Colorado, Delaware, Florida (excluding Palm Beach County), Georgia, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maryland, Michigan, Minnesota, Mississippi, Missouri, Nebraska, New Jersey, New Mexico, New York, North Carolina, North Dakota, Oklahoma, Ohio, Pennsylvania, South Carolina, South Dakota, Tennessee (excluding Wilson County), Texas, Virginia, West Virginia, Wisconsin.

Check the registration status of each product in each state before using.

ACTIVE INGREDIENT: Dicamba
Diglycolamine salt of dicamba (3,6-dichloro-*o*-anisic acid)* **42.80%**
OTHER INGREDIENTS: **57.20%**
TOTAL: **100.00%**
*Contains 29.0% 3,6-dichloro-*o*-anisic acid (2.9 pounds acid equivalent per U.S. gallon or 350 grams per liter)

EPA Reg. No. 264-RERN **EPA Est. No.**

CAUTION
KEEP OUT OF REACH OF CHILDREN

For MEDICAL and TRANSPORTATION Emergencies ONLY Call 24 Hours a Day 1-800-334-7577

For PRODUCT USE Information Call 1-866-99BAYER (1-866-992-2937)

For Incidence of Non-performance or Off-Target Movement or for Questions Regarding Buffer Requirements or Sensitive Crop Registries Call 1-844-RRXTEND (1-844-779-8363)

Please refer to [back panel] [booklet] for additional precautionary statements and directions for use. [Note to reviewer: Location of additional precautionary statements and directions for use will vary between those listed, depending on container type/size.]

Net Contents:

FIRST AID	
IF IN EYES:	• Hold eye open and rinse slowly and gently with water for 15 to 20 minutes. • Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. • Call a poison control center or doctor for treatment advice.

IF SWALLOWED:	• Call a poison control center or doctor immediately for treatment advice. • Have person sip a glass of water if able to swallow. • DO NOT induce vomiting unless told to do so by a poison control center or doctor. • DO NOT give anything by mouth to an unconscious person.
IF ON SKIN OR CLOTHING:	• Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15 to 20 minutes. • Call a poison control center or doctor for treatment advice.
In case of emergency, call the toll-free Bayer Emergency Response telephone number: 1-800-334-7577. Have the product container or label with you when calling a poison control center or doctor or when going for treatment.	

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION

- Causes moderate eye irritation.
- Avoid contact with eyes or clothing.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

All mixers, loaders, applicators, and other handlers must wear:

- Long-sleeved shirt and long pants
- Waterproof gloves
- Shoes plus socks

Follow the manufacturer's instructions for cleaning and maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

ENGINEERING CONTROLS

When handlers use closed systems, or enclosed cabs in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240 (d) (4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

IMPORTANT: When reduced PPE is worn because a closed system is being used, handlers must be provided all PPE specified above for "all mixers, loaders, applicators, and other handlers" and have such PPE immediately available for use in an emergency, such as a spill or equipment breakdown.

USER SAFETY RECOMMENDATIONS
User should: • Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet. • Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. • Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

ENVIRONMENTAL HAZARDS

DO NOT apply directly to water, or to areas where surface water is present, or to intertidal areas below the mean high-water mark. DO NOT contaminate water when disposing of equipment washwaters or rinsate. Apply this product only as directed on the label.

Ground Water Advisory: This chemical is known to leach through soil into ground water under certain conditions as a result of agricultural use. Use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in ground water contamination.

GROUND AND SURFACE WATER PROTECTION

Point source contamination: To prevent point source contamination, DO NOT mix or load this pesticide product within 50 feet of wells (including abandoned wells and drainage wells), sink holes, perennial or intermittent streams and rivers, and natural or impounded lakes and reservoirs. DO NOT apply pesticide product within 50 feet of wells. This setback does not apply to properly capped or plugged abandoned wells and does not apply to impervious pad or properly diked mixing/loading areas as described below.

Mixing, loading, rinsing, or washing operations performed within 50 feet of a well are allowed only when conducted on an impervious pad constructed to withstand the weight of the heaviest load that may be on or move across the pad. The pad must be self-contained to prevent surface water flow over or from the pad. The pad capacity must be maintained at 110% that of the largest pesticide container or application equipment used on the pad and have sufficient capacity to contain all product spills, equipment or container leaks, equipment washwaters, and rainwater that may fall on the pad. The containment capacity does not apply to vehicles delivering pesticide shipments to the mixing/loading site. States may have in effect additional requirements regarding wellhead setbacks and operational containment.

Care must be taken when using this product to prevent: a) back siphoning into wells, b) spills, or c) improper disposal of excess pesticide, spray mixtures, or rinsates. Check valves or anti-siphoning devices must be used on all mixing equipment.

Movement by surface runoff or through soil: DO NOT apply under conditions that favor runoff. DO NOT apply if soil is saturated with water or when rainfall that may exceed soil field capacity is forecasted to occur within 48 hours.

Under some conditions, dicamba has the potential for runoff several days after application. Poorly draining, wet, or erodible soils with readily visible slopes toward adjacent sensitive areas are more prone to produce runoff. When used on erodible soils, best management practices for minimizing runoff should be employed. Consult your local Soil Conservation Service for recommendations in your use area.

Ground water contamination may occur in areas where soils are permeable or coarse and ground water is near the surface. DO NOT apply to impervious substrates such as paved or highly compacted surfaces in areas with high potential for ground water contamination. DO NOT apply to soils classified as sand with less than 3% organic matter and where ground water depth is shallow.

Movement by water erosion of treated soil: DO NOT apply or incorporate this product through any type of irrigation equipment nor by flood or furrow irrigation. Ensure treated areas have received at least one-half inch rainfall (or irrigation) before using tailwater for subsequent irrigation of other fields.

PROTECTING ENDANGERED SPECIES / PESTICIDE USE LIMITATION AREAS

The use of any pesticide in a manner that may kill or otherwise harm an endangered species or adversely modify their habitat is a violation of federal law. Use of this product in a manner inconsistent with its labeling may pose a hazard to endangered or threatened species. **When using this product, you must follow the measures contained in the Endangered Species Protection Bulletin for the area in which you are applying the product.** To obtain Bulletins, no more than six months before using this product, consult https://www.epa.gov/endangered-species/bulletins-live-two-view-bulletins or call 1-844-447-3813. You must use the Bulletin valid for the month in which you will apply the product.

It is a Federal offense to use any pesticide in a manner that results in the death of an endangered species.

PHYSICAL OR CHEMICAL HAZARDS

DO NOT store or heat near oxidizing agents as a hazardous chemical reaction may occur.

DIRECTIONS FOR USE

RESTRICTED USE PESTICIDE

Only for retail sale to and use by Certified Applicators. NOT to be used by uncertified persons working under the supervision of a certified applicator, except that uncertified persons may transport containers.

It is a violation of Federal law to use this product in any manner inconsistent with its labeling. This labeling must be in the user's possession during application. Read the entire label before using this product.

DO NOT apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

For important crop safety information, refer to the "Specific Use Directions" section for each crop.

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. This standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses and of handlers of agricultural pesticides. It contains requirements for training, decontamination, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about Personal Protective Equipment (PPE), notification to workers, and restricted-entry intervals. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

DO NOT enter or allow worker entry into treated areas during the restricted-entry interval **(REI) of 24 hours.** **PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water is:** • Coveralls worn over short-sleeved shirt and short pants • Chemical-resistant footwear plus socks • Waterproof gloves • Chemical-resistant headgear for overhead exposure • Protective eyewear

PRODUCT INFORMATION

XtendiMax® With VaporGrip® Technology is:

- a water-soluble formulation intended for control and suppression of many annual, biennial, and perennial broadleaf weeds listed in the "Weeds Controlled or Suppressed" section of this label. This product may be used for control of these weeds in cotton with XtendFlex® Technology and soybean with Roundup Ready 2 Xtend® Technology or XtendFlex® Technology.
- a contact, systemic herbicide, with limited soil activity on small seeded broadleaf weeds, including waterhemp, lambsquarters, and Palmer pigweed.
- readily absorbed by plants through shoot and root uptake, translocates throughout the plant's system, and accumulates in areas of active growth. XtendiMax® With VaporGrip® Technology interferes with plant growth hormones (auxins) resulting in death of many broadleaf weeds.

Additional state restrictions and requirements may apply. The user must comply with any additional state requirements and restrictions.

Refer to the specific use directions and restrictions in each crop table. Follow all requirements and restrictions on www.xtendimaxapplicationrequirements.com.

APPLICATION REQUIREMENTS OVERVIEW

Read and follow all applicable restrictions, precautions, and directions on the container label and booklet and at www.xtendimaxapplicationrequirements.com. For product questions or inquiries and/or to report any nonperformance of this product against any particular weed species, call 1-844-RRXTEND (1-844-779-8363). It is recommended that the certified applicator visit www.xtendimaxapplicationrequirements.com to obtain a copy of the Overview of Application Requirements for reference prior to and during application.

REQUIREMENTS	LABEL SECTIONS
Mandatory Training: ☐ Prior to applying, applicator must complete dicamba-specific training. Only certified applicators may apply this product; NOT to be used by uncertified persons working under the supervision of a certified applicator, except that uncertified persons may transport containers.	➢ Training (pp. 5-6)
Record Keeping: ☐ Records must be created within 72 hours of every application. Records must be kept for a period of two years.	➢ Record Keeping (p. 6)
Application: ☐ For EVERY application of XtendiMax® With VaporGrip® Technology, an approved **Volatility Reduction Adjuvant (VRA)** must be included in the spray solution. An approved **Drift Reduction Adjuvant (DRA)** must also be included in the spray solution, unless otherwise indicated on www.xtendimaxapplicationrequirements.com. Refer to the website for a list of approved DRAs and VRAs. ☐ *Rate and Timing*: Apply 22 fluid ounces per acre (0.5 lb. a.e. dicamba) for any single pre-emergent or in-crop application in: ○ Cotton with XtendFlex® Technology up to and including July 30 (DO NOT apply after July 30 regardless of growth stage), and ○ Soybean with Roundup Ready 2 Xtend® Technology or XtendFlex® Technology up to and including June 30. Applications occurring after R1 are prohibited as crop response may occur and in no event can applications be made after June 30 regardless of growth stage. ○ For details, see the "Specific Use Directions" section. ☐ *Spray volume:* Apply in a minimum of 15 gallons of spray solution per acre. ☐ *Tank mixing*: Use only approved tank-mix partners found at www.xtendimaxapplicationrequirements.com.	➢ Tank Mix Partners (p. 9) ➢ Specific Use Directions (pp. 12-14) ➢ Specific Use Directions (pp. 12-14) ➢ Tank Mix Partners (p. 9)

○ Refer to all product labels to determine mix order or perform a mix compatibility test.	
Application Equipment: ☐ *Spray system equipment cleanout*: Ensure entire sprayer system is properly cleaned before and after application. ☐ *Nozzles*: Use only approved nozzles within specified pressures found at www.xtendimaxapplicationrequirements.com. ☐ *Spray boom height*: Maximum boom height is 24 inches above target pest or crop canopy. ☐ *Ground speed*: DO NOT exceed 15 mph.	➢ Equipment Requirements (pp. 7-8)
Environmental Conditions: ☐ *Wind speed*: Apply when wind speed, measured at boom height, is 3-10 mph. ☐ *Inversions*: DO NOT spray during an inversion; only spray between one hour after sunrise and two hours before sunset. ☐ *Rainfall*: DO NOT apply this product if rain that may exceed soil field capacity and result in soil runoff is forecasted in the next 48 hours.	➢ Environmental Requirements (p. 7)
Downwind Requirements: ☐ *Sensitive crops and certain plants downwind*: DO NOT apply if sensitive crops and/or certain plants, as defined below in this label, are planted on an adjacent downwind field or area. ☐ *Downwind buffer*: After determining no adjacent sensitive crops and/or certain plants are downwind, maintain a 240-ft downwind buffer. ☐ *Endangered species*: Consult Endangered Species Protection Bulletins for ESA counties and restrictions.	➢ Adjacent Sensitive Crops and Certain Plants (p. 8) ➢ Buffer Requirements (p. 8) ➢ Protecting Endangered Species (p. 3)
Drift Reduction Technology: ☐ See "Optional Use of Drift Reduction Technology" section for details on application requirements and the potential to qualify for reduced use restrictions.	➢ Optional Use of Drift Reduction Technology (pp. 8-9)

USE RESTRICTIONS

- DO NOT USE ANY TANK MIX PRODUCT OR ANY NOZZLE AND PRESSURE COMBINATION WITH XTENDIMAX® WITH VAPORGRIP® TECHNOLOGY THAT IS NOT IDENTIFIED ON THE LIST OF APPROVED PRODUCTS FOUND AT www.xtendimaxapplicationrequirements.com.
- DO NOT TANK MIX AMMONIUM SULFATE (AMS) WITH THIS PRODUCT.
- DO NOT EXCEED 88 FLUID OUNCES (2 POUNDS ACID EQUIVALENT (A.E.) DICAMBA) OF XTENDIMAX® WITH VAPORGRIP® TECHNOLOGY PER ACRE PER YEAR.
- DO NOT EXCEED 88 FLUID OUNCES (2 POUNDS A.E. DICAMBA) PER ACRE PER YEAR FROM ALL DICAMBA APPLICATIONS IF MORE THAN ONE DICAMBA-CONTAINING PRODUCT IS APPLIED TO THE SAME SITE WITHIN THE SAME YEAR.
- DO NOT MAKE APPLICATION OF THIS PRODUCT IF RAIN IS EXPECTED IN THE NEXT 48 HOURS THAT MAY EXCEED SOIL FIELD CAPACITY AND RESULT IN SOIL RUNOFF.
- DO NOT APPLY THROUGH ANY TYPE OF IRRIGATION EQUIPMENT. DO NOT TREAT IRRIGATION DITCHES OR WATER USED FOR CROP IRRIGATION OR DOMESTIC PURPOSES.
- DO NOT APPLY TO CROPS UNDER STRESS DUE TO LACK OF MOISTURE, HAIL DAMAGE, FLOODING, HERBICIDE INJURY, MECHANICAL INJURY, INSECTS, OR WIDELY FLUCTUATING TEMPERATURES AS INJURY MAY RESULT.
- DO NOT APPLY THIS PRODUCT IF SENSITIVE CROPS AND CERTAIN PLANTS ARE PLANTED ON AN ADJACENT DOWNWIND FIELD OR AREA.
- DO NOT APPLY THIS PRODUCT AERIALLY.
- Restricted Entry Interval (REI): 24 hours.

USE PRECAUTIONS

- In case material is released or spilled: dike and contain the spill with inert material (sand, earth, etc.) and transfer liquid and solid diking material to separate containers for disposal. Remove contaminated clothing and wash affected skin areas with soap and water. Wash clothing before re-use. Keep the spill out of all sewers and open bodies of water.
- Rainfast period: This product is rainfast four (4) hours after application to most weed species. Rainfall or irrigation occurring within four (4) hours after application may necessitate retreatment or may otherwise result in reduced weed control.

TRAINING

Prior to using this product, users must complete dicamba-specific training to obtain certification. Once completed, dicamba-specific training is then required every other year for all users of this product. If state-specific training is required by the state where the applicator intends to apply this product, the applicator must complete training from the state or state-authorized provider. Otherwise, the applicator

may complete dicamba-specific training provided either by the state/state-authorized provider or by a registrant of a dicamba product approved for in-crop use with dicamba-tolerant crops.

RECORD KEEPING

The following records must be generated as soon as practical but **no later than 72 hours after application**. The certified applicator must keep these records for a period of **two years**. Records must be made available to State Pesticide Control Official(s), USDA, and EPA upon request. See www.xtendimaxapplicationrequirements.com for an example form summarizing record keeping requirements.

Keep records of the following items for each application of XtendiMax® With VaporGrip® Technology:

1. All Items required by 7 CFR Part 110 (RECORDKEEPING ON RESTRICTED USE PESTICIDES BY CERTIFIED APPLICATORS), including:
    a. The brand or product name
    b. The EPA registration number
    c. The total amount applied
    d. The month, day, and year of application
    e. The location of the application
    f. The crop, commodity, stored product, or site of application
    g. The size of treated area
    h. The name of the certified applicator
    i. The certification number of the certified applicator
2. *Training*: Completion date and provider of required training and proof of completion.
3. *Receipts of Purchase*: Receipts or copies for the purchase of this product.
4. *Product Label*: A copy of this product label and any state special local needs label that supplements this label.
5. *Sensitive Crops and Certain Plants Awareness*:
    a. Document that a sensitive crop registry was consulted. At a minimum, documentation must include the name of the sensitive crop registry and the date it was consulted.
    b. Record of a survey of adjacent areas documenting the sensitive crops and/or certain plants (as defined below in the "Adjacent Sensitive Crops and Certain Plants" section of this label) surrounding the field prior to application. At a minimum, records must include documentation of adjacent sensitive crops and/or certain plants and the date the survey was conducted.
6. *Buffer Requirement*: Record of the buffer distance implemented as directed in the "Spray Drift Management" and "Optional Use of Drift Reduction Technology" sections of this label.
7. *Start and Finish Times of Each Application*: Record of the time at which the application started and finished.
8. *Application Timing*: Record of the type of application (for example: preemergence, postemergence) and the number of days after planting if postemergence.
9. *Air Temperature*: Record of the air temperature in degrees Fahrenheit at the start and completion of each application.
10. *Wind Speed and Direction*: Record of the wind speed and direction (the direction from which the wind is blowing) at boom height at the start and completion of each application.
11. *Nozzle and Pressure*: Record of the spray nozzle manufacturer/brand, type, orifice size, and operating pressure used during each application of this product.
12. *Tank Mix Products*: Record of the brand names and EPA registration numbers (if applicable) for all products that were tank mixed with this product for each application, as well as a record of the volume of each added to the tank prior to application.
13. ***Mandatory Volatility and Drift Reduction Adjuvants***: Receipts or copies for the purchase of an approved volatility reduction adjuvant, as well as a record of the volume added to the tank prior to application. Receipts or copies for the purchase of an approved DRA and a record of the volume added to the tank prior to application, unless otherwise indicated on www.xtendimaxapplicationrequirements.com.
14. *Spray System Cleanout*: At a minimum, records must include confirmation that the spray system was clean before using this product and that the post-application cleanout was completed in accordance with the "Proper Spray System Equipment Cleanout" section of this label.

HERBICIDE RESISTANCE MANAGEMENT RECOMMENDATIONS

The dicamba active ingredient in XtendiMax® With VaporGrip® Technology is a Group 4 herbicide. Any weed population may contain or develop plants naturally resistant to XtendiMax® With VaporGrip® Technology and other Group 4 herbicides. The resistant biotypes may dominate the weed population if these herbicides are used repeatedly in the same field. Appropriate resistance management strategies should be followed.

To delay herbicide resistance, take one or more of the following steps:

- Limit cultivation and/or mechanical tillage within 7 days after application, as this may result in reduced efficacy and promote regrowth of treated weeds.
- Rotate the use of XtendiMax® With VaporGrip® Technology within a growing season and among growing seasons with different herbicide groups (other than Group 4) that control the same weeds.
- Use tank mixtures with herbicides from a different herbicide Group if such use is permitted.
- Adopt an integrated weed-management program for herbicide use that includes scouting and uses historical information related to herbicide use and crop rotation and that considers tillage (or other mechanical control methods), cultural (*e.g.*, higher crop seeding rates; precision fertilizer application method and timing to favor the crop and not the weeds), biological (weed-competitive crops or varieties), and other management practices.
- Scout after herbicide application to monitor weed populations for early signs of resistance development. Indicators of possible herbicide resistance include: (1) failure to control a weed species normally controlled by the herbicide at the dose applied,

especially if control is achieved on adjacent weeds; (2) a spreading patch of non-controlled plants of a particular weed species; (3) surviving plants mixed with controlled individuals of the same species. If resistance is suspected, prevent weed seed production in the affected area by an alternative herbicide from a different group or by a mechanical method such as hoeing or tillage. Prevent movement of resistant weed seeds to other fields by cleaning harvesting and tillage equipment when moving between fields and by planting clean seed.

- If a weed pest population continues to progress after treatment with this product, switch to another management strategy or herbicide with an effective mode of action, if available, and contact Bayer at 1-844-RRXTEND (1-844-779-8363).
- Contact your local extension specialist or certified crop advisors for additional pesticide resistance-management and/or integrated weed-management recommendations for specific crops and weed biotypes.
- For further information or to report suspected resistance contact Bayer at 1-844-RRXTEND (1-844-779-8363).

Management of Dicamba-Resistant Biotypes

Appropriate testing is critical in order to determine if a weed is resistant to dicamba. Contact your Bayer representative to determine if resistance in any particular weed biotype has been confirmed in your area or visit www.iwilltakeaction.com or www.weedscience.org.

The following good agronomic practices can reduce the spread of confirmed dicamba-resistant biotypes, particularly if pursued as soon as signs of resistance are observed:

- If a naturally occurring resistant biotype is present in your field, this product may be tank mixed or applied sequentially with an appropriately labeled herbicide with a different mode of action to achieve control (read "Tank Mixing" section for more information).
- Cultural and mechanical control practices (*e.g.*, crop rotation or tillage) can also be used as appropriate.
- Scout treated fields after herbicide application and control weed escapes, including resistant biotypes, before they set seed.
- Thoroughly clean equipment, as practical, for all weed seeds before leaving fields known to contain resistant biotypes.

SPRAY DRIFT MANAGEMENT

THE APPLICATOR IS RESPONSIBLE FOR AVOIDING OFF-SITE SPRAY DRIFT TO THE EXTENT CONSISTENT WITH APPLICABLE LAW. The applicator is responsible for compliance with state and local pesticide regulations, including any state or local pesticide drift regulations. DO NOT allow herbicide solution to mist, drip, drift, or splash onto desirable vegetation because severe injury or destruction to desirable broadleaf plants could result.

Applications using larger droplets reduces drift potential but will not prevent drift if the application is made improperly or under unfavorable environmental conditions. The interaction of weather-related factors and equipment must be monitored to maximize performance and on-target spray deposition. The applicator is responsible for considering all these factors when making a spray decision to the extent consistent with applicable law. BE AWARE OF NEARBY NON-TARGET SITES AND CHANGING ENVIRONMENTAL CONDITIONS (see the "Temperature Inversions" section of this label).

Environmental Requirements

Wind Speed

Wind speed must be measured in the field of application at boom height prior to and after application. Only apply when wind speed at boom height is between 3 MPH and 10 MPH during application.

Temperature Inversions

DO NOT apply this product during a temperature inversion as the off-target movement potential is high.

Applications of this product may ONLY occur one hour after sunrise through two hours before sunset. In general, temperature inversions are more likely during nighttime hours.

- Temperature inversions are characterized by increasing temperature with altitude and are common on nights with limited cloud cover and light to no wind.
- The presence of an inversion can be indicated by ground fog or, if fog is not present, by the movement of smoke from a ground source or an aircraft smoke generator. Smoke that layers and moves laterally in a concentrated cloud (under low wind conditions) indicates an inversion, while smoke that moves upward and rapidly dissipates indicates good vertical air mixing.

Equipment Requirements

DO NOT APPLY THIS PRODUCT USING AERIAL SPRAY EQUIPMENT.

Nozzle Type

To produce minimal amounts of fine spray particles, the applicator must use an approved nozzle within a specified pressure range as found at www.xtendimaxapplicationrequirements.com. DO NOT use any other nozzle and pressure combination not specifically listed on this website.

Equipment Ground Speed

DO NOT exceed a ground speed of 15 miles per hour. Select a ground speed that will deliver the desired spray volume while maintaining the desired spray pressure. Slower speeds generally result in better spray coverage and deposition on the target area. Provided the applicator can maintain the required nozzle pressure, it is recommended that tractor speed is reduced to 5 miles per hour at field edges.

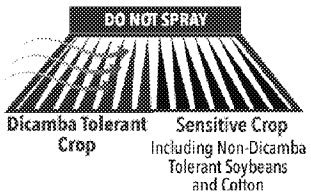
Spray Boom Height

Use the minimum boom height appropriate for spray pattern overlap based on nozzle selection and spacing, according to manufacturer recommendations, or 24 inches above canopy, whichever is smaller.

Adjacent Sensitive Crops and Certain Plants

DO NOT SPRAY this product when wind is blowing toward adjacent sensitive crops and certain plants, as defined immediately below.

It is important for the applicator to be aware that wind direction may vary during the application. If wind direction shifts such that the wind is blowing toward adjacent sensitive crops and/or certain plants, the applicator **must STOP** the application.



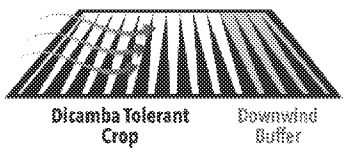
Before making an application, 1) consult a sensitive crop registry (such as FieldWatch or state/federal registry), 2) survey adjacent fields and areas, and 3) confirm the type or variety of plants and crops surrounding the field prior to application. At a minimum, records must include the name of the sensitive crop registry, the date it was consulted, documentation of adjacent plants and crops/areas surrounding the field of application, and the date the survey was conducted.

Dicamba-sensitive crops and/or certain plants include, but are not limited to, non-dicamba-tolerant soybeans and cotton, tomatoes and other fruiting vegetables (EPA crop group 8), fruit trees, cucurbits (EPA crop group 9), grapes, beans, flowers, ornamentals, peas, potatoes, sunflower, tobacco, and other broadleaf plants, including if these plants are in a greenhouse. Severe injury or destruction could occur if any contact between this product and these plants occurs. Sensitive crop registries can provide additional information about sensitive crops and sensitive areas.

If you have questions regarding sensitive crop registries contact Bayer at 1-844-RRXTEND (1-844-779-8363) **prior to application**.

Buffer Requirements

After determining no adjacent sensitive crops and/or certain plants are downwind, the applicator **must always maintain a 240-foot downwind buffer** between the last treated row and the nearest downwind field edge when applying using broadcast open-boom equipment. For reduced downwind buffer distances, refer to "Optional Use of Drift Reduction Technology" section of this label.



The following areas may be included in the buffer distance composition when directly adjacent to the treated field edges:

- Roads, paved or gravel surfaces, mowed grassy areas adjacent to field, and areas of bare ground from recent plowing~~ed~~ or grading~~ed areas~~ that are contiguous with the ~~planted area~~treated field
- Planted agricultural fields containing: corn, dicamba-tolerant cotton, dicamba-tolerant soybean, sorghum, proso millet, small grains, sugarcane, and other crops for which dicamba has a post-emergent approved use. If the applicator intends to include such crops as dicamba-tolerant cotton and/or dicamba-tolerant soybeans in the buffer distance composition, the applicator must confirm the crops are in fact dicamba-tolerant.
- Agricultural fields that have been prepared for planting
- Areas covered by the footprint of a building, silo, or other man-made structure with walls and/or roof

If you have questions regarding Buffer Requirement, contact Bayer at 1-844-RRXTEND (1-844-779-8363) **prior to application**.

Optional Use of Drift Reduction Technology

This product may be optionally applied using a hooded/shielded broadcast sprayer or other types of drift reduction technology (DRT) for postemergence weed control as well as residual control of susceptible weeds. The applicator must use an approved nozzle within a specified pressure range as found at www.xtendimaxapplicationrequirements.com. Use of drift reduction technology (DRT) in combination with approved nozzles is recommended to further reduce drift potential.

Applications of this product may qualify for reduced use restrictions, such as a reduced downwind buffer distance, provided a **qualified DRT** listed on www.xtendimaxapplicationrequirements.com is used and operated according to the directions and limitations provided at www.xtendimaxapplicationrequirements.com.

Hooded/Shielded Broadcast Sprayer:

For hooded/shielded sprayers, all application nozzles must be contained within the enclosed area. Shielding the boom or individual nozzles can reduce the effects of wind. However, it is the responsibility of the applicator to verify that the shields are preventing drift and

not interfering with uniform deposition of the product. Applicators must ensure the sprayer system is off or controlled during turns to further prevent spray drift. Refer to the hooded/shielded sprayer manufacturer use specifications prior to use.

Requirements for Reduced Use Restrictions with Optional Hooded/Shielded Sprayer: ONLY **qualified** hooded/shielded sprayers listed on www.xtendimaxapplicationrequirements.com are eligible for reduced use restrictions when applying this product. When using a **qualified** hooded/shielded sprayer, the applicator **must always maintain a minimum 110-foot downwind buffer** between the last treated row and the nearest downwind field edge. Consult Endangered Species Protection Bulletins for ESA counties and restrictions. While this product may be applied with other (non-qualified) hooded/shielded sprayers, no reduction in use restrictions is associated with their use.

TANK MIX PARTNERS

Tank Mixing

It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions, limitations, and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.

All applications of this product require the inclusion of a volatility reduction adjuvant (VRA), such as a VaporGrip® Xtra Agent product or an approved VRA equivalent, in the tank mix. The inclusion of a **drift reduction adjuvant (DRA) is also required** in the tank mix, unless otherwise indicated on www.xtendimaxapplicationrequirements.com. Only tank mix products that have been tested and found to not adversely affect the offsite movement potential of XtendiMax® With VaporGrip® Technology may be tank mixed with XtendiMax® With VaporGrip® Technology. The applicator must check the website found at www.xtendimaxapplicationrequirements.com for a list of approved tank mix products no more than 7 days before applying XtendiMax® With VaporGrip® Technology.

DO NOT tank mix any product with XtendiMax® With VaporGrip® Technology unless:

1. The intended tank mix product is identified on the list of tested products found at www.xtendimaxapplicationrequirements.com;
2. The intended products are not prohibited on either this label or the label of the tank mix product; and
3. All requirements and restrictions on www.xtendimaxapplicationrequirements.com are followed.

NOTE: DO NOT use PVA (polyvinyl acetate) packets in a tank mix with products that contain boron or release free chlorine. The resultant reaction of PVA and boron or free chlorine is a plastic that is not soluble in water or solvents.

APPLICATION INSTRUCTIONS

APPLY THIS PRODUCT USING PROPERLY MAINTAINED AND CALIBRATED EQUIPMENT CAPABLE OF DELIVERING THE REQUIRED VOLUMES.

DO NOT APPLY THIS PRODUCT USING AERIAL SPAY EQUIPMENT.

XtendiMax® With VaporGrip® Technology can be applied to actively growing weeds as broadcast, band, or spot spray applications using water as a carrier. For best results, treat weeds early when they are relatively small (less than 4 inches). Timely application to small weeds early in the season will improve control and reduce weed competition.

Ground Application (Broadcast)

Water Volume: Use a minimum of 15 gallons of spray solution per broadcast acre for optimal performance. Use 20 gallons per acre or greater when treating dense weed canopy/vegetation.

Ground Application (Hooded In-Row and Directed Layby)

Using a hooded sprayer or other drift reduction technology in combination with approved nozzles may further reduce drift potential. When applying XtendiMax® With VaporGrip® Technology by hooded in-row or layby sprayers, determine the amount of herbicide and water volume needed using the following formula:

$$\frac{\text{band width (inches)}}{\text{row width (inches)}} * \text{broadcast rate per acre} = \text{rate per treated acre}$$

$$\frac{\text{band width (inches)}}{\text{row width(inches)}} * \text{broadcast spray volume per acre} = \text{spray volume per treated acre}$$

SPRAY SYSTEM EQUIPMENT CLEANOUT

You must ensure that the spray system used to apply this product is clean before using this product. Failure to properly clean the entire spray system can result in inadvertent contamination of the spray system. Contamination of the spray system may cause injury to non-dicamba-tolerant soybeans and other sensitive crops.

Inadvertent contamination can also occur in equipment used for bulk product handling and mixing prior to use in the spray system. Care should be taken to reduce contamination not only in the spray system but in any equipment used to transfer or deliver product. For example, bulk handling and mixing equipment containing this product should be segregated when possible to reduce potential for cross-

contamination. Consider using block and check valves to avoid backflow during transfer. Piping should be reviewed to ensure there is not potential for product build-up. Dedicated nurse trucks and tender equipment should be used when possible.

Clean equipment **immediately after using** this product, using a **triple rinse** procedure as follows:

1. After spraying, drain the sprayer (including boom and lines) immediately. DO NOT allow the spray solution to remain in the spray boom lines overnight prior to flushing.
2. Fill tank with clean water (at least 10% volume) and flush tank, hoses, boom, and nozzles. Ensure agitation for 15 minutes and then spray out solution through boom. If equipped, open boom ends and flush.
3. Inspect and clean all strainers, screens, and filters.
4. Fill tank with clean water (at least 10% of volume) and prepare a cleaning solution with a commercial detergent or sprayer cleaner or ammonia according to the manufacturer's directions.
5. Take care to wash all parts of the tank, including the inside top surface. Start agitation in the sprayer and thoroughly recirculate the cleaning solution for at least 15 minutes. All visible deposits must be removed from the spraying system.
6. Flush hoses, spray lines, and nozzles for at least 1 minute with the cleaning solution.
7. Remove nozzles, screens, and strainers and clean separately in the cleaning solution after completing the above procedures.
8. Drain pump, filter, and lines.
9. Repeat steps 2 and 3.
10. Rinse the complete spraying system with clean water.
11. Clean and wash off the outside of the entire sprayer and boom.
12. All rinse water must be disposed of in compliance with local, state, and federal guidelines.

ROTATIONAL CROPS

When counting days from the application of this product, do not count days when the ground is frozen. Moisture is essential for the degradation of this herbicide in soil. If dry weather prevails, use cultivation to allow herbicide contact with moist soil.

No rotational cropping restrictions apply when rotating to soybean with Roundup Ready 2 Xtend® Technology or XtendFlex® Technology or to cotton seed with XtendFlex® Technology (including Bollgard® 3 XtendFlex® Cotton, Bollgard II® XtendFlex® Cotton, or XtendFlex® Cotton). For other crops, the interval between application and planting rotational crop is given below. Planting at intervals less than specified below may result in crop injury.

For application rates of this product of **22 fluid ounces per acre per year:**

- No planting restrictions apply beyond 120 days after application.
- East of the Mississippi River:
  - Wait a minimum of 30 days for 22 fluid ounces applied per acre before planting.
- West of the Mississippi River:
  - Wait a minimum of 45 days for 22 fluid ounces applied per acre before planting.
  - In areas with less than 30 inches of annual rainfall wait a minimum of 100 days before planting (furrow and/or overhead irrigation can be included in rainfall determination).

For application rates of this product of **44 to 88 fluid ounces per acre per year:**

- In areas with less than 30 inches of annual rainfall:
  - Wait a minimum of 180 days before planting crops (furrow and/or overhead irrigation can be included in rainfall determination).
- In areas with 30 inches or more annual rainfall:
  - Wait a minimum of 120 days after application before planting.

WEEDS CONTROLLED OR SUPPRESSED

General Weed List, Including ALS-, Glyphosate-, and Triazine-Resistant Biotypes

ANNUAL WEEDS		
Alkanet	Flixweed	Pusley, Florida
Amaranth, Palmer, Powell, Spiny	Fumitory	Radish, Wild
Aster, Slender	Goosefoot, Nettleleaf	Ragweed, Common, Giant (Buffaloweed), Lance-Leaf
Bedstraw, Catchweed	Hempnettle	Rocket, London, Yellow
Beggarweed, Florida	Henbit	Rubberweed, Bitter (Bitterweed)
Broomweed, Common	Jacobs-Ladder	Salsify
Buckwheat, Tartary, Wild	Jimsonweed	Senna, Coffee
Buffalobur	Knawel (German Moss)	Sesbania, Hemp
Burclover, California	Knotweed, Prostrate	Shepherdpurse
Burcucumber	Kochia	Sicklepod
Buttercup, Corn, Creeping, Roughseed, Western Field	Ladysthumb	Sida, Prickly (Teaweed)
Carpetweed	Lambsquarters Common	Smartweed, Green, Pennsylvania
Catchfly, Nightflowering	Lettuce, Miners, Prickly	Sneezeweed, Bitter
Chamomile, Corn	Mallow, Common, Venice	Sowthistle, Annual, Spiny
Chevil, Bur	Marestail (Horseweed)	Spanish Needles
Chickweed, Common	Mayweed	Spikeweed, Common
Clovers	Morningglory, Ivyleaf, Tall	Spurge, Prostrate, Leafy
Cockle, Corn, Cow, White	Mustard, Black, Blue, Tansy, Treacle, Tumble, Wild, Yellowtops	Spurry, Corn
Cocklebur, Common	Nightshade, Black, Cutleaf	Starbur, Bristly
Copperleaf, Hophornbeam	Pennycress, Field (Fanweed, Frenchweed, Stinkweed)	Starwort, Little
Cornflower (Bachelor Button)	Pepperweed, Virginia (Peppergrass)	Sumpweed, Rough
Croton, Tropic, Woolly	Pigweed, Prostrate, Redroot (Carelessweed), Rough, Smooth, Tumble	Sunflower, Common (Wild), Volunteer
Daisy, English	Pineappleweed	Thistle, Russian
Dragonhead, American	Poorjoe	Velvetleaf
Eveningprimrose, Cutleaf	Poppy, Red-horned	Waterhemp, Common, Tall
Falseflax, Smallseed	Puncturevine	Waterprimrose, Winged
Fleabane, Annual	Purslane, Common	Wormwood

BIENNIAL WEEDS		
Burdock, Common	Gromwell	Starthistle, Yellow
Carrot, Wild (Queen Anne's Lace)	Knapweed, Diffuse, Spotted	Sweetclover
Cockle, White	Mallow, Dwarf	Teasel
Eveningprimrose, Common	Plantain, Bracted	Thistle, Bull, Milk, Musk, Plumeless
Geranium, Carolina	Ragwort, Tansy	

PERENNIAL WEEDS		
Alfalfa	Garlic, Wild	Smartweed, Swamp
Artichoke, Jerusalem	Goldenrod, Canada, Missouri	Snakeweed, Broom
Aster, Spiny, Whiteheath	Goldenweed, Common	Sorrel, Red (Sheep Sorrel)
Bedstraw, Smooth	Hawkweed	Sowthistle, Perennial
Bindweed, Field, Hedge	Henbane, Black	Spurge, Leafy
Blueweed, Texas	Horsenettle, Carolina	Sundrops
Bursage, Woollyleaf (Bur Ragweed, Povertyweed)	Ironweed	Thistle, Canada, Scotch
Buttercup, Tall	Knapweed, Black, Diffuse, Russian, Spotted	Toadflex, Dalmatian
Campion, Bladder	Milkweed, Climbing, Common, Honeyvine, Western Whorled	Tropical Soda Apple
Chickweed, Field, Mouseear	Nettle, Stinging	Trumpetcreeper (Buckvine)
Chicory	Nightshade, Silverleaf (White Horsenettle)	Vetch
Clover, Hop	Onion, Wild	Waterhemlock, Spotted
Dandelion, Common	Plantain, Broadleaf, Buckhorn	Waterprimrose, Creeping
Dock Broadleaf (Bitterdock), Curly	Pokeweed	Woodsorrel, Creeping, Yellow
Dogbane, Hemp	Ragweed, Western	Wormwood, Absinth, Louisiana
Dogfennel (Cypressweed)	Redvine	Yankeeweed
Fern, Bracken	Sericia Lespedeza	Yarrow, Common

SPECIFIC USE DIRECTIONS

CROPS WITH XTEND® TECHNOLOGY

Cotton with XtendFlex® Technology (including Bollgard II® XtendFlex® COTTON, Bollgard® 3 XtendFlex® COTTON, or XtendFlex® COTTON) and soybean with Roundup Ready 2 Xtend® Technology or XtendFlex® Technology CONTAIN A PATENTED GENE THAT PROVIDES TOLERANCE TO DICAMBA, THE ACTIVE INGREDIENT IN THIS PRODUCT. THIS PRODUCT WILL CAUSE SEVERE CROP INJURY OR DESTRUCTION AND YIELD LOSS IF APPLIED TO COTTON AND SOYBEAN THAT ARE NOT DICAMBA TOLERANT, INCLUDING COTTON AND SOYBEAN WITH A TRAIT ENGINEERED TO CONFER TOLERANCE TO AUXIN HERBICIDES OTHER THAN DICAMBA. FOLLOW THE REQUIREMENTS SET FORTH HEREIN TO PREVENT SEVERE CROP INJURY OR DESTRUCTION AND YIELD LOSS. CONTACT WITH FOLIAGE, GREEN STEMS, OR FRUIT OF CROPS, OR ANY DESIRABLE PLANTS THAT DO NOT CONTAIN A DICAMBA TOLERANCE GENE OR ARE NOT NATURALLY TOLERANT TO DICAMBA, COULD RESULT IN SEVERE PLANT INJURY OR DESTRUCTION.

XtendiMax® With VaporGrip® Technology is approved by U.S. EPA for use in cotton with XtendFlex® Technology and in soybean with Roundup Ready 2 Xtend® Technology or XtendFlex® Technology only in the following states, subject to county restriction as noted: Alabama, Arkansas, Arizona, Colorado, Delaware, Florida (excluding Palm Beach County), Georgia, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maryland, Michigan, Minnesota, Mississippi, Missouri, Nebraska, New Jersey, New Mexico, New York, North Carolina, North Dakota, Oklahoma, Ohio, Pennsylvania, South Carolina, South Dakota, Tennessee (excluding Wilson County), Texas, Virginia, West Virginia, Wisconsin.

Information on cotton with XtendFlex® Technology and on soybean with Roundup Ready 2 Xtend® Technology or XtendFlex® Technology can be obtained from your seed supplier or Bayer representative. Cotton with XtendFlex® Technology and soybean with Roundup Ready 2 Xtend® Technology or XtendFlex® Technology must be purchased from an authorized licensed seed supplier.

Cotton with XtendFlex® Technology, soybean with Roundup Ready 2 Xtend® Technology or XtendFlex® Technology, and methods of controlling weeds and applying dicamba in cotton with XtendFlex® Technology and in soybean with Roundup Ready 2 Xtend® Technology or XtendFlex® Technology are protected under U.S. patent law. No license to use cotton with XtendFlex® Technology or soybean with Roundup Ready 2 Xtend® Technology or XtendFlex® Technology is granted or implied with the purchase of this herbicide product. Cotton with XtendFlex® Technology and soybean with Roundup Ready 2 Xtend® Technology or XtendFlex® Technology are owned by Bayer and a license must be obtained from Bayer before using it. Contact your Authorized Bayer Retailer for information on obtaining a license to use cotton with XtendFlex® Technology and soybean with Roundup Ready 2 Xtend® Technology or XtendFlex® Technology.

COTTON WITH XTENDFLEX® TECHNOLOGY	
Application Rate	• **Burndown/Early Preplant, Preplant, At-Planting, Preemergence:** Apply ONLY 22 fluid ounces (0.5 lb. acid equivalent (a.e.) dicamba) per acre for a single burndown/early preplant, preplant, at-planting, or preemergence application. • **Postemergence (in-crop):** For any single, in-crop application, apply ONLY 22 fluid ounces (0.5 lb. a.e. dicamba) per acre.
Maximum Annual Rates	• *Total of all Burndown/Early Preplant, Preplant, At-Planting, and Preemergence applications*: 44 fluid ounces per acre (1.0 lb. a.e. dicamba per acre)

	• *Total of all in-crop applications*: 44 fluid ounces per acre (1.0 lb. a.e. dicamba per acre) • *Combined total per year for all applications*: 88 fluid ounces per acre (2.0 lb. a.e. dicamba per acre)
Application Timing	• **Burndown/Early Preplant, Preplant, At-Planting, Preemergence:** This product may be applied before, during, or immediately after planting. • **Postemergence (in-crop):** This product may be applied in-crop up to and including July 30.
Number of Applications	• Sequential applications of this product may be necessary to control new flushes of weeds or on tough-to-control weeds. Allow at least 7 days between applications. • A maximum of **two** burndown/early preplant, preplant, at-planting, and preemergence and **two** in-crop applications may be made.
Spray Volume	• Apply this product in a minimum of 15 gallons of spray solution per acre as a broadcast application. • Use 20 gallons per acre or greater when treating dense weed canopy/vegetation.
Preharvest Interval	• Allow a minimum of 7 days between application and harvest.
Livestock Grazing or Feeding	• Permitted.
Use Precautions	• Refer to the "Weeds Controlled or Suppressed" section of this label for specific weeds controlled. • For best performance, control weeds early when they are less than 4 inches. • Postemergence applications of this product mixed with adjuvants may cause a leaf response to cotton with XtendFlex® Technology. The symptoms usually appear as necrotic spots on fully expanded leaves. EC-based products that are tank mixed with products containing dicamba may increase the severity of the leaf damage. • For postemergence applications with a hooded in-row sprayer, cotton must be a minimum of 15 inches tall at the time of application. • For postemergence applications with a directed layby sprayer, the release point for the herbicide must not be more than 10 inches from the soil and cotton must be at least 20 inches in height. Spray tip must be angled downward to the soil making sure no spray droplets remain in the air.
Use Restrictions	• DO NOT apply **less than** 22 fluid ounces (0.5 lb. a.e. dicamba) per acre. • DO NOT apply **more than** 22 fluid ounces (0.5 lb. a.e. dicamba) per acre. • DO NOT exceed two pre-emergent applications. • DO NOT exceed two post-emergent applications. • DO NOT exceed 88 fluid ounces per acre (2.0 lb. a.e. dicamba per acre) per year.

SOYBEAN WITH ROUNDUP READY 2 XTEND® TECHNOLOGY OR XTENDFLEX® TECHNOLOGY	
Application Rate	• **Burndown/Early Preplant, Preplant, At-Planting, Preemergence:** Apply ONLY 22 fluid ounces (0.5 lb. acid equivalent (a.e.) dicamba) per acre for a single burndown/early preplant, preplant, at-planting, or preemergence application. • **Postemergence (in-crop):** For any single, in-crop application, apply ONLY 22 fluid ounces (0.5 lb. a.e. dicamba) per acre.
Maximum Annual Rates	• *Total of all Burndown/Early Preplant, Preplant, At-Planting, and Preemergence applications*: 44 fluid ounces per acre (1.0 lb. a.e. dicamba per acre) • *Total of all in-crop applications*: 44 fluid ounces per acre (1.0 lb. a.e. dicamba per acre) • *Combined total per year for all applications*: 88 fluid ounces per acre (2.0 lb. a.e. dicamba per acre)
Application Timing	• **Burndown/Early Preplant, Preplant, At-Planting, Preemergence:** This product may be applied before, during, or immediately after planting. • **Postemergence (in-crop):** This product may only be applied in-crop up to and including June 30. Applications occurring after R1 are prohibited as crop response may occur.
Number of Applications	• A second application may be necessary to control new flushes of weeds. Allow at least 7 days between applications. For best results, apply after some weed re-growth has occurred. • A maximum of **two** burndown/early preplant, preplant, at-planting, and preemergence and **two** in-crop applications may be made.
Spray Volume	• Apply this product in a minimum of 15 gallons of spray solution per acre as a broadcast application. • Use 20 gallons per acre or greater when treating dense weed canopy/vegetation.
Preharvest Interval	• Allow a minimum of 7 days between application and harvest.
Livestock Grazing or Feeding	• Permitted.
Use Precautions	• Refer to the "Weeds Controlled or Suppressed" section of this label for specific weeds controlled. • For best performance, control weeds early when they are less than 4 inches. • Postemergence application under stressful environments may cause temporary loss of turgor, a response commonly described as leaf droop in soybean with Roundup Ready 2 Xtend® Technology or XtendFlex® Technology. Typically, affected plants recover in 1-3 days depending on the level of droop and environmental conditions. • For postemergence applications with a hooded in-row sprayer, soybeans must be a minimum of 15 inches tall at the time of application. • For postemergence applications with a directed layby sprayer, the release point for the herbicide must not be more than 10 inches from the soil and soybeans must be at least 20 inches in height. Spray tip must be angled downward to the soil making sure no spray droplets remain in the air

Use Restrictions	• DO NOT apply **less than** 22 fluid ounces (0.5 lb. a.e. dicamba) per acre. • DO NOT apply **more than** 22 fluid ounces (0.5 lb. a.e. dicamba) per acre. • DO NOT exceed two pre-emergent applications. • DO NOT exceed two post-emergent applications. • DO NOT exceed 88 fluid ounces per acre (2.0 lb. a.e. dicamba per acre) per year.

STORAGE AND DISPOSAL

Proper pesticide storage and disposal are essential to protect against exposure to people and the environment due to leaks and spills, excess product or waste, and vandalism. Do not allow this product to contaminate water, foodstuffs, feed or seed by storage or disposal.

Pesticide storage
Store pesticides away from food, pet food, feed, seed, fertilizers, and veterinary supplies. Keep container closed to prevent spills and contamination.

Pesticide disposal
To avoid wastes, use all material in this container, including rinsate, by application according to label directions. If wastes cannot be avoided, offer remaining product to a waste disposal facility or pesticide disposal program. Such programs are often run by state or local governments or by industry. All disposal must be in accordance with applicable federal, state, and local regulations and procedures.

Container handling and disposal
[*Insert appropriate Container Handling and Disposal Statement and Refilling Limitation from the following options*]

[*CONTAINER HANDLING AND DISPOSAL STATEMENT AND REFILLING LIMITATION FOR NONREFILLABLE RIGID CONTAINERS OF LESS THAN 1-GALLON CAPACITY*]
Nonrefillable container. Do not reuse or refill this container.

[*Alternative container statement:* Nonrefillable container. Do not reuse this container to hold materials other than pesticides or dilute pesticides (rinsate). After emptying and cleaning, it may be allowable to temporarily hold rinsate or other pesticide-related materials in this container. Contact your state regulatory agency to determine allowable practices in your state.]

Triple rinse this container promptly after emptying.

Triple rinse as follows: Empty the remaining contents into application equipment or mix-tank and continue to drain for 10 seconds after the flow begins to drip. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or mix-tank, or store rinsate for later use or disposal. Continue to drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times.

Once properly rinsed, some plastic [*Optional text:* agricultural] pesticide containers can be taken to a container collection site or picked up for recycling. [*Alternative container disposal statement:* Then offer the container for recycling, if available.]

[*Optional container disposal statement:* To find the nearest collection site, contact your chemical dealer or Bayer at 1-866-99BAYER (1-866-992-2937).]
If recycling is not available, dispose of in accordance with federal, state and local regulations and procedures, which may include puncturing the properly rinsed container and disposing in a sanitary landfill.

[*CONTAINER HANDLING AND DISPOSAL STATEMENT AND REFILLING LIMITATION FOR NONREFILLABLE RIGID PLASTIC 2.5-GALLON CONTAINER AND OTHER NONREFILLABLE CONTAINERS OF GREATER THAN 1-GALLON BUT EQUAL TO OR LESS THAN 5-GALLON CAPACITY*]
Nonrefillable container. Do not reuse this container to hold materials other than pesticides or dilute pesticides (rinsate). After emptying and cleaning, it may be allowable to temporarily hold rinsate or other pesticide-related materials in this container. Contact your state regulatory agency to determine allowable practices in your state.

[*Alternative container statement:* Nonrefillable container. Do not reuse or refill this container.]

Triple rinse or pressure rinse (or equivalent) this container promptly after emptying.

Triple rinse as follows: Empty the remaining contents into application equipment or mix-tank and continue to drain for 10 seconds after the flow begins to drip. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or mix-tank, or store rinsate for later use or disposal. Continue to drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times.

Pressure rinse as follows: Empty the remaining contents into application equipment or mix-tank and continue to drain for 10 seconds after the flow begins to drip. Place container so that it can drain directly into application equipment or mix-tank while rinsing, or collect

rinsate for later use or disposal. Insert pressure rinsing nozzle into the side of the container and rinse at about 40 PSI for at least 30 seconds. Continue to drain for 10 seconds after the flow begins to drip.

Once properly rinsed, some plastic [*Optional text:* agricultural] pesticide containers can be taken to a container collection site or picked up for recycling. [*Alternative container disposal statement:* Then offer the container for recycling, if available.]

[*Optional container disposal statement:* To find the nearest collection site, contact your chemical dealer or Bayer at 1-866-99BAYER (1-866-992-2937).]

If recycling is not available, dispose of in accordance with federal, state and local regulations and procedures, which may include puncturing the properly rinsed container and disposing in a sanitary landfill.

[*CONTAINER HANDLING AND DISPOSAL STATEMENT AND REFILLING LIMITATION FOR NONREFILLABLE RIGID PLASTIC 30-GALLON CONTAINER AND OTHER NONREFILLABLE CONTAINERS OF GREATER THAN 5-GALLON CAPACITY*]
Nonrefillable container. Do not reuse or refill this container.

[*Alternative container statement:* Nonrefillable container. Do not reuse this container to hold materials other than pesticides or dilute pesticides (rinsate). After emptying and cleaning, it may be allowable to temporarily hold rinsate or other pesticide-related materials in this container. Contact your state regulatory agency to determine allowable practices in your state.]

Triple rinse or pressure rinse (or equivalent) this container promptly after emptying.

[*Optional label text:* For containers not equipped with pumping systems,] Triple rinse as follows: Empty the remaining contents into application equipment or mix-tank. Fill the container ¼ full with water. Replace and tighten closures. Tip the container on its side and roll it back and forth for 30 seconds, ensuring at least one complete revolution. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or mix-tank, or store rinsate for later use or disposal. Repeat this procedure two more times.

[*Alternative or additional triple rinsing instructions for large containers equipped with pumping systems:* [*Optional label text:* For large containers equipped with pumping systems,] Triple rinse as follows: Empty the remaining contents into application equipment or mix-tank. Fill the container about 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times.]

Pressure rinse as follows: Empty the remaining contents into application equipment or mix-tank and continue to drain for 10 seconds after the flow begins to drip. Place container so that it can drain directly into application equipment or mix-tank while rinsing, or collect rinsate for later use or disposal. Insert pressure rinsing nozzle into the side of the container and rinse at about 40 PSI for at least 30 seconds. Continue to drain for 10 seconds after the flow begins to drip.

Once properly rinsed, some plastic [*Optional text:* agricultural] pesticide containers can be taken to a container collection site or picked up for recycling. [*Alternative container disposal statement:* Then offer the container for recycling, if available.]

[*Optional container disposal statement:* Some container manufacturers offer container recycling. See additional information regarding manufacturer recycling programs attached to this container, if available. If no recycling information is available on this container, contact your chemical dealer or Bayer at 1-866-99BAYER (1-866-992-2937) to find the nearest recycling location.]

[*Optional container disposal statement:* To find the nearest collection site, contact your chemical dealer or Bayer at 1-866-99BAYER (1-866-992-2937).]

If recycling is not available, dispose of in accordance with federal, state and local regulations and procedures, which may include puncturing the properly rinsed container and disposing in a sanitary landfill.

[*Optional container disposal statement:* Return Properly Rinsed Container to Bayer for Recycling – Call 1-866-99BAYER (1-866-992-2937).]

[*Optional additional container disposal statement:* IBC EMPTY? – FREE CALL – 1-888-SCHUETZ (1-888-724-8389) www.schuetz.net/ticket; Schuetz ticket service]

[*Optional additional container disposal statement:* FREE IBC PICKUP] [For continental USA and Canada only.]

[*Optional additional container disposal statement:* RETURNnet SYSTEM – To return empty IBC's Email or Call – www.returnnetsystem.com – 1-888-758-SHIP (1-888-758-7447) – United States and Canada – IBCNA – Clarkston, Michigan – USA]

[*CONTAINER HANDLING AND DISPOSAL STATEMENT AND REFILLING LIMITATION FOR ALL REFILLABLE CONTAINERS, EXCEPT TRANSPORT VEHICLES*]
Refillable container. Refill this container with pesticide only. Do not reuse this container for any other purpose.

Cleaning this container before refilling is the responsibility of the refiller. Cleaning this container before final disposal is the responsibility of the person disposing of the container.

To clean this container before final disposal, empty the remaining contents from the container into application equipment or mix-tank. Fill the container about 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times.

[*Optional container disposal statement:* Then offer the container for recycling, if available.]

[*Optional container disposal statement:* Some container manufacturers offer container recycling. See additional information regarding manufacturer recycling programs attached to this container, if available. If no recycling information is available on this container, contact your chemical dealer or Bayer at 1-866-99BAYER (1-866-992-2937) to find the nearest recycling location.]

[*Optional additional container disposal statement:* IBC EMPTY? – FREE CALL – 1-888-SCHUETZ (1-888-724-8389) www.schuetz.net/ticket; Schuetz ticket service]

[*Optional additional container disposal statement:* FREE IBC PICKUP] [For continental USA and Canada only.]

[*Optional additional container disposal statement:* RETURNnet SYSTEM – To return empty IBC's Email or Call – www.returnnetsystem.com – 1-888-758-SHIP (1-888-758-7447) – United States and Canada – IBCNA – Clarkston, Michigan – USA]

[*Optional container disposal statement:* To obtain information about recycling refillable containers, contact Bayer at 1-866-99BAYER (1-866-992-2937).]

[*Optional container disposal statement:* Return Properly Rinsed Container to Bayer for Recycling – Call 1-866-99BAYER (1-866-992-2937).]

[*Optional additional container label statements for the CUBE refillable packaging system only:*

CUBE Bayer Refillable Delivery System
FEATURES INCLUDE:
- Automatic Venting
- Heavy duty one-way 2-inch camloc ball valve with protective shield door
- Complete coated steel protective enclosure
- Durable 4-way plastic pallet
- Lift door to access one-way valve]

CONDITIONS OF SALE AND LIMITATIONS OF WARRANTY AND LIABILITY

Read the entire Directions for Use, Conditions, Disclaimer of Warranties, and Limitations of Liability before buying or using this product. If terms are not acceptable, return the unopened product container at once.

By using this product, user or buyer accepts the following Conditions, Disclaimer of Warranties, and Limitations of Liability.

CONDITIONS: The directions for use of this product are believed to be adequate and must be followed carefully. However, it is impossible to eliminate all risks associated with the use of this product. Crop injury, ineffectiveness, or other unintended consequences may result because of such factors as weather conditions, presence of other materials, or the manner of use or application inconsistent with this label (including conditions noted on the label , such as unfavorable soil conditions, unfavorable climate conditions, etc.), all of which are beyond the control of Bayer CropScience LP ("Bayer") or the seller. To the extent consistent with applicable law, all such risks shall be assumed by the user or buyer. Buyer and all users shall promptly notify Bayer of any claims whether based in contract, negligence, strict liability, other tort or otherwise

DISCLAIMER OF WARRANTIES: Subject to risks as set forth in the Conditions above, Bayer warrants that this product is reasonably fit for the purposes stated on the label when used for the purposes stated on the label when used in accordance with directions. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, BAYER MAKES NO OTHER WARRANTIES, EXPRESS OR IMPLIED, OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE OR OTHERWISE. BAYER MAKES NO RECOMMENDATION OR WARRANTY HEREIN REGARDING THE USE OF ANY PRODUCTS THAT MAY APPEAR ON THE WEBSITE REFERENCED IN THE TANK MIXING INSTRUCTIONS HEREIN, REGARDLESS OF WHETHER SUCH PRODUCT IS USED ALONE OR IN A TANK MIX WITH XtendiMax® With VaporGrip® Technology. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, BAYER DISCLAIMS ANY LIABILITY WHATSOEVER FOR SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, FOR IN-CROP (OVER-THE-TOP) USES ON CROPS WITH XTEND® TECHNOLOGY, CROP SAFETY AND WEED CONTROL PERFORMANCE ARE NOT WARRANTED BY BAYER WHEN THIS PRODUCT IS USED IN CONJUNCTION WITH "BROWN BAG" OR "BIN RUN" SEED SAVED FROM PREVIOUS YEAR'S PRODUCTION AND REPLANTED. FURTHER, TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, BAYER DOES NOT WARRANT THE WEED CONTROL PERFORMANCE OF DICAMBA-RESISTANT WEED BIOTYPES.

LIMITATIONS OF LIABILITY: To the extent consistent with applicable law, the exclusive remedy of the user or buyer for any and all losses, injuries, or damages resulting from the use or handling of this product, whether in contract, warranty, tort, negligence, strict liability or otherwise, shall not exceed the purchase price paid, or at Bayer's election, the replacement of product.

These Conditions of Sales, Disclaimer of Warranties and Limitations of Liability cannot be varied by any written or verbal statements or agreements. No employee or sales agent of Bayer or seller is authorized to vary or exceed the terms of the Disclaimer of Warranties or Limitations of Liability in any manner.

Bollgard II®, Bollgard®, Degree Xtra®, Field Master®, Harness®, Roundup Ready®, Roundup Ready 2 Xtend®, Roundup PowerMAX®, RT 3®, Roundup WeatherMAX®, XtendiMax®, XtendFlex®, and VaporGrip® are registered trademarks of Bayer Technology LLC. All other trademarks are the property of their respective owners.

PRODUCED FOR

Bayer CropScience

Bayer CropScience LP
800 N. Lindbergh Blvd.
St. Louis, MO 63167
1-866-99BAYER (1-866-992-2937)

XTENDIMAX® WITH VAPORGRIP® TECHNOLOGY (PENDING) 10/26/2020

Message

From: Steven Callen [steven.callen@bayer.com]
Sent: 12/20/2019 4:38:31 PM
To: opptankmixrequests [opptankmixrequests@epa.gov]; Schmid, Emily [Schmid.Emily@epa.gov]
CC: Kenny, Daniel [Kenny.Dan@epa.gov]; Corbin, Mark [Corbin.Mark@epa.gov]; james.m.nyangulu@monsanto.com; Thomas Orr [thomas.b.orr@monsanto.com]; Tina Bhakta [tina.bhakta@monsanto.com]
Subject: URL amendments for Xtendimax with VaporGrip Technology (EPA Reg. No. 524-617)_12/20/2019
Attachments: 4-REG-2019-0295-07 Submission Report Final Signed 11052019.pdf; 4-REG-2019-0295-08 Submission Report Final Signed 11052019.pdf; 1-EPA8570-1_20191220.pdf; 2-Cover letter_M1768_URLamendments_newProd_20191220.pdf; 3-ConfidentialAttachment_M1768_EquivProd_20191220.pdf; 4-REG_2019-0295-04 Final Signed 10022019 Final.pdf

Dear Emily,

Please find attached the 8570-1 form, cover letter, confidential attachment, and data volumes (MSL0030768, MSL0030769, MSL0030771) notifying the EPA of amendments to be made to XtendiMax's URL. With this submission, Bayer intends to post the referenced products to www.xtendimaxapplicationrequirements.com as approved tank mix products.

Sincerely,
Steven

Steven T. Callen, Ph.D.
Regulatory Affairs Manager

//////////////////

Bayer U.S. – Crop Science
Monsanto Company
Global Chemistry & Seed Regulatory Affairs
700 Chesterfield Parkway West
Mail Zone: FF4B
Chesterfield, MO 63017, USA
Tel: +1 (636) 737-1133
Fax: +1 (636) 737-5390
Cell: Ex. 6 Personal Privacy (PP)
E-mail: steven.callen@bayer.com
Web: http://www.bayer.com

/// Follow Bayer on:
/// Twitter /// Facebook /// Instagram /// LinkedIn /// YouTube

/// Follow me on:
/// Twitter /// LinkedIn

Message

From: MARVIN, THOMAS [AG/1920] [thomas.marvin@bayer.com]
Sent: 10/8/2019 4:02:21 PM
To: Kenny, Daniel [Kenny.Dan@epa.gov]
Subject: RE: Invora

Hi Dan. Sorry to nag, but was hoping to get any feedback by this Wednesday evening on current status/timeline for the Premix below (submission ID RD 1833; latest PRIA is 12/31) and related MUP (submission ID RD 1834; same PRIA). Any info you can provide would be helpful to know for an internal planning meeting scheduled for early this Thursday morning, in addition to informing prioritization proposal below.

Tom

Tom Marvin
Head of Regulatory Science North America

////////////////////

Bayer Crop Science
801 Pennsylvania Ave, NW
Suite 745
Washington, DC, 20004
Tel: +1 202-383-2851
Cell: +1 202-676-7846

From: MARVIN, THOMAS [AG/1920]
Sent: Thursday, October 03, 2019 8:22 AM
To: Kenny, Daniel <Kenny.Dan@epa.gov>
Subject: RE: Invora

Thanks Dan. We have not submitted any withdraw requests yet, as we were waiting to hear EPA's feedback on the whether it could meet what would be the remaining priorities—the 12/31/19 PRIAs for Roundup Xtend 2 Premix and the related manufacturing use product. That feedback will help our Business determine the cost/benefit of proceeding with any withdrawals or re-negotiations.

Tom

Tom Marvin
Head of Regulatory Science North America

////////////////////

Bayer Crop Science
801 Pennsylvania Ave, NW
Suite 745
Washington, DC, 20004
Tel: +1 202-383-2851
Cell: +1 202-676-7846

From: Kenny, Daniel [mailto:Kenny.Dan@epa.gov]
Sent: Thursday, October 03, 2019 9:15 AM
To: MARVIN, THOMAS [AG/1920] <thomas.marvin@bayer.com>
Subject: RE: Invora

Yes, thanks Tom. We've got and understand your priorities, so that should help in arranging our workload to best meet the needs. Also, thanks very much for the information regarding the ones that would not be needed, as that would save valuable time that may can now be used for those products that are most important. Regarding those withdrawn products, do you know if a letter was ever submitted to officially withdraw them?

Thanks again for this information. We are trying to consolidate our efforts into those areas where it is most impactful, and this helps a lot.

Dan

Daniel Kenny, Chief
Herbicide Branch
Registration Division
Office of Pesticide Programs
U.S. Environmental Protection Agency

From: MARVIN, THOMAS [AG/1920] <thomas.marvin@bayer.com>
Sent: Wednesday, October 02, 2019 9:56 AM
To: Kenny, Daniel <Kenny.Dan@epa.gov>
Subject: RE: Invora

Hi Dan. Just circling back to the proposal below on prioritizing pending dicamba OTT actions. Do you have any feedback yet? Feel free to call anytime if helpful to discuss directly.

Tom

Tom Marvin
Head of Regulatory Science North America

////////////////////

Bayer Crop Science
801 Pennsylvania Ave, NW
Suite 745
Washington, DC, 20004
Tel: +1 202-383-2851
Cell: +1 202-676-7846

From: MARVIN, THOMAS [AG/1920]
Sent: Wednesday, August 28, 2019 12:03 PM
To: Kenny, Daniel <Kenny.Dan@epa.gov>
Subject: RE: Invora

No worries at all. Thanks for considering the proposal.

-------- Original Message --------
Subject: RE: Invora
From: "Kenny, Daniel" <Kenny.Dan@epa.gov>
Date: Aug 28, 2019, 11:40 AM
To: "MARVIN, THOMAS [AG/1920]" <thomas.marvin@bayer.com>
Yes, thank you Tom! My apologies for not reading this carefully before responding. This is very helpful and I will relay this to the folks working the priority list.

Thanks again,
Dan

Daniel Kenny, Chief
Herbicide Branch
Registration Division
Office of Pesticide Programs
U.S. Environmental Protection Agency

From: MARVIN, THOMAS [AG/1920] <thomas.marvin@bayer.com>
Sent: Wednesday, August 28, 2019 9:59 AM
To: Kenny, Daniel <Kenny.Dan@epa.gov>; MARVIN, THOMAS [AG/1920] <thomas.marvin@bayer.com>
Subject: RE: Invora

Dan, there are 3 actions in the table below we are proposing to withdraw that would come off the list. Is that what you meant?

Tom Marvin
Head of Regulatory Science North America

////////////////////

Bayer Crop Science
1300 I Street, NW
Suite 450 East
Washington, DC, USA
Tel: +1 202-383-2851
Cell: +1 202-676-7846

From: Kenny, Daniel [mailto:Kenny.Dan@epa.gov]
Sent: Wednesday, August 28, 2019 9:56 AM
To: MARVIN, THOMAS [AG/1920] <thomas.marvin@bayer.com>
Subject: RE: Invora

Thanks Tom, I'll pass this on. There was another question about this, were there any applications that you are no longer needing and that could be removed from the list?

Daniel Kenny, Chief
Herbicide Branch
Registration Division
Office of Pesticide Programs
U.S. Environmental Protection Agency

From: MARVIN, THOMAS [AG/1920] <thomas.marvin@bayer.com>
Sent: Wednesday, August 28, 2019 8:36 AM
To: Kenny, Daniel <Kenny.Dan@epa.gov>
Subject: RE: Invora

Hi Dan. Circling back to your question below on prioritizing Bayer's pending dicamba HT applications. We identified 7 pending dicamba HT applications (please let us know if we missed any). We propose that OPP prioritize 2 of those 7 pending applications per the table below. Happy to discuss next steps or to provide any additional info.

Application	Identifier	Proposed Status

Roundup Xtend 2 Premix, M1833 Herbicide (Ethanolamine Salt)	Submission ID: RD 1833	Prioritize. Latest PRIA date is 12/31/2019; submitted on 6/29/2017
M1834 Dicamba MUP (Ethanolamine Salt)	Submission ID: RD 1834	Prioritize. Latest PRIA date is 12/31/2019; submitted on 6/29/2017
Roundup Xtend 1 Premix, M1769 Herbicide, Uses on HT Soy and HT Cotton	Pending over the top use of EPA Reg. 524-616 on HT Soy and HT Cotton	withdraw
Warrant Dicamba Premix, AD2611 Herbicide	Submission No. RD 1827	withdraw
M1691, uses on HT Soy and HT Cotton	Pending over the top use of EPA Reg. 524-582 on HT Soy and HT Cotton.	withdraw
XtendiMax 2, M1832 Herbicide (Ethanolamine Salt)	Submission No. RD 1832	Renegotiate PRIA, which expires on 12/31/2019
XtendiMax 1, M1768 Herbicide, Use on HT Corn	Submission No. RD 1784; pending over the top use of 524-617 Herbicide on HT Corn.	Renegotiate PRIA, which expires on 12/31/2019

Tom Marvin
Head of Regulatory Science North America

//////////////////

Bayer Crop Science
801 Pennsylvania, NW
Washington, DC, USA
Tel: +1 202-383-2851
Cell: +1 202-676-7846

From: MARVIN, THOMAS [AG/1920]
Sent: Thursday, August 08, 2019 9:04 AM
To: Kenny, Daniel <Kenny.Dan@epa.gov>; MARVIN, THOMAS [AG/1920] <thomas.marvin@bayer.com>
Subject: RE: Invora

Thanks Dan, we will discuss and get back to you soon with our proposed priorities.

Tom Marvin
Head of Regulatory Science North America

//////////////////

Bayer Crop Science
1300 I Street, NW
Suite 450 East
Washington, DC, USA
Tel: +1 202-383-2851
Cell: +1 202-676-7846

From: Kenny, Daniel [mailto:Kenny.Dan@epa.gov]
Sent: Thursday, August 08, 2019 7:55 AM

To: MARVIN, THOMAS [AG/1920] <thomas.marvin@bayer.com>
Subject: RE: Invora

Thanks again for your help with this, Tom. When I sent this, I forgot to also ask you about the status of the dicamba premix applications. We are trying to organize our workload and strategize an approach on the various premixes, and remembered that Bayer had indicated that there were some applications that they were willing to withdraw. Because these applications take more resources than usual to complete and because we don't want to spend those resources on applications that aren't actually needed, did you still intend to withdraw any of those? We'd rather spend the time on those that are still important to the applicants.

Let me know what you think, and we'll organize accordingly.

Thanks very much,
Dan

Daniel Kenny, Chief
Herbicide Branch
Registration Division
Office of Pesticide Programs
U.S. Environmental Protection Agency

From: MARVIN, THOMAS [AG/1920] <thomas.marvin@bayer.com>
Sent: Tuesday, August 06, 2019 5:29 PM
To: Kenny, Daniel <Kenny.Dan@epa.gov>; MARVIN, THOMAS [AG/1920] <thomas.marvin@bayer.com>
Subject: RE: Invora

Dan,

Karen Shearer will send you a proposed waiver tomorrow as soon as possible. Hopefully before the afternoon. Please let me know if there are any wrinkles I can assist with. All is well here, hope the same with you and your team.

Tom

-------- Original Message --------
Subject: RE: Invora
From: "Kenny, Daniel" <Kenny.Dan@epa.gov>
Date: Aug 6, 2019, 4:59 PM
To: "MARVIN, THOMAS [AG/1920]" <thomas.marvin@bayer.com>
Thanks Tom.

Daniel Kenny, Chief
Herbicide Branch
Registration Division
Office of Pesticide Programs
U.S. Environmental Protection Agency

From: MARVIN, THOMAS [AG/1920] <thomas.marvin@bayer.com>
Sent: Tuesday, August 06, 2019 4:51 PM
To: Kenny, Daniel <Kenny.Dan@epa.gov>
Subject: Re: Invora

Hi Dan. I'll get back to you shortly on this.

-------- Original Message --------
Subject: Invora
From: "Kenny, Daniel" <Kenny.Dan@epa.gov>
Date: Aug 6, 2019, 4:33 PM
To: "MARVIN, THOMAS [AG/1920]" <thomas.marvin@bayer.com>
Hi Tom. I hope all is well. I don't know if you are planning to attend the workshop on Thursday with the ranchers from Texas to discuss Invora, but it has occurred to us here at EPA that, if we are indeed going to participate, we need to have Bayer waive the pre-registration confidentiality for that application. I don't know of any template that exists for that, so I would leave it up to Bayer, but based on discussions today, it appears that it will be difficult for us to participate without it. Can you or someone authorized to waive the confidentiality email me a letter to such end? Of course, no waiver is needed for CBI such as the CSF components, just the pre-registration confidentiality that protects against sharing information about the application to competitors. If you can help with this, we need something before the workshop, preferably today or tomorrow. If this is not something that you can help with, can you point me in the correct direction?

Thanks for your help,
Dan Kenny

Daniel Kenny, Chief
Herbicide Branch
Registration Division
Office of Pesticide Programs
U.S. Environmental Protection Agency

The information contained in this e-mail is for the exclusive use of the intended recipient(s) and may be confidential, proprietary, and/or legally privileged. Inadvertent disclosure of this message does not constitute a waiver of any privilege. If you receive this message in error, please do not directly or indirectly use, print, copy, forward, or disclose any part of this message. Please also delete this e-mail and all copies and notify the sender. Thank you.

The information contained in this e-mail is for the exclusive use of the intended recipient(s) and may be confidential, proprietary, and/or legally privileged. Inadvertent disclosure of this message does not constitute a waiver of any privilege. If you receive this message in error, please do not directly or indirectly use, print, copy, forward, or disclose any part of this message. Please also delete this e-mail and all copies and notify the sender. Thank you.

The information contained in this e-mail is for the exclusive use of the intended recipient(s) and may be confidential, proprietary, and/or legally privileged. Inadvertent disclosure of this message does not constitute a waiver of any privilege. If you receive this message in error, please do not directly or indirectly use, print, copy, forward, or disclose any part of this message. Please also delete this e-mail and all copies and notify the sender. Thank you.

The information contained in this e-mail is for the exclusive use of the intended recipient(s) and may be confidential, proprietary, and/or legally privileged. Inadvertent disclosure of this message does not constitute a waiver of any privilege. If you receive this message in error, please do not directly or indirectly use, print, copy, forward, or disclose any part of this message. Please also delete this e-mail and all copies and notify the sender. Thank you.

The information contained in this e-mail is for the exclusive use of the intended recipient(s) and may be confidential, proprietary, and/or legally privileged. Inadvertent disclosure of this message does not constitute a waiver of any privilege. If you receive this message in error, please do not directly or indirectly use, print, copy, forward, or disclose any part of this message. Please also delete this e-mail and all copies and notify the sender. Thank you.

The information contained in this e-mail is for the exclusive use of the intended recipient(s) and may be confidential, proprietary, and/or legally privileged. Inadvertent disclosure of this message does not constitute a waiver of any privilege. If you receive this message in error, please do not directly or indirectly use, print, copy, forward, or disclose any part of this message. Please also delete this e-mail and all copies and notify the sender. Thank you.

Message

From: MARVIN, THOMAS [AG/1920] [thomas.marvin@bayer.com]
Sent: 10/3/2019 1:21:32 PM
To: Kenny, Daniel [Kenny.Dan@epa.gov]
Subject: RE: Invora

Thanks Dan. We have not submitted any withdraw requests yet, as we were waiting to hear EPA's feedback on the whether it could meet what would be the remaining priorities—the 12/31/19 PRIAs for Roundup Xtend 2 Premix and the related manufacturing use product. That feedback will help our Business determine the cost/benefit of proceeding with any withdrawals or re-negotiations.

Tom

Tom Marvin
Head of Regulatory Science North America

////////////////////

Bayer Crop Science
801 Pennsylvania Ave, NW
Suite 745
Washington, DC, 20004
Tel: +1 202-383-2851
Cell: +1 202-676-7846

From: Kenny, Daniel [mailto:Kenny.Dan@epa.gov]
Sent: Thursday, October 03, 2019 9:15 AM
To: MARVIN, THOMAS [AG/1920] <thomas.marvin@bayer.com>
Subject: RE: Invora

Yes, thanks Tom. We've got and understand your priorities, so that should help in arranging our workload to best meet the needs. Also, thanks very much for the information regarding the ones that would not be needed, as that would save valuable time that may can now be used for those products that are most important. Regarding those withdrawn products, do you know if a letter was ever submitted to officially withdraw them?

Thanks again for this information. We are trying to consolidate our efforts into those areas where it is most impactful, and this helps a lot.

Dan

Daniel Kenny, Chief
Herbicide Branch
Registration Division
Office of Pesticide Programs
U.S. Environmental Protection Agency

From: MARVIN, THOMAS [AG/1920] <thomas.marvin@bayer.com>
Sent: Wednesday, October 02, 2019 9:56 AM
To: Kenny, Daniel <Kenny.Dan@epa.gov>
Subject: RE: Invora

Hi Dan. Just circling back to the proposal below on prioritizing pending dicamba OTT actions. Do you have any feedback yet? Feel free to call anytime if helpful to discuss directly.

Tom

Tom Marvin
Head of Regulatory Science North America

////////////////////

Bayer Crop Science
801 Pennsylvania Ave, NW
Suite 745
Washington, DC, 20004
Tel: +1 202-383-2851
Cell: +1 202-676-7846

From: MARVIN, THOMAS [AG/1920]
Sent: Wednesday, August 28, 2019 12:03 PM
To: Kenny, Daniel <Kenny.Dan@epa.gov>
Subject: RE: Invora

No worries at all. Thanks for considering the proposal.

-------- Original Message --------
Subject: RE: Invora
From: "Kenny, Daniel" <Kenny.Dan@epa.gov>
Date: Aug 28, 2019, 11:40 AM
To: "MARVIN, THOMAS [AG/1920]" <thomas.marvin@bayer.com>
Yes, thank you Tom! My apologies for not reading this carefully before responding. This is very helpful and I will relay this to the folks working the priority list.

Thanks again,
Dan

Daniel Kenny, Chief
Herbicide Branch
Registration Division
Office of Pesticide Programs
U.S. Environmental Protection Agency

From: MARVIN, THOMAS [AG/1920] <thomas.marvin@bayer.com>
Sent: Wednesday, August 28, 2019 9:59 AM
To: Kenny, Daniel <Kenny.Dan@epa.gov>; MARVIN, THOMAS [AG/1920] <thomas.marvin@bayer.com>
Subject: RE: Invora

Dan, there are 3 actions in the table below we are proposing to withdraw that would come off the list. Is that what you meant?

Tom Marvin
Head of Regulatory Science North America

////////////////////

Bayer Crop Science
1300 I Street, NW
Suite 450 East
Washington, DC, USA
Tel: +1 202-383-2851
Cell: +1 202-676-7846

From: Kenny, Daniel [mailto:Kenny.Dan@epa.gov]
Sent: Wednesday, August 28, 2019 9:56 AM
To: MARVIN, THOMAS [AG/1920] <thomas.marvin@bayer.com>
Subject: RE: Invora

Thanks Tom, I'll pass this on. There was another question about this, were there any applications that you are no longer needing and that could be removed from the list?

Daniel Kenny, Chief
Herbicide Branch
Registration Division
Office of Pesticide Programs
U.S. Environmental Protection Agency

From: MARVIN, THOMAS [AG/1920] <thomas.marvin@bayer.com>
Sent: Wednesday, August 28, 2019 8:36 AM
To: Kenny, Daniel <Kenny.Dan@epa.gov>
Subject: RE: Invora

Hi Dan. Circling back to your question below on prioritizing Bayer's pending dicamba HT applications. We identified 7 pending dicamba HT applications (please let us know if we missed any). We propose that OPP prioritize 2 of those 7 pending applications per the table below. Happy to discuss next steps or to provide any additional info.

Application	Identifier	Proposed Status
Roundup Xtend 2 Premix, M1833 Herbicide (Ethanolamine Salt)	Submission ID: RD 1833	Prioritize. Latest PRIA date is 12/31/2019; submitted on 6/29/2017
M1834 Dicamba MUP (Ethanolamine Salt)	Submission ID: RD 1834	Prioritize. Latest PRIA date is 12/31/2019; submitted on 6/29/2017
Roundup Xtend 1 Premix, M1769 Herbicide, Uses on HT Soy and HT Cotton	Pending over the top use of EPA Reg. 524-616 on HT Soy and HT Cotton	withdraw
Warrant Dicamba Premix, AD2611 Herbicide	Submission No. RD 1827	withdraw
M1691, uses on HT Soy and HT Cotton	Pending over the top use of EPA Reg. 524-582 on HT Soy and HT Cotton.	withdraw
XtendiMax 2, M1832 Herbicide (Ethanolamine Salt)	Submission No. RD 1832	Renegotiate PRIA, which expires on 12/31/2019
XtendiMax 1, M1768 Herbicide, Use on HT Corn	Submission No. RD 1784; pending over the top use of 524-617 Herbicide on HT Corn.	Renegotiate PRIA, which expires on 12/31/2019

Tom Marvin
Head of Regulatory Science North America

//////////////////

Bayer Crop Science
801 Pennsylvania, NW
Washington, DC, USA
Tel: +1 202-383-2851
Cell: +1 202-676-7846

From: MARVIN, THOMAS [AG/1920]
Sent: Thursday, August 08, 2019 9:04 AM
To: Kenny, Daniel <Kenny.Dan@epa.gov>; MARVIN, THOMAS [AG/1920] <thomas.marvin@bayer.com>
Subject: RE: Invora

Thanks Dan, we will discuss and get back to you soon with our proposed priorities.

Tom Marvin
Head of Regulatory Science North America

//////////////////

Bayer Crop Science
1300 I Street, NW
Suite 450 East
Washington, DC, USA
Tel: +1 202-383-2851
Cell: +1 202-676-7846

From: Kenny, Daniel [mailto:Kenny.Dan@epa.gov]
Sent: Thursday, August 08, 2019 7:55 AM
To: MARVIN, THOMAS [AG/1920] <thomas.marvin@bayer.com>
Subject: RE: Invora

Thanks again for your help with this, Tom. When I sent this, I forgot to also ask you about the status of the dicamba premix applications. We are trying to organize our workload and strategize an approach on the various premixes, and remembered that Bayer had indicated that there were some applications that they were willing to withdraw. Because these applications take more resources than usual to complete and because we don't want to spend those resources on applications that aren't actually needed, did you still intend to withdraw any of those? We'd rather spend the time on those that are still important to the applicants.

Let me know what you think, and we'll organize accordingly.

Thanks very much,
Dan

Daniel Kenny, Chief
Herbicide Branch
Registration Division
Office of Pesticide Programs
U.S. Environmental Protection Agency

From: MARVIN, THOMAS [AG/1920] <thomas.marvin@bayer.com>
Sent: Tuesday, August 06, 2019 5:29 PM
To: Kenny, Daniel <Kenny.Dan@epa.gov>; MARVIN, THOMAS [AG/1920] <thomas.marvin@bayer.com>
Subject: RE: Invora

Dan,

Karen Shearer will send you a proposed waiver tomorrow as soon as possible. Hopefully before the afternoon. Please let me know if there are any wrinkles I can assist with. All is well here, hope the same with you and your team.

Tom

-------- Original Message --------
Subject: RE: Invora
From: "Kenny, Daniel" <Kenny.Dan@epa.gov>
Date: Aug 6, 2019, 4:59 PM
To: "MARVIN, THOMAS [AG/1920]" <thomas.marvin@bayer.com>
Thanks Tom.

Daniel Kenny, Chief
Herbicide Branch
Registration Division
Office of Pesticide Programs
U.S. Environmental Protection Agency

From: MARVIN, THOMAS [AG/1920] <thomas.marvin@bayer.com>
Sent: Tuesday, August 06, 2019 4:51 PM
To: Kenny, Daniel <Kenny.Dan@epa.gov>
Subject: Re: Invora

Hi Dan. I'll get back to you shortly on this.

-------- Original Message --------
Subject: Invora
From: "Kenny, Daniel" <Kenny.Dan@epa.gov>
Date: Aug 6, 2019, 4:33 PM
To: "MARVIN, THOMAS [AG/1920]" <thomas.marvin@bayer.com>
Hi Tom. I hope all is well. I don't know if you are planning to attend the workshop on Thursday with the ranchers from Texas to discuss Invora, but it has occurred to us here at EPA that, if we are indeed going to participate, we need to have Bayer waive the pre-registration confidentiality for that application. I don't know of any template that exists for that, so I would leave it up to Bayer, but based on discussions today, it appears that it will be difficult for us to participate without it. Can you or someone authorized to waive the confidentiality email me a letter to such end? Of course, no waiver is needed for CBI such as the CSF components, just the pre-registration confidentiality that protects against sharing information about the application to competitors. If you can help with this, we need something before the workshop, preferably today or tomorrow. If this is not something that you can help with, can you point me in the correct direction?

Thanks for your help,
Dan Kenny

Daniel Kenny, Chief

Herbicide Branch
Registration Division
Office of Pesticide Programs
U.S. Environmental Protection Agency

The information contained in this e-mail is for the exclusive use of the intended recipient(s) and may be confidential, proprietary, and/or legally privileged. Inadvertent disclosure of this message does not constitute a waiver of any privilege. If you receive this message in error, please do not directly or indirectly use, print, copy, forward, or disclose any part of this message. Please also delete this e-mail and all copies and notify the sender. Thank you.

The information contained in this e-mail is for the exclusive use of the intended recipient(s) and may be confidential, proprietary, and/or legally privileged. Inadvertent disclosure of this message does not constitute a waiver of any privilege. If you receive this message in error, please do not directly or indirectly use, print, copy, forward, or disclose any part of this message. Please also delete this e-mail and all copies and notify the sender. Thank you.

The information contained in this e-mail is for the exclusive use of the intended recipient(s) and may be confidential, proprietary, and/or legally privileged. Inadvertent disclosure of this message does not constitute a waiver of any privilege. If you receive this message in error, please do not directly or indirectly use, print, copy, forward, or disclose any part of this message. Please also delete this e-mail and all copies and notify the sender. Thank you.

The information contained in this e-mail is for the exclusive use of the intended recipient(s) and may be confidential, proprietary, and/or legally privileged. Inadvertent disclosure of this message does not constitute a waiver of any privilege. If you receive this message in error, please do not directly or indirectly use, print, copy, forward, or disclose any part of this message. Please also delete this e-mail and all copies and notify the sender. Thank you.

The information contained in this e-mail is for the exclusive use of the intended recipient(s) and may be confidential, proprietary, and/or legally privileged. Inadvertent disclosure of this message does not constitute a waiver of any privilege. If you receive this message in error, please do not directly or indirectly use, print, copy, forward, or disclose any part of this message. Please also delete this e-mail and all copies and notify the sender. Thank you.

The information contained in this e-mail is for the exclusive use of the intended recipient(s) and may be confidential, proprietary, and/or legally privileged.

Inadvertent disclosure of this message does not constitute a waiver of any privilege. If you receive this message in error, please do not directly or indirectly use, print, copy, forward, or disclose any part of this message. Please also delete this e-mail and all copies and notify the sender. Thank you.

Message

From: MARVIN, THOMAS [AG/1920] [thomas.marvin@bayer.com]
Sent: 10/2/2019 1:56:07 PM
To: Kenny, Daniel [Kenny.Dan@epa.gov]
Subject: RE: Invora

Hi Dan. Just circling back to the proposal below on prioritizing pending dicamba OTT actions. Do you have any feedback yet? Feel free to call anytime if helpful to discuss directly.

Tom

Tom Marvin
Head of Regulatory Science North America

//////////////////

Bayer Crop Science
801 Pennsylvania Ave, NW
Suite 745
Washington, DC, 20004
Tel: +1 202-383-2851
Cell: +1 202-676-7846

From: MARVIN, THOMAS [AG/1920]
Sent: Wednesday, August 28, 2019 12:03 PM
To: Kenny, Daniel <Kenny.Dan@epa.gov>
Subject: RE: Invora

No worries at all. Thanks for considering the proposal.

-------- Original Message --------
Subject: RE: Invora
From: "Kenny, Daniel" <Kenny.Dan@epa.gov>
Date: Aug 28, 2019, 11:40 AM
To: "MARVIN, THOMAS [AG/1920]" <thomas.marvin@bayer.com>
Yes, thank you Tom! My apologies for not reading this carefully before responding. This is very helpful and I will relay this to the folks working the priority list.

Thanks again,
Dan

Daniel Kenny, Chief
Herbicide Branch
Registration Division
Office of Pesticide Programs
U.S. Environmental Protection Agency

From: MARVIN, THOMAS [AG/1920] <thomas.marvin@bayer.com>
Sent: Wednesday, August 28, 2019 9:59 AM
To: Kenny, Daniel <Kenny.Dan@epa.gov>; MARVIN, THOMAS [AG/1920] <thomas.marvin@bayer.com>
Subject: RE: Invora

Dan, there are 3 actions in the table below we are proposing to withdraw that would come off the list. Is that what you meant?

Tom Marvin
Head of Regulatory Science North America

////////////////////

Bayer Crop Science
1300 I Street, NW
Suite 450 East
Washington, DC, USA
Tel: +1 202-383-2851
Cell: +1 202-676-7846

From: Kenny, Daniel [mailto:Kenny.Dan@epa.gov]
Sent: Wednesday, August 28, 2019 9:56 AM
To: MARVIN, THOMAS [AG/1920] <thomas.marvin@bayer.com>
Subject: RE: Invora

Thanks Tom, I'll pass this on. There was another question about this, were there any applications that you are no longer needing and that could be removed from the list?

Daniel Kenny, Chief
Herbicide Branch
Registration Division
Office of Pesticide Programs
U.S. Environmental Protection Agency

From: MARVIN, THOMAS [AG/1920] <thomas.marvin@bayer.com>
Sent: Wednesday, August 28, 2019 8:36 AM
To: Kenny, Daniel <Kenny.Dan@epa.gov>
Subject: RE: Invora

Hi Dan. Circling back to your question below on prioritizing Bayer's pending dicamba HT applications. We identified 7 pending dicamba HT applications (please let us know if we missed any). We propose that OPP prioritize 2 of those 7 pending applications per the table below. Happy to discuss next steps or to provide any additional info.

Application	Identifier	Proposed Status
Roundup Xtend 2 Premix, M1833 Herbicide (Ethanolamine Salt)	Submission ID: RD 1833	Prioritize. Latest PRIA date is 12/31/2019; submitted on 6/29/2017
M1834 Dicamba MUP (Ethanolamine Salt)	Submission ID: RD 1834	Prioritize. Latest PRIA date is 12/31/2019; submitted on 6/29/2017
Roundup Xtend 1 Premix, M1769 Herbicide, Uses on HT Soy and HT Cotton	Pending over the top use of EPA Reg. 524-616 on HT Soy and HT Cotton	withdraw
Warrant Dicamba Premix, AD2611 Herbicide	Submission No. RD 1827	withdraw

M1691, uses on HT Soy and HT Cotton	Pending over the top use of EPA Reg. 524-582 on HT Soy and HT Cotton.	withdraw
XtendiMax 2, M1832 Herbicide (Ethanolamine Salt)	Submission No. RD 1832	Renegotiate PRIA, which expires on 12/31/2019
XtendiMax 1, M1768 Herbicide, Use on HT Corn	Submission No. RD 1784; pending over the top use of 524-617 Herbicide on HT Corn.	Renegotiate PRIA, which expires on 12/31/2019

Tom Marvin
Head of Regulatory Science North America

////////////////////

Bayer Crop Science
801 Pennsylvania, NW
Washington, DC, USA
Tel: +1 202-383-2851
Cell: +1 202-676-7846

From: MARVIN, THOMAS [AG/1920]
Sent: Thursday, August 08, 2019 9:04 AM
To: Kenny, Daniel <Kenny.Dan@epa.gov>; MARVIN, THOMAS [AG/1920] <thomas.marvin@bayer.com>
Subject: RE: Invora

Thanks Dan, we will discuss and get back to you soon with our proposed priorities.

Tom Marvin
Head of Regulatory Science North America

////////////////////

Bayer Crop Science
1300 I Street, NW
Suite 450 East
Washington, DC, USA
Tel: +1 202-383-2851
Cell: +1 202-676-7846

From: Kenny, Daniel [mailto:Kenny.Dan@epa.gov]
Sent: Thursday, August 08, 2019 7:55 AM
To: MARVIN, THOMAS [AG/1920] <thomas.marvin@bayer.com>
Subject: RE: Invora

Thanks again for your help with this, Tom. When I sent this, I forgot to also ask you about the status of the dicamba premix applications. We are trying to organize our workload and strategize an approach on the various premixes, and remembered that Bayer had indicated that there were some applications that they were willing to withdraw. Because these applications take more resources than usual to complete and because we don't want to spend those resources on applications that aren't actually needed, did you still intend to withdraw any of those? We'd rather spend the time on those that are still important to the applicants.

Let me know what you think, and we'll organize accordingly.

Thanks very much,

Dan

Daniel Kenny, Chief
Herbicide Branch
Registration Division
Office of Pesticide Programs
U.S. Environmental Protection Agency

From: MARVIN, THOMAS [AG/1920] <thomas.marvin@bayer.com>
Sent: Tuesday, August 06, 2019 5:29 PM
To: Kenny, Daniel <Kenny.Dan@epa.gov>; MARVIN, THOMAS [AG/1920] <thomas.marvin@bayer.com>
Subject: RE: Invora

Dan,

Karen Shearer will send you a proposed waiver tomorrow as soon as possible. Hopefully before the afternoon. Please let me know if there are any wrinkles I can assist with. All is well here, hope the same with you and your team.

Tom

-------- Original Message --------
Subject: RE: Invora
From: "Kenny, Daniel" <Kenny.Dan@epa.gov>
Date: Aug 6, 2019, 4:59 PM
To: "MARVIN, THOMAS [AG/1920]" <thomas.marvin@bayer.com>
Thanks Tom.

Daniel Kenny, Chief
Herbicide Branch
Registration Division
Office of Pesticide Programs
U.S. Environmental Protection Agency

From: MARVIN, THOMAS [AG/1920] <thomas.marvin@bayer.com>
Sent: Tuesday, August 06, 2019 4:51 PM
To: Kenny, Daniel <Kenny.Dan@epa.gov>
Subject: Re: Invora

Hi Dan. I'll get back to you shortly on this.

-------- Original Message --------
Subject: Invora
From: "Kenny, Daniel" <Kenny.Dan@epa.gov>
Date: Aug 6, 2019, 4:33 PM
To: "MARVIN, THOMAS [AG/1920]" <thomas.marvin@bayer.com>
Hi Tom. I hope all is well. I don't know if you are planning to attend the workshop on Thursday with the ranchers from Texas to discuss Invora, but it has occurred to us here at EPA that, if we are indeed going to participate, we need to have Bayer waive the pre-registration confidentiality for that application. I don't know of any template that exists for that, so I would leave it up to Bayer, but based on discussions today, it appears that it will be difficult for us to participate without it. Can you or someone authorized to waive the confidentiality email me a letter to such end? Of course, no waiver is needed for CBI such as the CSF components, just the pre-registration confidentiality that protects against

sharing information about the application to competitors. If you can help with this, we need something before the workshop, preferably today or tomorrow. If this is not something that you can help with, can you point me in the correct direction?

Thanks for your help,
Dan Kenny

Daniel Kenny, Chief
Herbicide Branch
Registration Division
Office of Pesticide Programs
U.S. Environmental Protection Agency

The information contained in this e-mail is for the exclusive use of the intended recipient(s) and may be confidential, proprietary, and/or legally privileged. Inadvertent disclosure of this message does not constitute a waiver of any privilege. If you receive this message in error, please do not directly or indirectly use, print, copy, forward, or disclose any part of this message. Please also delete this e-mail and all copies and notify the sender. Thank you.

The information contained in this e-mail is for the exclusive use of the intended recipient(s) and may be confidential, proprietary, and/or legally privileged. Inadvertent disclosure of this message does not constitute a waiver of any privilege. If you receive this message in error, please do not directly or indirectly use, print, copy, forward, or disclose any part of this message. Please also delete this e-mail and all copies and notify the sender. Thank you.

The information contained in this e-mail is for the exclusive use of the intended recipient(s) and may be confidential, proprietary, and/or legally privileged. Inadvertent disclosure of this message does not constitute a waiver of any privilege. If you receive this message in error, please do not directly or indirectly use, print, copy, forward, or disclose any part of this message. Please also delete this e-mail and all copies and notify the sender. Thank you.

The information contained in this e-mail is for the exclusive use of the intended recipient(s) and may be confidential, proprietary, and/or legally privileged. Inadvertent disclosure of this message does not constitute a waiver of any privilege. If you receive this message in error, please do not directly or indirectly use, print, copy, forward, or disclose any part of this message. Please also delete this e-mail and all copies and notify the sender. Thank you.

The information contained in this e-mail is for the exclusive use of the intended recipient(s) and may be confidential, proprietary, and/or legally privileged. Inadvertent disclosure of this message does not constitute a waiver of any privilege. If

you receive this message in error, please do not directly or indirectly use, print, copy, forward, or disclose any part of this message. Please also delete this e-mail and all copies and notify the sender. Thank you.

Message

From: MARVIN, THOMAS [AG/1920] [thomas.marvin@bayer.com]
Sent: 8/28/2019 4:03:19 PM
To: Kenny, Daniel [Kenny.Dan@epa.gov]
Subject: RE: Invora

No worries at all. Thanks for considering the proposal.

-------- Original Message --------
Subject: RE: Invora
From: "Kenny, Daniel" <Kenny.Dan@epa.gov>
Date: Aug 28, 2019, 11:40 AM
To: "MARVIN, THOMAS [AG/1920]" <thomas.marvin@bayer.com>
Yes, thank you Tom! My apologies for not reading this carefully before responding. This is very helpful and I will relay this to the folks working the priority list.

Thanks again,
Dan

Daniel Kenny, Chief
Herbicide Branch
Registration Division
Office of Pesticide Programs
U.S. Environmental Protection Agency

From: MARVIN, THOMAS [AG/1920] <thomas.marvin@bayer.com>
Sent: Wednesday, August 28, 2019 9:59 AM
To: Kenny, Daniel <Kenny.Dan@epa.gov>; MARVIN, THOMAS [AG/1920] <thomas.marvin@bayer.com>
Subject: RE: Invora

Dan, there are 3 actions in the table below we are proposing to withdraw that would come off the list. Is that what you meant?

Tom Marvin
Head of Regulatory Science North America

////////////////////

Bayer Crop Science
1300 I Street, NW
Suite 450 East
Washington, DC, USA
Tel: +1 202-383-2851
Cell: +1 202-676-7846

From: Kenny, Daniel [mailto:Kenny.Dan@epa.gov]
Sent: Wednesday, August 28, 2019 9:56 AM
To: MARVIN, THOMAS [AG/1920] <thomas.marvin@bayer.com>
Subject: RE: Invora

Thanks Tom, I'll pass this on. There was another question about this, were there any applications that you are no longer needing and that could be removed from the list?

Daniel Kenny, Chief
Herbicide Branch
Registration Division
Office of Pesticide Programs
U.S. Environmental Protection Agency

From: MARVIN, THOMAS [AG/1920] <thomas.marvin@bayer.com>
Sent: Wednesday, August 28, 2019 8:36 AM
To: Kenny, Daniel <Kenny.Dan@epa.gov>
Subject: RE: Invora

Hi Dan. Circling back to your question below on prioritizing Bayer's pending dicamba HT applications. We identified 7 pending dicamba HT applications (please let us know if we missed any). We propose that OPP prioritize 2 of those 7 pending applications per the table below. Happy to discuss next steps or to provide any additional info.

Application	Identifier	Proposed Status
Roundup Xtend 2 Premix, M1833 Herbicide (Ethanolamine Salt)	Submission ID: RD 1833	Prioritize. Latest PRIA date is 12/31/2019; submitted on 6/29/2017
M1834 Dicamba MUP (Ethanolamine Salt)	Submission ID: RD 1834	Prioritize. Latest PRIA date is 12/31/2019; submitted on 6/29/2017
Roundup Xtend 1 Premix, M1769 Herbicide, Uses on HT Soy and HT Cotton	Pending over the top use of EPA Reg. 524-616 on HT Soy and HT Cotton	withdraw
Warrant Dicamba Premix, AD2611 Herbicide	Submission No. RD 1827	withdraw
M1691, uses on HT Soy and HT Cotton	Pending over the top use of EPA Reg. 524-582 on HT Soy and HT Cotton.	withdraw
XtendiMax 2, M1832 Herbicide (Ethanolamine Salt)	Submission No. RD 1832	Renegotiate PRIA, which expires on 12/31/2019
XtendiMax 1, M1768 Herbicide, Use on HT Corn	Submission No. RD 1784; pending over the top use of 524-617 Herbicide on HT Corn.	Renegotiate PRIA, which expires on 12/31/2019

Tom Marvin
Head of Regulatory Science North America

////////////////////

Bayer Crop Science
801 Pennsylvania, NW
Washington, DC, USA
Tel: +1 202-383-2851
Cell: +1 202-676-7846

From: MARVIN, THOMAS [AG/1920]
Sent: Thursday, August 08, 2019 9:04 AM
To: Kenny, Daniel <Kenny.Dan@epa.gov>; MARVIN, THOMAS [AG/1920] <thomas.marvin@bayer.com>
Subject: RE: Invora

Thanks Dan, we will discuss and get back to you soon with our proposed priorities.

Tom Marvin
Head of Regulatory Science North America

//////////////////

Bayer Crop Science
1300 I Street, NW
Suite 450 East
Washington, DC, USA
Tel: +1 202-383-2851
Cell: +1 202-676-7846

From: Kenny, Daniel [mailto:Kenny.Dan@epa.gov]
Sent: Thursday, August 08, 2019 7:55 AM
To: MARVIN, THOMAS [AG/1920] <thomas.marvin@bayer.com>
Subject: RE: Invora

Thanks again for your help with this, Tom. When I sent this, I forgot to also ask you about the status of the dicamba premix applications. We are trying to organize our workload and strategize an approach on the various premixes, and remembered that Bayer had indicated that there were some applications that they were willing to withdraw. Because these applications take more resources than usual to complete and because we don't want to spend those resources on applications that aren't actually needed, did you still intend to withdraw any of those? We'd rather spend the time on those that are still important to the applicants.

Let me know what you think, and we'll organize accordingly.

Thanks very much,
Dan

Daniel Kenny, Chief
Herbicide Branch
Registration Division
Office of Pesticide Programs
U.S. Environmental Protection Agency

From: MARVIN, THOMAS [AG/1920] <thomas.marvin@bayer.com>
Sent: Tuesday, August 06, 2019 5:29 PM
To: Kenny, Daniel <Kenny.Dan@epa.gov>; MARVIN, THOMAS [AG/1920] <thomas.marvin@bayer.com>
Subject: RE: Invora

Dan,

Karen Shearer will send you a proposed waiver tomorrow as soon as possible. Hopefully before the afternoon. Please let me know if there are any wrinkles I can assist with. All is well here, hope the same with you and your team.

Tom

-------- Original Message --------
Subject: RE: Invora
From: "Kenny, Daniel" <Kenny.Dan@epa.gov>
Date: Aug 6, 2019, 4:59 PM
To: "MARVIN, THOMAS [AG/1920]" <thomas.marvin@bayer.com>
Thanks Tom.

Daniel Kenny, Chief
Herbicide Branch
Registration Division
Office of Pesticide Programs
U.S. Environmental Protection Agency

From: MARVIN, THOMAS [AG/1920] <thomas.marvin@bayer.com>
Sent: Tuesday, August 06, 2019 4:51 PM
To: Kenny, Daniel <Kenny.Dan@epa.gov>
Subject: Re: Invora

Hi Dan. I'll get back to you shortly on this.

-------- Original Message --------
Subject: Invora
From: "Kenny, Daniel" <Kenny.Dan@epa.gov>
Date: Aug 6, 2019, 4:33 PM
To: "MARVIN, THOMAS [AG/1920]" <thomas.marvin@bayer.com>
Hi Tom. I hope all is well. I don't know if you are planning to attend the workshop on Thursday with the ranchers from Texas to discuss Invora, but it has occurred to us here at EPA that, if we are indeed going to participate, we need to have Bayer waive the pre-registration confidentiality for that application. I don't know of any template that exists for that, so I would leave it up to Bayer, but based on discussions today, it appears that it will be difficult for us to participate without it. Can you or someone authorized to waive the confidentiality email me a letter to such end? Of course, no waiver is needed for CBI such as the CSF components, just the pre-registration confidentiality that protects against sharing information about the application to competitors. If you can help with this, we need something before the workshop, preferably today or tomorrow. If this is not something that you can help with, can you point me in the correct direction?

Thanks for your help,
Dan Kenny

Daniel Kenny, Chief
Herbicide Branch
Registration Division
Office of Pesticide Programs
U.S. Environmental Protection Agency

The information contained in this e-mail is for the exclusive use of the intended recipient(s) and may be confidential, proprietary, and/or legally privileged. Inadvertent disclosure of this message does not constitute a waiver of any privilege. If you receive this message in error, please do not directly or indirectly use, print, copy, forward, or disclose any part of this message. Please also delete this e-mail and all copies and notify the sender. Thank you.

The information contained in this e-mail is for the exclusive use of the intended recipient(s) and may be confidential, proprietary, and/or legally privileged. Inadvertent disclosure of this message does not constitute a waiver of any privilege. If you receive this message in error, please do not directly or indirectly use, print, copy, forward, or disclose any part of this message. Please also delete this e-mail and all copies and notify the sender. Thank you.

The information contained in this e-mail is for the exclusive use of the intended recipient(s) and may be confidential, proprietary, and/or legally privileged. Inadvertent disclosure of this message does not constitute a waiver of any privilege. If you receive this message in error, please do not directly or indirectly use, print, copy, forward, or disclose any part of this message. Please also delete this e-mail and all copies and notify the sender. Thank you.

The information contained in this e-mail is for the exclusive use of the intended recipient(s) and may be confidential, proprietary, and/or legally privileged. Inadvertent disclosure of this message does not constitute a waiver of any privilege. If you receive this message in error, please do not directly or indirectly use, print, copy, forward, or disclose any part of this message. Please also delete this e-mail and all copies and notify the sender. Thank you.

The information contained in this e-mail is for the exclusive use of the intended recipient(s) and may be confidential, proprietary, and/or legally privileged. Inadvertent disclosure of this message does not constitute a waiver of any privilege. If you receive this message in error, please do not directly or indirectly use, print, copy, forward, or disclose any part of this message. Please also delete this e-mail and all copies and notify the sender. Thank you.

Message

From: Thomas Marvin [thomas.marvin@bayer.com]
Sent: 10/26/2020 6:31:21 PM
To: Kenny, Daniel [Kenny.Dan@epa.gov]
CC: Echeverria, Marietta [Echeverria.Marietta@epa.gov]; Rosenblatt, Daniel [Rosenblatt.Dan@epa.gov]
Subject: RE: Revised HRM
Attachments: MASTER LABEL_XtendiMax_264-RERN_20201026_redline.pdf; MASTER LABEL_XtendiMax_264-RERN_20201026.pdf

Sorry dan, revised labels attached.

From: Kenny, Daniel <Kenny.Dan@epa.gov>
Sent: Monday, October 26, 2020 2:25 PM
To: Thomas Marvin <thomas.marvin@bayer.com>
Cc: Echeverria, Marietta <Echeverria.Marietta@epa.gov>; Rosenblatt, Daniel <Rosenblatt.Dan@epa.gov>
Subject: RE: Revised HRM

Sorry Tom, 2:00 obviously did not work. We'll follow up as soon as we can.

From: Kenny, Daniel
Sent: Monday, October 26, 2020 1:32 PM
To: MARVIN, THOMAS [AG/1920] <thomas.marvin@bayer.com>
Cc: Echeverria, Marietta (Echeverria.Marietta@epa.gov) <Echeverria.Marietta@epa.gov>; Rosenblatt, Daniel <Rosenblatt.Dan@epa.gov>
Subject: Revised HRM

Hello Tom. Attached are our comments to the proposed changes to the HRM plan that come as attachment D. There are also some highlighted points in the beginning of the document that we think are important to communicate to Bayer but not intended to be included in the actual terms of registration.

Please share this with your group and consider them as quickly as possible. We realize this doesn't leave much time, but Marietta and I are hoping to follow up with you at 2:00 to see if there are any remaining issues.

Thanks,
Dan

Daniel Kenny, Chief
Herbicide Branch
Registration Division
Office of Pesticide Programs
U.S. Environmental Protection Agency

RESTRICTED USE PESTICIDE
To be used by certified applicators only; NOT to be used by uncertified persons working under the supervision of a certified applicator, except that uncertified persons may transport containers.

This labeling expires on 12/20/2025. DO NOT use or distribute this product after 12/20/2025.

DICAMBA	GROUP	4	HERBICIDE

XtendiMax® With VaporGrip® Technology

ABN: M1768 Herbicide

For weed control in cotton with XtendFlex® Technology (dicamba-tolerant cotton) and soybean with Roundup Ready 2 Xtend® Technology or XtendFlex® Technology (dicamba-tolerant soybean).

XtendiMax® With VaporGrip® Technology is approved by U.S. EPA for use in dicamba-tolerant cotton and dicamba-tolerant soybeans only in the following states, subject to county restrictions as noted: Alabama, Arkansas, Arizona, Colorado, Delaware, Florida (excluding Palm Beach County), Georgia, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maryland, Michigan, Minnesota, Mississippi, Missouri, Nebraska, New Jersey, New Mexico, New York, North Carolina, North Dakota, Oklahoma, Ohio, Pennsylvania, South Carolina, South Dakota, Tennessee (excluding Wilson County), Texas, Virginia, West Virginia, Wisconsin.

Check the registration status of each product in each state before using.

ACTIVE INGREDIENT: Dicamba
Diglycolamine salt of dicamba (3,6-dichloro-*o*-anisic acid)* **42.80%**
OTHER INGREDIENTS: **57.20%**
TOTAL: **100.00%**
*Contains 29.0% 3,6-dichloro-*o*-anisic acid (2.9 pounds acid equivalent per U.S. gallon or 350 grams per liter)

EPA Reg. No. 264-RERN **EPA Est. No.**

CAUTION

KEEP OUT OF REACH OF CHILDREN

For MEDICAL and TRANSPORTATION Emergencies ONLY Call 24 Hours a Day 1-800-334-7577

For PRODUCT USE Information Call 1-866-99BAYER (1-866-992-2937)

For Incidence of Non-performance or Off-Target Movement or for Questions Regarding Buffer Requirements or Sensitive Crop Registries Call 1-844-RRXTEND (1-844-779-8363)

Please refer to [back panel] [booklet] for additional precautionary statements and directions for use. [Note to reviewer: Location of additional precautionary statements and directions for use will vary between those listed, depending on container type/size.]

Net Contents:

FIRST AID	
IF IN EYES:	• Hold eye open and rinse slowly and gently with water for 15 to 20 minutes. • Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. • Call a poison control center or doctor for treatment advice.

IF SWALLOWED:	• Call a poison control center or doctor immediately for treatment advice. • Have person sip a glass of water if able to swallow. • DO NOT induce vomiting unless told to do so by a poison control center or doctor. • DO NOT give anything by mouth to an unconscious person.
IF ON SKIN OR CLOTHING:	• Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15 to 20 minutes. • Call a poison control center or doctor for treatment advice.
In case of emergency, call the toll-free Bayer Emergency Response telephone number: 1-800-334-7577. Have the product container or label with you when calling a poison control center or doctor or when going for treatment.	

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION

- Causes moderate eye irritation.
- Avoid contact with eyes or clothing.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

All mixers, loaders, applicators, and other handlers must wear:

- Long-sleeved shirt and long pants
- Waterproof gloves
- Shoes plus socks

Follow the manufacturer's instructions for cleaning and maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

ENGINEERING CONTROLS

When handlers use closed systems, or enclosed cabs in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240 (d) (4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

IMPORTANT: When reduced PPE is worn because a closed system is being used, handlers must be provided all PPE specified above for "all mixers, loaders, applicators, and other handlers" and have such PPE immediately available for use in an emergency, such as a spill or equipment breakdown.

USER SAFETY RECOMMENDATIONS

User should:

- Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet.
- Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

ENVIRONMENTAL HAZARDS

DO NOT apply directly to water, or to areas where surface water is present, or to intertidal areas below the mean high-water mark. DO NOT contaminate water when disposing of equipment washwaters or rinsate. Apply this product only as directed on the label.

Ground Water Advisory: This chemical is known to leach through soil into ground water under certain conditions as a result of agricultural use. Use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in ground water contamination.

GROUND AND SURFACE WATER PROTECTION

Point source contamination: To prevent point source contamination, DO NOT mix or load this pesticide product within 50 feet of wells (including abandoned wells and drainage wells), sink holes, perennial or intermittent streams and rivers, and natural or impounded lakes and reservoirs. DO NOT apply pesticide product within 50 feet of wells. This setback does not apply to properly capped or plugged abandoned wells and does not apply to impervious pad or properly diked mixing/loading areas as described below.

Mixing, loading, rinsing, or washing operations performed within 50 feet of a well are allowed only when conducted on an impervious pad constructed to withstand the weight of the heaviest load that may be on or move across the pad. The pad must be self-contained to prevent surface water flow over or from the pad. The pad capacity must be maintained at 110% that of the largest pesticide container or application equipment used on the pad and have sufficient capacity to contain all product spills, equipment or container leaks, equipment washwaters, and rainwater that may fall on the pad. The containment capacity does not apply to vehicles delivering pesticide shipments to the mixing/loading site. States may have in effect additional requirements regarding wellhead setbacks and operational containment.

Care must be taken when using this product to prevent: a) back siphoning into wells, b) spills, or c) improper disposal of excess pesticide, spray mixtures, or rinsates. Check valves or anti-siphoning devices must be used on all mixing equipment.

Movement by surface runoff or through soil: DO NOT apply under conditions that favor runoff. DO NOT apply if soil is saturated with water or when rainfall that may exceed soil field capacity is forecasted to occur within 48 hours.

Under some conditions, dicamba has the potential for runoff several days after application. Poorly draining, wet, or erodible soils with readily visible slopes toward adjacent sensitive areas are more prone to produce runoff. When used on erodible soils, best management practices for minimizing runoff should be employed. Consult your local Soil Conservation Service for recommendations in your use area.

Ground water contamination may occur in areas where soils are permeable or coarse and ground water is near the surface. DO NOT apply to impervious substrates such as paved or highly compacted surfaces in areas with high potential for ground water contamination. DO NOT apply to soils classified as sand with less than 3% organic matter and where ground water depth is shallow.

Movement by water erosion of treated soil: DO NOT apply or incorporate this product through any type of irrigation equipment nor by flood or furrow irrigation. Ensure treated areas have received at least one-half inch rainfall (or irrigation) before using tailwater for subsequent irrigation of other fields.

PROTECTING ENDANGERED SPECIES / PESTICIDE USE LIMITATION AREAS

The use of any pesticide in a manner that may kill or otherwise harm an endangered species or adversely modify their habitat is a violation of federal law. Use of this product in a manner inconsistent with its labeling may pose a hazard to endangered or threatened species. **When using this product, you must follow the measures contained in the Endangered Species Protection Bulletin for the area in which you are applying the product.** To obtain Bulletins, no more than six months before using this product, consult https://www.epa.gov/endangered-species/bulletins-live-two-view-bulletins or call 1-844-447-3813. You must use the Bulletin valid for the month in which you will apply the product.

It is a Federal offense to use any pesticide in a manner that results in the death of an endangered species.

PHYSICAL OR CHEMICAL HAZARDS

DO NOT store or heat near oxidizing agents as a hazardous chemical reaction may occur.

DIRECTIONS FOR USE

RESTRICTED USE PESTICIDE

Only for retail sale to and use by Certified Applicators. NOT to be used by uncertified persons working under the supervision of a certified applicator, except that uncertified persons may transport containers.

It is a violation of Federal law to use this product in any manner inconsistent with its labeling. This labeling must be in the user's possession during application. Read the entire label before using this product.

DO NOT apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

For important crop safety information, refer to the "Specific Use Directions" section for each crop.

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. This standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses and of handlers of agricultural pesticides. It contains requirements for training, decontamination, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about Personal Protective Equipment (PPE), notification to workers, and restricted-entry intervals. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

DO NOT enter or allow worker entry into treated areas during the restricted-entry interval **(REI) of 24 hours.** **PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water is:** • Coveralls worn over short-sleeved shirt and short pants • Chemical-resistant footwear plus socks • Waterproof gloves • Chemical-resistant headgear for overhead exposure • Protective eyewear

PRODUCT INFORMATION

XtendiMax® With VaporGrip® Technology is:

- a water-soluble formulation intended for control and suppression of many annual, biennial, and perennial broadleaf weeds listed in the "Weeds Controlled or Suppressed" section of this label. This product may be used for control of these weeds in cotton with XtendFlex® Technology and soybean with Roundup Ready 2 Xtend® Technology or XtendFlex® Technology.
- a contact, systemic herbicide, with limited soil activity on small seeded broadleaf weeds, including waterhemp, lambsquarters, and Palmer pigweed.
- readily absorbed by plants through shoot and root uptake, translocates throughout the plant's system, and accumulates in areas of active growth. XtendiMax® With VaporGrip® Technology interferes with plant growth hormones (auxins) resulting in death of many broadleaf weeds.

Additional state restrictions and requirements may apply. The user must comply with any additional state requirements and restrictions.

Refer to the specific use directions and restrictions in each crop table. Follow all requirements and restrictions on www.xtendimaxapplicationrequirements.com.

APPLICATION REQUIREMENTS OVERVIEW

Read and follow all applicable restrictions, precautions, and directions on the container label and booklet and at www.xtendimaxapplicationrequirements.com. For product questions or inquiries and/or to report any nonperformance of this product against any particular weed species, call 1-844-RRXTEND (1-844-779-8363). It is recommended that the certified applicator visit www.xtendimaxapplicationrequirements.com to obtain a copy of the Overview of Application Requirements for reference prior to and during application.

REQUIREMENTS	LABEL SECTIONS
Mandatory Training: ☐ Prior to applying, applicator must complete dicamba-specific training. Only certified applicators may apply this product; NOT to be used by uncertified persons working under the supervision of a certified applicator, except that uncertified persons may transport containers.	➢ Training (pp. 5-6)
Record Keeping: ☐ Records must be created within 72 hours of every application. Records must be kept for a period of two years.	➢ Record Keeping (p. 6)
Application: ☐ For EVERY application of XtendiMax® With VaporGrip® Technology, an approved **Volatility Reduction Adjuvant (VRA)** must be included in the spray solution. An approved **Drift Reduction Adjuvant (DRA)** must also be included in the spray solution, unless otherwise indicated on www.xtendimaxapplicationrequirements.com. Refer to the website for a list of approved DRAs and VRAs. ☐ *Rate and Timing*: Apply 22 fluid ounces per acre (0.5 lb. a.e. dicamba) for any single pre-emergent or in-crop application in: ○ Cotton with XtendFlex® Technology up to and including July 30 (DO NOT apply after July 30 regardless of growth stage), and ○ Soybean with Roundup Ready 2 Xtend® Technology or XtendFlex® Technology up to and including June 30. Applications occurring after R1 are prohibited as crop response may occur and in no event can applications be made after June 30 regardless of growth stage. ○ For details, see the "Specific Use Directions" section. ☐ *Spray volume:* Apply in a minimum of 15 gallons of spray solution per acre. ☐ *Tank mixing*: Use only approved tank-mix partners found at www.xtendimaxapplicationrequirements.com.	➢ Tank Mix Partners (p. 9) ➢ Specific Use Directions (pp. 12-14) ➢ Specific Use Directions (pp. 12-14) ➢ Tank Mix Partners (p. 9)

○ Refer to all product labels to determine mix order or perform a mix compatibility test.	
Application Equipment: ☐ *Spray system equipment cleanout*: Ensure entire sprayer system is properly cleaned before and after application. ☐ *Nozzles*: Use only approved nozzles within specified pressures found at www.xtendimaxapplicationrequirements.com. ☐ *Spray boom height*: Maximum boom height is 24 inches above target pest or crop canopy. ☐ *Ground speed*: DO NOT exceed 15 mph.	➢ Equipment Requirements (pp. 7-8)
Environmental Conditions: ☐ *Wind speed*: Apply when wind speed, measured at boom height, is 3-10 mph. ☐ *Inversions*: DO NOT spray during an inversion; only spray between one hour after sunrise and two hours before sunset. ☐ *Rainfall*: DO NOT apply this product if rain that may exceed soil field capacity and result in soil runoff is forecasted in the next 48 hours.	➢ Environmental Requirements (p. 7)
Downwind Requirements: ☐ *Sensitive crops and certain plants downwind*: DO NOT apply if sensitive crops and/or certain plants, as defined below in this label, are planted on an adjacent downwind field or area. ☐ *Downwind buffer*: After determining no adjacent sensitive crops and/or certain plants are downwind, maintain a 240-ft downwind buffer. ☐ *Endangered species*: Consult Endangered Species Protection Bulletins for ESA counties and restrictions.	➢ Adjacent Sensitive Crops and Certain Plants (p. 8) ➢ Buffer Requirements (p. 8) ➢ Protecting Endangered Species (p. 3)
Drift Reduction Technology: ☐ See "Optional Use of Drift Reduction Technology" section for details on application requirements and the potential to qualify for reduced use restrictions.	➢ Optional Use of Drift Reduction Technology (pp. 8-9)

USE RESTRICTIONS

- DO NOT USE ANY TANK MIX PRODUCT OR ANY NOZZLE AND PRESSURE COMBINATION WITH XTENDIMAX® WITH VAPORGRIP® TECHNOLOGY THAT IS NOT IDENTIFIED ON THE LIST OF APPROVED PRODUCTS FOUND AT www.xtendimaxapplicationrequirements.com.
- DO NOT TANK MIX AMMONIUM SULFATE (AMS) WITH THIS PRODUCT.
- DO NOT EXCEED 88 FLUID OUNCES (2 POUNDS ACID EQUIVALENT (A.E.) DICAMBA) OF XTENDIMAX® WITH VAPORGRIP® TECHNOLOGY PER ACRE PER YEAR.
- DO NOT EXCEED 88 FLUID OUNCES (2 POUNDS A.E. DICAMBA) PER ACRE PER YEAR FROM ALL DICAMBA APPLICATIONS IF MORE THAN ONE DICAMBA-CONTAINING PRODUCT IS APPLIED TO THE SAME SITE WITHIN THE SAME YEAR.
- DO NOT MAKE APPLICATION OF THIS PRODUCT IF RAIN IS EXPECTED IN THE NEXT 48 HOURS THAT MAY EXCEED SOIL FIELD CAPACITY AND RESULT IN SOIL RUNOFF.
- DO NOT APPLY THROUGH ANY TYPE OF IRRIGATION EQUIPMENT. DO NOT TREAT IRRIGATION DITCHES OR WATER USED FOR CROP IRRIGATION OR DOMESTIC PURPOSES.
- DO NOT APPLY TO CROPS UNDER STRESS DUE TO LACK OF MOISTURE, HAIL DAMAGE, FLOODING, HERBICIDE INJURY, MECHANICAL INJURY, INSECTS, OR WIDELY FLUCTUATING TEMPERATURES AS INJURY MAY RESULT.
- DO NOT APPLY THIS PRODUCT IF SENSITIVE CROPS AND CERTAIN PLANTS ARE PLANTED ON AN ADJACENT DOWNWIND FIELD OR AREA.
- DO NOT APPLY THIS PRODUCT AERIALLY.
- Restricted Entry Interval (REI): 24 hours.

USE PRECAUTIONS

- In case material is released or spilled: dike and contain the spill with inert material (sand, earth, etc.) and transfer liquid and solid diking material to separate containers for disposal. Remove contaminated clothing and wash affected skin areas with soap and water. Wash clothing before re-use. Keep the spill out of all sewers and open bodies of water.
- Rainfast period: This product is rainfast four (4) hours after application to most weed species. Rainfall or irrigation occurring within four (4) hours after application may necessitate retreatment or may otherwise result in reduced weed control.

TRAINING

Prior to using this product, users must complete dicamba-specific training to obtain certification. Once completed, dicamba-specific training is then required every other year for all users of this product. If state-specific training is required by the state where the applicator intends to apply this product, the applicator must complete training from the state or state-authorized provider. Otherwise, the applicator

may complete dicamba-specific training provided either by the state/state-authorized provider or by a registrant of a dicamba product approved for in-crop use with dicamba-tolerant crops.

RECORD KEEPING

The following records must be generated as soon as practical but **no later than 72 hours after application**. The certified applicator must keep these records for a period of **two years**. Records must be made available to State Pesticide Control Official(s), USDA, and EPA upon request. See www.xtendimaxapplicationrequirements.com for an example form summarizing record keeping requirements.

Keep records of the following items for each application of XtendiMax® With VaporGrip® Technology:

1. All Items required by 7 CFR Part 110 (RECORDKEEPING ON RESTRICTED USE PESTICIDES BY CERTIFIED APPLICATORS), including:
    a. The brand or product name
    b. The EPA registration number
    c. The total amount applied
    d. The month, day, and year of application
    e. The location of the application
    f. The crop, commodity, stored product, or site of application
    g. The size of treated area
    h. The name of the certified applicator
    i. The certification number of the certified applicator
2. *Training*: Completion date and provider of required training and proof of completion.
3. *Receipts of Purchase*: Receipts or copies for the purchase of this product.
4. *Product Label*: A copy of this product label and any state special local needs label that supplements this label.
5. *Sensitive Crops and Certain Plants Awareness*:
    a. Document that a sensitive crop registry was consulted. At a minimum, documentation must include the name of the sensitive crop registry and the date it was consulted.
    b. Record of a survey of adjacent areas documenting the sensitive crops and/or certain plants (as defined below in the "Adjacent Sensitive Crops and Certain Plants" section of this label) surrounding the field prior to application. At a minimum, records must include documentation of adjacent sensitive crops and/or certain plants and the date the survey was conducted.
6. *Buffer Requirement*: Record of the buffer distance implemented as directed in the "Spray Drift Management" and "Optional Use of Drift Reduction Technology" sections of this label.
7. *Start and Finish Times of Each Application*: Record of the time at which the application started and finished.
8. *Application Timing*: Record of the type of application (for example: preemergence, postemergence) and the number of days after planting if postemergence.
9. *Air Temperature*: Record of the air temperature in degrees Fahrenheit at the start and completion of each application.
10. *Wind Speed and Direction*: Record of the wind speed and direction (the direction from which the wind is blowing) at boom height at the start and completion of each application.
11. *Nozzle and Pressure*: Record of the spray nozzle manufacturer/brand, type, orifice size, and operating pressure used during each application of this product.
12. *Tank Mix Products*: Record of the brand names and EPA registration numbers (if applicable) for all products that were tank mixed with this product for each application, as well as a record of the volume of each added to the tank prior to application.
13. ***Mandatory Volatility and Drift Reduction Adjuvants***: Receipts or copies for the purchase of an approved volatility reduction adjuvant, as well as a record of the volume added to the tank prior to application. Receipts or copies for the purchase of an approved DRA and a record of the volume added to the tank prior to application, unless otherwise indicated on www.xtendimaxapplicationrequirements.com.
14. *Spray System Cleanout*: At a minimum, records must include confirmation that the spray system was clean before using this product and that the post-application cleanout was completed in accordance with the "Proper Spray System Equipment Cleanout" section of this label.

HERBICIDE RESISTANCE MANAGEMENT RECOMMENDATIONS

The dicamba active ingredient in XtendiMax® With VaporGrip® Technology is a Group 4 herbicide. Any weed population may contain or develop plants naturally resistant to XtendiMax® With VaporGrip® Technology and other Group 4 herbicides. The resistant biotypes may dominate the weed population if these herbicides are used repeatedly in the same field. Appropriate resistance management strategies should be followed.

To delay herbicide resistance, take one or more of the following steps:

- Limit cultivation and/or mechanical tillage within 7 days after application, as this may result in reduced efficacy and promote regrowth of treated weeds.
- Rotate the use of XtendiMax® With VaporGrip® Technology within a growing season and among growing seasons with different herbicide groups (other than Group 4) that control the same weeds.
- Use tank mixtures with herbicides from a different herbicide Group if such use is permitted.
- Adopt an integrated weed-management program for herbicide use that includes scouting and uses historical information related to herbicide use and crop rotation and that considers tillage (or other mechanical control methods), cultural (*e.g.*, higher crop seeding rates; precision fertilizer application method and timing to favor the crop and not the weeds), biological (weed-competitive crops or varieties), and other management practices.
- Scout after herbicide application to monitor weed populations for early signs of resistance development. Indicators of possible herbicide resistance include: (1) failure to control a weed species normally controlled by the herbicide at the dose applied,

especially if control is achieved on adjacent weeds; (2) a spreading patch of non-controlled plants of a particular weed species; (3) surviving plants mixed with controlled individuals of the same species. If resistance is suspected, prevent weed seed production in the affected area by an alternative herbicide from a different group or by a mechanical method such as hoeing or tillage. Prevent movement of resistant weed seeds to other fields by cleaning harvesting and tillage equipment when moving between fields and by planting clean seed.

- If a weed pest population continues to progress after treatment with this product, switch to another management strategy or herbicide with an effective mode of action, if available, and contact Bayer at 1-844-RRXTEND (1-844-779-8363).
- Contact your local extension specialist or certified crop advisors for additional pesticide resistance-management and/or integrated weed-management recommendations for specific crops and weed biotypes.
- For further information or to report suspected resistance contact Bayer at 1-844-RRXTEND (1-844-779-8363).

Management of Dicamba-Resistant Biotypes

Appropriate testing is critical in order to determine if a weed is resistant to dicamba. Contact your Bayer representative to determine if resistance in any particular weed biotype has been confirmed in your area or visit www.iwilltakeaction.com or www.weedscience.org.

The following good agronomic practices can reduce the spread of confirmed dicamba-resistant biotypes, particularly if pursued as soon as signs of resistance are observed:

- If a naturally occurring resistant biotype is present in your field, this product may be tank mixed or applied sequentially with an appropriately labeled herbicide with a different mode of action to achieve control (read "Tank Mixing" section for more information).
- Cultural and mechanical control practices (*e.g.*, crop rotation or tillage) can also be used as appropriate.
- Scout treated fields after herbicide application and control weed escapes, including resistant biotypes, before they set seed.
- Thoroughly clean equipment, as practical, for all weed seeds before leaving fields known to contain resistant biotypes.

SPRAY DRIFT MANAGEMENT

THE APPLICATOR IS RESPONSIBLE FOR AVOIDING OFF-SITE SPRAY DRIFT TO THE EXTENT CONSISTENT WITH APPLICABLE LAW. The applicator is responsible for compliance with state and local pesticide regulations, including any state or local pesticide drift regulations. DO NOT allow herbicide solution to mist, drip, drift, or splash onto desirable vegetation because severe injury or destruction to desirable broadleaf plants could result.

Applications using larger droplets reduces drift potential but will not prevent drift if the application is made improperly or under unfavorable environmental conditions. The interaction of weather-related factors and equipment must be monitored to maximize performance and on-target spray deposition. The applicator is responsible for considering all these factors when making a spray decision to the extent consistent with applicable law. BE AWARE OF NEARBY NON-TARGET SITES AND CHANGING ENVIRONMENTAL CONDITIONS (see the "Temperature Inversions" section of this label).

Environmental Requirements

Wind Speed

Wind speed must be measured in the field of application at boom height prior to and after application. Only apply when wind speed at boom height is between 3 MPH and 10 MPH during application.

Temperature Inversions

DO NOT apply this product during a temperature inversion as the off-target movement potential is high.

Applications of this product may ONLY occur one hour after sunrise through two hours before sunset. In general, temperature inversions are more likely during nighttime hours.

- Temperature inversions are characterized by increasing temperature with altitude and are common on nights with limited cloud cover and light to no wind.
- The presence of an inversion can be indicated by ground fog or, if fog is not present, by the movement of smoke from a ground source or an aircraft smoke generator. Smoke that layers and moves laterally in a concentrated cloud (under low wind conditions) indicates an inversion, while smoke that moves upward and rapidly dissipates indicates good vertical air mixing.

Equipment Requirements

DO NOT APPLY THIS PRODUCT USING AERIAL SPRAY EQUIPMENT.

Nozzle Type

To produce minimal amounts of fine spray particles, the applicator must use an approved nozzle within a specified pressure range as found at www.xtendimaxapplicationrequirements.com. DO NOT use any other nozzle and pressure combination not specifically listed on this website.

Equipment Ground Speed

DO NOT exceed a ground speed of 15 miles per hour. Select a ground speed that will deliver the desired spray volume while maintaining the desired spray pressure. Slower speeds generally result in better spray coverage and deposition on the target area. Provided the applicator can maintain the required nozzle pressure, it is recommended that tractor speed is reduced to 5 miles per hour at field edges.

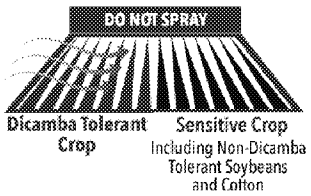
Spray Boom Height

Use the minimum boom height appropriate for spray pattern overlap based on nozzle selection and spacing, according to manufacturer recommendations, or 24 inches above canopy, whichever is smaller.

Adjacent Sensitive Crops and Certain Plants

DO NOT SPRAY this product when wind is blowing toward adjacent sensitive crops and certain plants, as defined immediately below.

It is important for the applicator to be aware that wind direction may vary during the application. If wind direction shifts such that the wind is blowing toward adjacent sensitive crops and/or certain plants, the applicator **must STOP** the application.



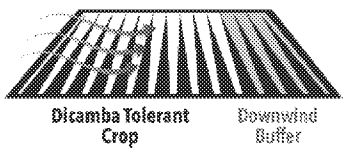
Before making an application, 1) consult a sensitive crop registry (such as FieldWatch or state/federal registry), 2) survey adjacent fields and areas, and 3) confirm the type or variety of plants and crops surrounding the field prior to application. At a minimum, records must include the name of the sensitive crop registry, the date it was consulted, documentation of adjacent plants and crops/areas surrounding the field of application, and the date the survey was conducted.

Dicamba-sensitive crops and/or certain plants include, but are not limited to, non-dicamba-tolerant soybeans and cotton, tomatoes and other fruiting vegetables (EPA crop group 8), fruit trees, cucurbits (EPA crop group 9), grapes, beans, flowers, ornamentals, peas, potatoes, sunflower, tobacco, and other broadleaf plants, including if these plants are in a greenhouse. Severe injury or destruction could occur if any contact between this product and these plants occurs. Sensitive crop registries can provide additional information about sensitive crops and sensitive areas.

If you have questions regarding sensitive crop registries contact Bayer at 1-844-RRXTEND (1-844-779-8363) **prior to application**.

Buffer Requirements

After determining no adjacent sensitive crops and/or certain plants are downwind, the applicator **must always maintain a 240-foot downwind buffer** between the last treated row and the nearest downwind field edge when applying using broadcast open-boom equipment. For reduced downwind buffer distances, refer to "Optional Use of Drift Reduction Technology" section of this label.



The following areas may be included in the buffer distance composition when directly adjacent to the treated field edges:

- Roads, paved or gravel surfaces, mowed grassy areas adjacent to field, and plowed or graded areas contiguous with the planted area
- Planted agricultural fields containing: corn, dicamba-tolerant cotton, dicamba-tolerant soybean, sorghum, proso millet, small grains, sugarcane, and other crops for which dicamba has a post-emergent approved use. If the applicator intends to include such crops as dicamba-tolerant cotton and/or dicamba-tolerant soybeans in the buffer distance composition, the applicator must confirm the crops are in fact dicamba-tolerant.
- Agricultural fields that have been prepared for planting
- Areas covered by the footprint of a building, silo, or other man-made structure with walls and/or roof

If you have questions regarding Buffer Requirement, contact Bayer at 1-844-RRXTEND (1-844-779-8363) **prior to application**.

Optional Use of Drift Reduction Technology

This product may be optionally applied using a hooded/shielded broadcast sprayer or other types of drift reduction technology (DRT) for postemergence weed control as well as residual control of susceptible weeds. The applicator must use an approved nozzle within a specified pressure range as found at www.xtendimaxapplicationrequirements.com. Use of drift reduction technology (DRT) in combination with approved nozzles is recommended to further reduce drift potential.

Applications of this product may qualify for reduced use restrictions, such as a reduced downwind buffer distance, provided a **qualified DRT** listed on www.xtendimaxapplicationrequirements.com is used and operated according to the directions and limitations provided at www.xtendimaxapplicationrequirements.com.

Hooded/Shielded Broadcast Sprayer:

For hooded/shielded sprayers, all application nozzles must be contained within the enclosed area. Shielding the boom or individual nozzles can reduce the effects of wind. However, it is the responsibility of the applicator to verify that the shields are preventing drift and

not interfering with uniform deposition of the product. Applicators must ensure the sprayer system is off or controlled during turns to further prevent spray drift. Refer to the hooded/shielded sprayer manufacturer use specifications prior to use.

Requirements for Reduced Use Restrictions with Optional Hooded/Shielded Sprayer: ONLY **qualified** hooded/shielded sprayers listed on www.xtendimaxapplicationrequirements.com are eligible for reduced use restrictions when applying this product. When using a **qualified** hooded/shielded sprayer, the applicator **must always maintain a minimum 110-foot downwind buffer** between the last treated row and the nearest downwind field edge. Consult Endangered Species Protection Bulletins for ESA counties and restrictions. While this product may be applied with other (non-qualified) hooded/shielded sprayers, no reduction in use restrictions is associated with their use.

TANK MIX PARTNERS

Tank Mixing

It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions, limitations, and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.

All applications of this product require the inclusion of a volatility reduction adjuvant (VRA), such as a VaporGrip® Xtra Agent product or an approved VRA equivalent, in the tank mix. The inclusion of a **drift reduction adjuvant (DRA) is also required** in the tank mix, unless otherwise indicated on www.xtendimaxapplicationrequirements.com. Only tank mix products that have been tested and found to not adversely affect the offsite movement potential of XtendiMax® With VaporGrip® Technology may be tank mixed with XtendiMax® With VaporGrip® Technology. The applicator must check the website found at www.xtendimaxapplicationrequirements.com for a list of approved tank mix products no more than 7 days before applying XtendiMax® With VaporGrip® Technology.

DO NOT tank mix any product with XtendiMax® With VaporGrip® Technology unless:

1. The intended tank mix product is identified on the list of tested products found at www.xtendimaxapplicationrequirements.com;
2. The intended products are not prohibited on either this label or the label of the tank mix product; and
3. All requirements and restrictions on www.xtendimaxapplicationrequirements.com are followed.

NOTE: DO NOT use PVA (polyvinyl acetate) packets in a tank mix with products that contain boron or release free chlorine. The resultant reaction of PVA and boron or free chlorine is a plastic that is not soluble in water or solvents.

APPLICATION INSTRUCTIONS

APPLY THIS PRODUCT USING PROPERLY MAINTAINED AND CALIBRATED EQUIPMENT CAPABLE OF DELIVERING THE REQUIRED VOLUMES.

DO NOT APPLY THIS PRODUCT USING AERIAL SPAY EQUIPMENT.

XtendiMax® With VaporGrip® Technology can be applied to actively growing weeds as broadcast, band, or spot spray applications using water as a carrier. For best results, treat weeds early when they are relatively small (less than 4 inches). Timely application to small weeds early in the season will improve control and reduce weed competition.

Ground Application (Broadcast)

Water Volume: Use a minimum of 15 gallons of spray solution per broadcast acre for optimal performance. Use 20 gallons per acre or greater when treating dense weed canopy/vegetation.

Ground Application (Hooded In-Row and Directed Layby)

Using a hooded sprayer or other drift reduction technology in combination with approved nozzles may further reduce drift potential. When applying XtendiMax® With VaporGrip® Technology by hooded in-row or layby sprayers, determine the amount of herbicide and water volume needed using the following formula:

$$\frac{\text{band width (inches)}}{\text{row width (inches)}} * \text{broadcast rate per acre} = \text{rate per treated acre}$$

$$\frac{\text{band width (inches)}}{\text{row width(inches)}} * \text{broadcast spray volume per acre} = \text{spray volume per treated acre}$$

SPRAY SYSTEM EQUIPMENT CLEANOUT

You must ensure that the spray system used to apply this product is clean before using this product. Failure to properly clean the entire spray system can result in inadvertent contamination of the spray system. Contamination of the spray system may cause injury to non-dicamba-tolerant soybeans and other sensitive crops.

Inadvertent contamination can also occur in equipment used for bulk product handling and mixing prior to use in the spray system. Care should be taken to reduce contamination not only in the spray system but in any equipment used to transfer or deliver product. For example, bulk handling and mixing equipment containing this product should be segregated when possible to reduce potential for cross-

contamination. Consider using block and check valves to avoid backflow during transfer. Piping should be reviewed to ensure there is not potential for product build-up. Dedicated nurse trucks and tender equipment should be used when possible.

Clean equipment **immediately after using** this product, using a **triple rinse** procedure as follows:

1. After spraying, drain the sprayer (including boom and lines) immediately. DO NOT allow the spray solution to remain in the spray boom lines overnight prior to flushing.
2. Fill tank with clean water (at least 10% volume) and flush tank, hoses, boom, and nozzles. Ensure agitation for 15 minutes and then spray out solution through boom. If equipped, open boom ends and flush.
3. Inspect and clean all strainers, screens, and filters.
4. Fill tank with clean water (at least 10% of volume) and prepare a cleaning solution with a commercial detergent or sprayer cleaner or ammonia according to the manufacturer's directions.
5. Take care to wash all parts of the tank, including the inside top surface. Start agitation in the sprayer and thoroughly recirculate the cleaning solution for at least 15 minutes. All visible deposits must be removed from the spraying system.
6. Flush hoses, spray lines, and nozzles for at least 1 minute with the cleaning solution.
7. Remove nozzles, screens, and strainers and clean separately in the cleaning solution after completing the above procedures.
8. Drain pump, filter, and lines.
9. Repeat steps 2 and 3.
10. Rinse the complete spraying system with clean water.
11. Clean and wash off the outside of the entire sprayer and boom.
12. All rinse water must be disposed of in compliance with local, state, and federal guidelines.

ROTATIONAL CROPS

When counting days from the application of this product, do not count days when the ground is frozen. Moisture is essential for the degradation of this herbicide in soil. If dry weather prevails, use cultivation to allow herbicide contact with moist soil.

No rotational cropping restrictions apply when rotating to soybean with Roundup Ready 2 Xtend® Technology or XtendFlex® Technology or to cotton seed with XtendFlex® Technology (including Bollgard® 3 XtendFlex® Cotton, Bollgard II® XtendFlex® Cotton, or XtendFlex® Cotton). For other crops, the interval between application and planting rotational crop is given below. Planting at intervals less than specified below may result in crop injury.

For application rates of this product of **22 fluid ounces per acre per year:**

- No planting restrictions apply beyond 120 days after application.
- East of the Mississippi River:
  - Wait a minimum of 30 days for 22 fluid ounces applied per acre before planting.
- West of the Mississippi River:
  - Wait a minimum of 45 days for 22 fluid ounces applied per acre before planting.
  - In areas with less than 30 inches of annual rainfall wait a minimum of 100 days before planting (furrow and/or overhead irrigation can be included in rainfall determination).

For application rates of this product of **44 to 88 fluid ounces per acre per year:**

- In areas with less than 30 inches of annual rainfall:
  - Wait a minimum of 180 days before planting crops (furrow and/or overhead irrigation can be included in rainfall determination).
- In areas with 30 inches or more annual rainfall:
  - Wait a minimum of 120 days after application before planting.

WEEDS CONTROLLED OR SUPPRESSED

General Weed List, Including ALS-, Glyphosate-, and Triazine-Resistant Biotypes

ANNUAL WEEDS		
Alkanet	Flixweed	Pusley, Florida
Amaranth, Palmer, Powell, Spiny	Fumitory	Radish, Wild
Aster, Slender	Goosefoot, Nettleleaf	Ragweed, Common, Giant (Buffaloweed), Lance-Leaf
Bedstraw, Catchweed	Hempnettle	Rocket, London, Yellow
Beggarweed, Florida	Henbit	Rubberweed, Bitter (Bitterweed)
Broomweed, Common	Jacobs-Ladder	Salsify
Buckwheat, Tartary, Wild	Jimsonweed	Senna, Coffee
Buffalobur	Knawel (German Moss)	Sesbania, Hemp
Burclover, California	Knotweed, Prostrate	Shepherdpurse
Burcucumber	Kochia	Sicklepod
Buttercup, Corn, Creeping, Roughseed, Western Field	Ladysthumb	Sida, Prickly (Teaweed)
Carpetweed	Lambsquarters Common	Smartweed, Green, Pennsylvania
Catchfly, Nightflowering	Lettuce, Miners, Prickly	Sneezeweed, Bitter
Chamomile, Corn	Mallow, Common, Venice	Sowthistle, Annual, Spiny
Chevil, Bur	Marestail (Horseweed)	Spanish Needles
Chickweed, Common	Mayweed	Spikeweed, Common
Clovers	Morningglory, Ivyleaf, Tall	Spurge, Prostrate, Leafy
Cockle, Corn, Cow, White	Mustard, Black, Blue, Tansy, Treacle, Tumble, Wild, Yellowtops	Spurry, Corn
Cocklebur, Common	Nightshade, Black, Cutleaf	Starbur, Bristly
Copperleaf, Hophornbeam	Pennycress, Field (Fanweed, Frenchweed, Stinkweed)	Starwort, Little
Cornflower (Bachelor Button)	Pepperweed, Virginia (Peppergrass)	Sumpweed, Rough
Croton, Tropic, Woolly	Pigweed, Prostrate, Redroot (Carelessweed), Rough, Smooth, Tumble	Sunflower, Common (Wild), Volunteer
Daisy, English	Pineappleweed	Thistle, Russian
Dragonhead, American	Poorjoe	Velvetleaf
Eveningprimrose, Cutleaf	Poppy, Red-horned	Waterhemp, Common, Tall
Falseflax, Smallseed	Puncturevine	Waterprimrose, Winged
Fleabane, Annual	Purslane, Common	Wormwood

BIENNIAL WEEDS		
Burdock, Common	Gromwell	Starthistle, Yellow
Carrot, Wild (Queen Anne's Lace)	Knapweed, Diffuse, Spotted	Sweetclover
Cockle, White	Mallow, Dwarf	Teasel
Eveningprimrose, Common	Plantain, Bracted	Thistle, Bull, Milk, Musk, Plumeless
Geranium, Carolina	Ragwort, Tansy	

PERENNIAL WEEDS		
Alfalfa	Garlic, Wild	Smartweed, Swamp
Artichoke, Jerusalem	Goldenrod, Canada, Missouri	Snakeweed, Broom
Aster, Spiny, Whiteheath	Goldenweed, Common	Sorrel, Red (Sheep Sorrel)
Bedstraw, Smooth	Hawkweed	Sowthistle, Perennial
Bindweed, Field, Hedge	Henbane, Black	Spurge, Leafy
Blueweed, Texas	Horsenettle, Carolina	Sundrops
Bursage, Woollyleaf (Bur Ragweed, Povertyweed)	Ironweed	Thistle, Canada, Scotch
Buttercup, Tall	Knapweed, Black, Diffuse, Russian, Spotted	Toadflex, Dalmatian
Campion, Bladder	Milkweed, Climbing, Common, Honeyvine, Western Whorled	Tropical Soda Apple
Chickweed, Field, Mouseear	Nettle, Stinging	Trumpetcreeper (Buckvine)
Chicory	Nightshade, Silverleaf (White Horsenettle)	Vetch
Clover, Hop	Onion, Wild	Waterhemlock, Spotted
Dandelion, Common	Plantain, Broadleaf, Buckhorn	Waterprimrose, Creeping
Dock Broadleaf (Bitterdock), Curly	Pokeweed	Woodsorrel, Creeping, Yellow
Dogbane, Hemp	Ragweed, Western	Wormwood, Absinth, Louisiana
Dogfennel (Cypressweed)	Redvine	Yankeeweed
Fern, Bracken	Sericia Lespedeza	Yarrow, Common

SPECIFIC USE DIRECTIONS

CROPS WITH XTEND® TECHNOLOGY

Cotton with XtendFlex® Technology (including Bollgard II® XtendFlex® COTTON, Bollgard® 3 XtendFlex® COTTON, or XtendFlex® COTTON) and soybean with Roundup Ready 2 Xtend® Technology or XtendFlex® Technology CONTAIN A PATENTED GENE THAT PROVIDES TOLERANCE TO DICAMBA, THE ACTIVE INGREDIENT IN THIS PRODUCT. THIS PRODUCT WILL CAUSE SEVERE CROP INJURY OR DESTRUCTION AND YIELD LOSS IF APPLIED TO COTTON AND SOYBEAN THAT ARE NOT DICAMBA TOLERANT, INCLUDING COTTON AND SOYBEAN WITH A TRAIT ENGINEERED TO CONFER TOLERANCE TO AUXIN HERBICIDES OTHER THAN DICAMBA. FOLLOW THE REQUIREMENTS SET FORTH HEREIN TO PREVENT SEVERE CROP INJURY OR DESTRUCTION AND YIELD LOSS. CONTACT WITH FOLIAGE, GREEN STEMS, OR FRUIT OF CROPS, OR ANY DESIRABLE PLANTS THAT DO NOT CONTAIN A DICAMBA TOLERANCE GENE OR ARE NOT NATURALLY TOLERANT TO DICAMBA, COULD RESULT IN SEVERE PLANT INJURY OR DESTRUCTION.

XtendiMax® With VaporGrip® Technology is approved by U.S. EPA for use in cotton with XtendFlex® Technology and in soybean with Roundup Ready 2 Xtend® Technology or XtendFlex® Technology only in the following states, subject to county restriction as noted: Alabama, Arkansas, Arizona, Colorado, Delaware, Florida (excluding Palm Beach County), Georgia, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maryland, Michigan, Minnesota, Mississippi, Missouri, Nebraska, New Jersey, New Mexico, New York, North Carolina, North Dakota, Oklahoma, Ohio, Pennsylvania, South Carolina, South Dakota, Tennessee (excluding Wilson County), Texas, Virginia, West Virginia, Wisconsin.

Information on cotton with XtendFlex® Technology and on soybean with Roundup Ready 2 Xtend® Technology or XtendFlex® Technology can be obtained from your seed supplier or Bayer representative. Cotton with XtendFlex® Technology and soybean with Roundup Ready 2 Xtend® Technology or XtendFlex® Technology must be purchased from an authorized licensed seed supplier.

Cotton with XtendFlex® Technology, soybean with Roundup Ready 2 Xtend® Technology or XtendFlex® Technology, and methods of controlling weeds and applying dicamba in cotton with XtendFlex® Technology and in soybean with Roundup Ready 2 Xtend® Technology or XtendFlex® Technology are protected under U.S. patent law. No license to use cotton with XtendFlex® Technology or soybean with Roundup Ready 2 Xtend® Technology or XtendFlex® Technology is granted or implied with the purchase of this herbicide product. Cotton with XtendFlex® Technology and soybean with Roundup Ready 2 Xtend® Technology or XtendFlex® Technology are owned by Bayer and a license must be obtained from Bayer before using it. Contact your Authorized Bayer Retailer for information on obtaining a license to use cotton with XtendFlex® Technology and soybean with Roundup Ready 2 Xtend® Technology or XtendFlex® Technology.

COTTON WITH XTENDFLEX® TECHNOLOGY	
Application Rate	• **Burndown/Early Preplant, Preplant, At-Planting, Preemergence:** Apply ONLY 22 fluid ounces (0.5 lb. acid equivalent (a.e.) dicamba) per acre for a single burndown/early preplant, preplant, at-planting, or preemergence application. • **Postemergence (in-crop):** For any single, in-crop application, apply ONLY 22 fluid ounces (0.5 lb. a.e. dicamba) per acre.
Maximum Annual Rates	• *Total of all Burndown/Early Preplant, Preplant, At-Planting, and Preemergence applications*: 44 fluid ounces per acre (1.0 lb. a.e. dicamba per acre)

	• *Total of all in-crop applications*: 44 fluid ounces per acre (1.0 lb. a.e. dicamba per acre) • *Combined total per year for all applications*: 88 fluid ounces per acre (2.0 lb. a.e. dicamba per acre)
Application Timing	• **Burndown/Early Preplant, Preplant, At-Planting, Preemergence:** This product may be applied before, during, or immediately after planting. • **Postemergence (in-crop):** This product may be applied in-crop up to and including July 30.
Number of Applications	• Sequential applications of this product may be necessary to control new flushes of weeds or on tough-to-control weeds. Allow at least 7 days between applications. • A maximum of **two** burndown/early preplant, preplant, at-planting, and preemergence and **two** in-crop applications may be made.
Spray Volume	• Apply this product in a minimum of 15 gallons of spray solution per acre as a broadcast application. • Use 20 gallons per acre or greater when treating dense weed canopy/vegetation.
Preharvest Interval	• Allow a minimum of 7 days between application and harvest.
Livestock Grazing or Feeding	• Permitted.
Use Precautions	• Refer to the "Weeds Controlled or Suppressed" section of this label for specific weeds controlled. • For best performance, control weeds early when they are less than 4 inches. • Postemergence applications of this product mixed with adjuvants may cause a leaf response to cotton with XtendFlex® Technology. The symptoms usually appear as necrotic spots on fully expanded leaves. EC-based products that are tank mixed with products containing dicamba may increase the severity of the leaf damage. • For postemergence applications with a hooded in-row sprayer, cotton must be a minimum of 15 inches tall at the time of application. • For postemergence applications with a directed layby sprayer, the release point for the herbicide must not be more than 10 inches from the soil and cotton must be at least 20 inches in height. Spray tip must be angled downward to the soil making sure no spray droplets remain in the air.
Use Restrictions	• DO NOT apply **less than** 22 fluid ounces (0.5 lb. a.e. dicamba) per acre. • DO NOT apply **more than** 22 fluid ounces (0.5 lb. a.e. dicamba) per acre. • DO NOT exceed two pre-emergent applications. • DO NOT exceed two post-emergent applications. • DO NOT exceed 88 fluid ounces per acre (2.0 lb. a.e. dicamba per acre) per year.

SOYBEAN WITH ROUNDUP READY 2 XTEND® TECHNOLOGY OR XTENDFLEX® TECHNOLOGY	
Application Rate	• **Burndown/Early Preplant, Preplant, At-Planting, Preemergence:** Apply ONLY 22 fluid ounces (0.5 lb. acid equivalent (a.e.) dicamba) per acre for a single burndown/early preplant, preplant, at-planting, or preemergence application. • **Postemergence (in-crop):** For any single, in-crop application, apply ONLY 22 fluid ounces (0.5 lb. a.e. dicamba) per acre.
Maximum Annual Rates	• *Total of all Burndown/Early Preplant, Preplant, At-Planting, and Preemergence applications*: 44 fluid ounces per acre (1.0 lb. a.e. dicamba per acre) • *Total of all in-crop applications*: 44 fluid ounces per acre (1.0 lb. a.e. dicamba per acre) • *Combined total per year for all applications*: 88 fluid ounces per acre (2.0 lb. a.e. dicamba per acre)
Application Timing	• **Burndown/Early Preplant, Preplant, At-Planting, Preemergence:** This product may be applied before, during, or immediately after planting. • **Postemergence (in-crop):** This product may only be applied in-crop up to and including June 30. Applications occurring after R1 are prohibited as crop response may occur.
Number of Applications	• A second application may be necessary to control new flushes of weeds. Allow at least 7 days between applications. For best results, apply after some weed re-growth has occurred. • A maximum of **two** burndown/early preplant, preplant, at-planting, and preemergence and **two** in-crop applications may be made.
Spray Volume	• Apply this product in a minimum of 15 gallons of spray solution per acre as a broadcast application. • Use 20 gallons per acre or greater when treating dense weed canopy/vegetation.
Preharvest Interval	• Allow a minimum of 7 days between application and harvest.
Livestock Grazing or Feeding	• Permitted.
Use Precautions	• Refer to the "Weeds Controlled or Suppressed" section of this label for specific weeds controlled. • For best performance, control weeds early when they are less than 4 inches. • Postemergence application under stressful environments may cause temporary loss of turgor, a response commonly described as leaf droop in soybean with Roundup Ready 2 Xtend® Technology or XtendFlex® Technology. Typically, affected plants recover in 1-3 days depending on the level of droop and environmental conditions. • For postemergence applications with a hooded in-row sprayer, soybeans must be a minimum of 15 inches tall at the time of application. • For postemergence applications with a directed layby sprayer, the release point for the herbicide must not be more than 10 inches from the soil and soybeans must be at least 20 inches in height. Spray tip must be angled downward to the soil making sure no spray droplets remain in the air

Use Restrictions	• DO NOT apply **less than** 22 fluid ounces (0.5 lb. a.e. dicamba) per acre. • DO NOT apply **more than** 22 fluid ounces (0.5 lb. a.e. dicamba) per acre. • DO NOT exceed two pre-emergent applications. • DO NOT exceed two post-emergent applications. • DO NOT exceed 88 fluid ounces per acre (2.0 lb. a.e. dicamba per acre) per year.

STORAGE AND DISPOSAL

Proper pesticide storage and disposal are essential to protect against exposure to people and the environment due to leaks and spills, excess product or waste, and vandalism. Do not allow this product to contaminate water, foodstuffs, feed or seed by storage or disposal.

Pesticide storage
Store pesticides away from food, pet food, feed, seed, fertilizers, and veterinary supplies. Keep container closed to prevent spills and contamination.

Pesticide disposal
To avoid wastes, use all material in this container, including rinsate, by application according to label directions. If wastes cannot be avoided, offer remaining product to a waste disposal facility or pesticide disposal program. Such programs are often run by state or local governments or by industry. All disposal must be in accordance with applicable federal, state, and local regulations and procedures.

Container handling and disposal
[*Insert appropriate Container Handling and Disposal Statement and Refilling Limitation from the following options*]

[*CONTAINER HANDLING AND DISPOSAL STATEMENT AND REFILLING LIMITATION FOR NONREFILLABLE RIGID CONTAINERS OF LESS THAN 1-GALLON CAPACITY*]
Nonrefillable container. Do not reuse or refill this container.

[*Alternative container statement:* Nonrefillable container. Do not reuse this container to hold materials other than pesticides or dilute pesticides (rinsate). After emptying and cleaning, it may be allowable to temporarily hold rinsate or other pesticide-related materials in this container. Contact your state regulatory agency to determine allowable practices in your state.]

Triple rinse this container promptly after emptying.

Triple rinse as follows: Empty the remaining contents into application equipment or mix-tank and continue to drain for 10 seconds after the flow begins to drip. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or mix-tank, or store rinsate for later use or disposal. Continue to drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times.

Once properly rinsed, some plastic [*Optional text:* agricultural] pesticide containers can be taken to a container collection site or picked up for recycling. [*Alternative container disposal statement:* Then offer the container for recycling, if available.]

[*Optional container disposal statement:* To find the nearest collection site, contact your chemical dealer or Bayer at 1-866-99BAYER (1-866-992-2937).]
If recycling is not available, dispose of in accordance with federal, state and local regulations and procedures, which may include puncturing the properly rinsed container and disposing in a sanitary landfill.

[*CONTAINER HANDLING AND DISPOSAL STATEMENT AND REFILLING LIMITATION FOR NONREFILLABLE RIGID PLASTIC 2.5-GALLON CONTAINER AND OTHER NONREFILLABLE CONTAINERS OF GREATER THAN 1-GALLON BUT EQUAL TO OR LESS THAN 5-GALLON CAPACITY*]
Nonrefillable container. Do not reuse this container to hold materials other than pesticides or dilute pesticides (rinsate). After emptying and cleaning, it may be allowable to temporarily hold rinsate or other pesticide-related materials in this container. Contact your state regulatory agency to determine allowable practices in your state.

[*Alternative container statement:* Nonrefillable container. Do not reuse or refill this container.]

Triple rinse or pressure rinse (or equivalent) this container promptly after emptying.

Triple rinse as follows: Empty the remaining contents into application equipment or mix-tank and continue to drain for 10 seconds after the flow begins to drip. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or mix-tank, or store rinsate for later use or disposal. Continue to drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times.

Pressure rinse as follows: Empty the remaining contents into application equipment or mix-tank and continue to drain for 10 seconds after the flow begins to drip. Place container so that it can drain directly into application equipment or mix-tank while rinsing, or collect

rinsate for later use or disposal. Insert pressure rinsing nozzle into the side of the container and rinse at about 40 PSI for at least 30 seconds. Continue to drain for 10 seconds after the flow begins to drip.

Once properly rinsed, some plastic [*Optional text:* agricultural] pesticide containers can be taken to a container collection site or picked up for recycling. [*Alternative container disposal statement:* Then offer the container for recycling, if available.]

[*Optional container disposal statement:* To find the nearest collection site, contact your chemical dealer or Bayer at 1-866-99BAYER (1-866-992-2937).]

If recycling is not available, dispose of in accordance with federal, state and local regulations and procedures, which may include puncturing the properly rinsed container and disposing in a sanitary landfill.

[*CONTAINER HANDLING AND DISPOSAL STATEMENT AND REFILLING LIMITATION FOR NONREFILLABLE RIGID PLASTIC 30-GALLON CONTAINER AND OTHER NONREFILLABLE CONTAINERS OF GREATER THAN 5-GALLON CAPACITY*]
Nonrefillable container. Do not reuse or refill this container.

[*Alternative container statement:* Nonrefillable container. Do not reuse this container to hold materials other than pesticides or dilute pesticides (rinsate). After emptying and cleaning, it may be allowable to temporarily hold rinsate or other pesticide-related materials in this container. Contact your state regulatory agency to determine allowable practices in your state.]

Triple rinse or pressure rinse (or equivalent) this container promptly after emptying.

[*Optional label text:* For containers not equipped with pumping systems,] Triple rinse as follows: Empty the remaining contents into application equipment or mix-tank. Fill the container ¼ full with water. Replace and tighten closures. Tip the container on its side and roll it back and forth for 30 seconds, ensuring at least one complete revolution. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or mix-tank, or store rinsate for later use or disposal. Repeat this procedure two more times.

[*Alternative or additional triple rinsing instructions for large containers equipped with pumping systems:* [*Optional label text:* For large containers equipped with pumping systems,] Triple rinse as follows: Empty the remaining contents into application equipment or mix-tank. Fill the container about 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times.]

Pressure rinse as follows: Empty the remaining contents into application equipment or mix-tank and continue to drain for 10 seconds after the flow begins to drip. Place container so that it can drain directly into application equipment or mix-tank while rinsing, or collect rinsate for later use or disposal. Insert pressure rinsing nozzle into the side of the container and rinse at about 40 PSI for at least 30 seconds. Continue to drain for 10 seconds after the flow begins to drip.

Once properly rinsed, some plastic [*Optional text:* agricultural] pesticide containers can be taken to a container collection site or picked up for recycling. [*Alternative container disposal statement:* Then offer the container for recycling, if available.]

[*Optional container disposal statement:* Some container manufacturers offer container recycling. See additional information regarding manufacturer recycling programs attached to this container, if available. If no recycling information is available on this container, contact your chemical dealer or Bayer at 1-866-99BAYER (1-866-992-2937) to find the nearest recycling location.]

[*Optional container disposal statement:* To find the nearest collection site, contact your chemical dealer or Bayer at 1-866-99BAYER (1-866-992-2937).]

If recycling is not available, dispose of in accordance with federal, state and local regulations and procedures, which may include puncturing the properly rinsed container and disposing in a sanitary landfill.

[*Optional container disposal statement:* Return Properly Rinsed Container to Bayer for Recycling – Call 1-866-99BAYER (1-866-992-2937).]

[*Optional additional container disposal statement:* IBC EMPTY? – FREE CALL – 1-888-SCHUETZ (1-888-724-8389) www.schuetz.net/ticket; Schuetz ticket service]

[*Optional additional container disposal statement:* FREE IBC PICKUP] [For continental USA and Canada only.]

[*Optional additional container disposal statement:* RETURNnet SYSTEM – To return empty IBC's Email or Call – www.returnnetsystem.com – 1-888-758-SHIP (1-888-758-7447) – United States and Canada – IBCNA – Clarkston, Michigan – USA]

[*CONTAINER HANDLING AND DISPOSAL STATEMENT AND REFILLING LIMITATION FOR ALL REFILLABLE CONTAINERS, EXCEPT TRANSPORT VEHICLES*]
Refillable container. Refill this container with pesticide only. Do not reuse this container for any other purpose.

Cleaning this container before refilling is the responsibility of the refiller. Cleaning this container before final disposal is the responsibility of the person disposing of the container.

To clean this container before final disposal, empty the remaining contents from the container into application equipment or mix-tank. Fill the container about 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times.

[*Optional container disposal statement:* Then offer the container for recycling, if available.]

[*Optional container disposal statement:* Some container manufacturers offer container recycling. See additional information regarding manufacturer recycling programs attached to this container, if available. If no recycling information is available on this container, contact your chemical dealer or Bayer at 1-866-99BAYER (1-866-992-2937) to find the nearest recycling location.]

[*Optional additional container disposal statement:* IBC EMPTY? – FREE CALL – 1-888-SCHUETZ (1-888-724-8389) www.schuetz.net/ticket; Schuetz ticket service]

[*Optional additional container disposal statement:* FREE IBC PICKUP] [For continental USA and Canada only.]

[*Optional additional container disposal statement:* RETURNnet SYSTEM – To return empty IBC's Email or Call – www.returnnetsystem.com – 1-888-758-SHIP (1-888-758-7447) – United States and Canada – IBCNA – Clarkston, Michigan – USA]

[*Optional container disposal statement:* To obtain information about recycling refillable containers, contact Bayer at 1-866-99BAYER (1-866-992-2937).]

[*Optional container disposal statement:* Return Properly Rinsed Container to Bayer for Recycling – Call 1-866-99BAYER (1-866-992-2937).]

[*Optional additional container label statements for the CUBE refillable packaging system only:*

CUBE Bayer Refillable Delivery System
FEATURES INCLUDE:
- Automatic Venting
- Heavy duty one-way 2-inch camloc ball valve with protective shield door
- Complete coated steel protective enclosure
- Durable 4-way plastic pallet
- Lift door to access one-way valve]

CONDITIONS OF SALE AND LIMITATIONS OF WARRANTY AND LIABILITY

Read the entire Directions for Use, Conditions, Disclaimer of Warranties, and Limitations of Liability before buying or using this product. If terms are not acceptable, return the unopened product container at once.

By using this product, user or buyer accepts the following Conditions, Disclaimer of Warranties, and Limitations of Liability.

CONDITIONS: The directions for use of this product are believed to be adequate and must be followed carefully. However, it is impossible to eliminate all risks associated with the use of this product. Crop injury, ineffectiveness, or other unintended consequences may result because of such factors as weather conditions, presence of other materials, or the manner of use or application inconsistent with this label (including conditions noted on the label , such as unfavorable soil conditions, unfavorable climate conditions, etc.), all of which are beyond the control of Bayer CropScience LP ("Bayer") or the seller. To the extent consistent with applicable law, all such risks shall be assumed by the user or buyer. Buyer and all users shall promptly notify Bayer of any claims whether based in contract, negligence, strict liability, other tort or otherwise

DISCLAIMER OF WARRANTIES: Subject to risks as set forth in the Conditions above, Bayer warrants that this product is reasonably fit for the purposes stated on the label when used for the purposes stated on the label when used in accordance with directions. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, BAYER MAKES NO OTHER WARRANTIES, EXPRESS OR IMPLIED, OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE OR OTHERWISE. BAYER MAKES NO RECOMMENDATION OR WARRANTY HEREIN REGARDING THE USE OF ANY PRODUCTS THAT MAY APPEAR ON THE WEBSITE REFERENCED IN THE TANK MIXING INSTRUCTIONS HEREIN, REGARDLESS OF WHETHER SUCH PRODUCT IS USED ALONE OR IN A TANK MIX WITH XtendiMax® With VaporGrip® Technology. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, BAYER DISCLAIMS ANY LIABILITY WHATSOEVER FOR SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, FOR IN-CROP (OVER-THE-TOP) USES ON CROPS WITH XTEND® TECHNOLOGY, CROP SAFETY AND WEED CONTROL PERFORMANCE ARE NOT WARRANTED BY BAYER WHEN THIS PRODUCT IS USED IN CONJUNCTION WITH "BROWN BAG" OR "BIN RUN" SEED SAVED FROM PREVIOUS YEAR'S PRODUCTION AND REPLANTED. FURTHER, TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, BAYER DOES NOT WARRANT THE WEED CONTROL PERFORMANCE OF DICAMBA-RESISTANT WEED BIOTYPES.

LIMITATIONS OF LIABILITY: To the extent consistent with applicable law, the exclusive remedy of the user or buyer for any and all losses, injuries, or damages resulting from the use or handling of this product, whether in contract, warranty, tort, negligence, strict liability or otherwise, shall not exceed the purchase price paid, or at Bayer's election, the replacement of product.

These Conditions of Sales, Disclaimer of Warranties and Limitations of Liability cannot be varied by any written or verbal statements or agreements. No employee or sales agent of Bayer or seller is authorized to vary or exceed the terms of the Disclaimer of Warranties or Limitations of Liability in any manner.

Bollgard II®, Bollgard®, Degree Xtra®, Field Master®, Harness®, Roundup Ready®, Roundup Ready 2 Xtend®, Roundup PowerMAX®, RT 3®, Roundup WeatherMAX®, XtendiMax®, XtendFlex®, and VaporGrip® are registered trademarks of Bayer Technology LLC. All other trademarks are the property of their respective owners.

PRODUCED FOR

Bayer CropScience

Bayer CropScience LP
800 N. Lindbergh Blvd.
St. Louis, MO 63167
1-866-99BAYER (1-866-992-2937)

XTENDIMAX® WITH VAPORGRIP® TECHNOLOGY (PENDING) 10/26/2020

RESTRICTED USE PESTICIDE
To be used by certified applicators only; NOT to be used by uncertified persons working under the supervision of a certified applicator, except that uncertified persons may transport containers.

This labeling expires on 12/20/2025. DO NOT use or distribute this product after 12/20/2025.

DICAMBA	GROUP 4	HERBICIDE

XtendiMax® With VaporGrip® Technology

ABN: M1768 Herbicide

For weed control in cotton with XtendFlex® Technology (dicamba-tolerant cotton) and soybean with Roundup Ready 2 Xtend® Technology or XtendFlex® Technology (dicamba-tolerant soybean).

XtendiMax® With VaporGrip® Technology is approved by U.S. EPA for use in dicamba-tolerant cotton and dicamba-tolerant soybeans only in the following states, subject to county restrictions as noted: Alabama, Arkansas, Arizona, Colorado, Delaware, Florida (excluding Palm Beach County), Georgia, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maryland, Michigan, Minnesota, Mississippi, Missouri, Nebraska, New Jersey, New Mexico, New York, North Carolina, North Dakota, Oklahoma, Ohio, Pennsylvania, South Carolina, South Dakota, Tennessee (excluding Wilson County), Texas, Virginia, West Virginia, Wisconsin.

Check the registration status of each product in each state before using.

ACTIVE INGREDIENT: Dicamba
Diglycolamine salt of dicamba (3,6-dichloro-*o*-anisic acid)* **42.80%**
OTHER INGREDIENTS: **57.20%**
TOTAL: **100.00%**
*Contains 29.0% 3,6-dichloro-*o*-anisic acid (2.9 pounds acid equivalent per U.S. gallon or 350 grams per liter)

EPA Reg. No. 264-RERN **EPA Est. No.**

CAUTION
KEEP OUT OF REACH OF CHILDREN

For MEDICAL and TRANSPORTATION Emergencies ONLY Call 24 Hours a Day 1-800-334-7577

For PRODUCT USE Information Call 1-866-99BAYER (1-866-992-2937)

For Incidence of Non-performance or Off-Target Movement or for Questions Regarding Buffer Requirements or Sensitive Crop Registries Call 1-844-RRXTEND (1-844-779-8363)

Please refer to [back panel] [booklet] for additional precautionary statements and directions for use. [Note to reviewer: Location of additional precautionary statements and directions for use will vary between those listed, depending on container type/size.]

Net Contents:

FIRST AID	
IF IN EYES:	• Hold eye open and rinse slowly and gently with water for 15 to 20 minutes. • Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. • Call a poison control center or doctor for treatment advice.

IF SWALLOWED:	• Call a poison control center or doctor immediately for treatment advice. • Have person sip a glass of water if able to swallow. • DO NOT induce vomiting unless told to do so by a poison control center or doctor. • DO NOT give anything by mouth to an unconscious person.
IF ON SKIN OR CLOTHING:	• Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15 to 20 minutes. • Call a poison control center or doctor for treatment advice.
In case of emergency, call the toll-free Bayer Emergency Response telephone number: 1-800-334-7577. Have the product container or label with you when calling a poison control center or doctor or when going for treatment.	

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION

- Causes moderate eye irritation.
- Avoid contact with eyes or clothing.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

All mixers, loaders, applicators, and other handlers must wear:

- Long-sleeved shirt and long pants
- Waterproof gloves
- Shoes plus socks

Follow the manufacturer's instructions for cleaning and maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

ENGINEERING CONTROLS

When handlers use closed systems, or enclosed cabs in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240 (d) (4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

IMPORTANT: When reduced PPE is worn because a closed system is being used, handlers must be provided all PPE specified above for "all mixers, loaders, applicators, and other handlers" and have such PPE immediately available for use in an emergency, such as a spill or equipment breakdown.

USER SAFETY RECOMMENDATIONS

User should:

- Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet.
- Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

ENVIRONMENTAL HAZARDS

DO NOT apply directly to water, or to areas where surface water is present, or to intertidal areas below the mean high-water mark. DO NOT contaminate water when disposing of equipment washwaters or rinsate. Apply this product only as directed on the label.

Ground Water Advisory: This chemical is known to leach through soil into ground water under certain conditions as a result of agricultural use. Use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in ground water contamination.

GROUND AND SURFACE WATER PROTECTION

Point source contamination: To prevent point source contamination, DO NOT mix or load this pesticide product within 50 feet of wells (including abandoned wells and drainage wells), sink holes, perennial or intermittent streams and rivers, and natural or impounded lakes and reservoirs. DO NOT apply pesticide product within 50 feet of wells. This setback does not apply to properly capped or plugged abandoned wells and does not apply to impervious pad or properly diked mixing/loading areas as described below.

Mixing, loading, rinsing, or washing operations performed within 50 feet of a well are allowed only when conducted on an impervious pad constructed to withstand the weight of the heaviest load that may be on or move across the pad. The pad must be self-contained to prevent surface water flow over or from the pad. The pad capacity must be maintained at 110% that of the largest pesticide container or application equipment used on the pad and have sufficient capacity to contain all product spills, equipment or container leaks, equipment washwaters, and rainwater that may fall on the pad. The containment capacity does not apply to vehicles delivering pesticide shipments to the mixing/loading site. States may have in effect additional requirements regarding wellhead setbacks and operational containment.

Care must be taken when using this product to prevent: a) back siphoning into wells, b) spills, or c) improper disposal of excess pesticide, spray mixtures, or rinsates. Check valves or anti-siphoning devices must be used on all mixing equipment.

Movement by surface runoff or through soil: DO NOT apply under conditions that favor runoff. DO NOT apply if soil is saturated with water or when rainfall that may exceed soil field capacity is forecasted to occur within 48 hours.

Under some conditions, dicamba has the potential for runoff several days after application. Poorly draining, wet, or erodible soils with readily visible slopes toward adjacent sensitive areas are more prone to produce runoff. When used on erodible soils, best management practices for minimizing runoff should be employed. Consult your local Soil Conservation Service for recommendations in your use area.

Ground water contamination may occur in areas where soils are permeable or coarse and ground water is near the surface. DO NOT apply to impervious substrates such as paved or highly compacted surfaces in areas with high potential for ground water contamination. DO NOT apply to soils classified as sand with less than 3% organic matter and where ground water depth is shallow.

Movement by water erosion of treated soil: DO NOT apply or incorporate this product through any type of irrigation equipment nor by flood or furrow irrigation. Ensure treated areas have received at least one-half inch rainfall (or irrigation) before using tailwater for subsequent irrigation of other fields.

PROTECTING ENDANGERED SPECIES / PESTICIDE USE LIMITATION AREAS

The use of any pesticide in a manner that may kill or otherwise harm an endangered species or adversely modify their habitat is a violation of federal law. Use of this product in a manner inconsistent with its labeling may pose a hazard to endangered or threatened species. **When using this product, you must follow the measures contained in the Endangered Species Protection Bulletin for the area in which you are applying the product.** To obtain Bulletins, no more than six months before using this product, consult https://www.epa.gov/endangered-species/bulletins-live-two-view-bulletins or call 1-844-447-3813. You must use the Bulletin valid for the month in which you will apply the product.

It is a Federal offense to use any pesticide in a manner that results in the death of an endangered species.

PHYSICAL OR CHEMICAL HAZARDS

DO NOT store or heat near oxidizing agents as a hazardous chemical reaction may occur.

DIRECTIONS FOR USE

RESTRICTED USE PESTICIDE

Only for retail sale to and use by Certified Applicators. NOT to be used by uncertified persons working under the supervision of a certified applicator, except that uncertified persons may transport containers.

It is a violation of Federal law to use this product in any manner inconsistent with its labeling. This labeling must be in the user's possession during application. Read the entire label before using this product.

DO NOT apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

For important crop safety information, refer to the "Specific Use Directions" section for each crop.

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. This standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses and of handlers of agricultural pesticides. It contains requirements for training, decontamination, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about Personal Protective Equipment (PPE), notification to workers, and restricted-entry intervals. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

DO NOT enter or allow worker entry into treated areas during the restricted-entry interval **(REI) of 24 hours.**

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water is:

- Coveralls worn over short-sleeved shirt and short pants
- Chemical-resistant footwear plus socks
- Waterproof gloves
- Chemical-resistant headgear for overhead exposure
- Protective eyewear

PRODUCT INFORMATION

XtendiMax® With VaporGrip® Technology is:

- a water-soluble formulation intended for control and suppression of many annual, biennial, and perennial broadleaf weeds listed in the "Weeds Controlled or Suppressed" section of this label. This product may be used for control of these weeds in cotton with XtendFlex® Technology and soybean with Roundup Ready 2 Xtend® Technology or XtendFlex® Technology.
- a contact, systemic herbicide, with limited soil activity on small seeded broadleaf weeds, including waterhemp, lambsquarters, and Palmer pigweed.
- readily absorbed by plants through shoot and root uptake, translocates throughout the plant's system, and accumulates in areas of active growth. XtendiMax® With VaporGrip® Technology interferes with plant growth hormones (auxins) resulting in death of many broadleaf weeds.

Additional state restrictions and requirements may apply. The user must comply with any additional state requirements and restrictions.

Refer to the specific use directions and restrictions in each crop table. Follow all requirements and restrictions on www.xtendimaxapplicationrequirements.com.

APPLICATION REQUIREMENTS OVERVIEW

Read and follow all applicable restrictions, precautions, and directions on the container label and booklet and at www.xtendimaxapplicationrequirements.com. For product questions or inquiries and/or to report any nonperformance of this product against any particular weed species, call 1-844-RRXTEND (1-844-779-8363). It is recommended that the certified applicator visit www.xtendimaxapplicationrequirements.com to obtain a copy of the Overview of Application Requirements for reference prior to and during application.

REQUIREMENTS	LABEL SECTIONS
Mandatory Training: ☐ Prior to applying, applicator must complete dicamba-specific training. Only certified applicators may apply this product; NOT to be used by uncertified persons working under the supervision of a certified applicator, except that uncertified persons may transport containers.	➢ Training (pp. 5-6)
Record Keeping: ☐ Records must be created within 72 hours of every application. Records must be kept for a period of two years.	➢ Record Keeping (p. 6)
Application: ☐ For EVERY application of XtendiMax® With VaporGrip® Technology, an approved **Volatility Reduction Adjuvant (VRA)** must be included in the spray solution. An approved **Drift Reduction Adjuvant (DRA)** must also be included in the spray solution, unless otherwise indicated on www.xtendimaxapplicationrequirements.com. Refer to the website for a list of approved DRAs and VRAs.	➢ Tank Mix Partners (p. 9)
☐ *Rate and Timing*: Apply 22 fluid ounces per acre (0.5 lb. a.e. dicamba) for any single pre-emergent or in-crop application in: ○ Cotton with XtendFlex® Technology up to and including July 30 (DO NOT apply after July 30 regardless of growth stage), and ○ Soybean with Roundup Ready 2 Xtend® Technology or XtendFlex® Technology up to and including June 30. Applications occurring after R1 are prohibited as crop response may occur and in no event can applications be made after June 30 regardless of growth stage. ○ For details, see the "Specific Use Directions" section.	➢ Specific Use Directions (pp. 12-14)
☐ *Spray volume:* Apply in a minimum of 15 gallons of spray solution per acre. ☐ *Tank mixing*: Use only approved tank-mix partners found at www.xtendimaxapplicationrequirements.com.	➢ Specific Use Directions (pp. 12-14) ➢ Tank Mix Partners (p. 9)

○ Refer to all product labels to determine mix order or perform a mix compatibility test.	
Application Equipment: ☐ *Spray system equipment cleanout*: Ensure entire sprayer system is properly cleaned before and after application. ☐ *Nozzles*: Use only approved nozzles within specified pressures found at www.xtendimaxapplicationrequirements.com. ☐ *Spray boom height*: Maximum boom height is 24 inches above target pest or crop canopy. ☐ *Ground speed*: DO NOT exceed 15 mph.	➢ Equipment Requirements (pp. 7-8)
Environmental Conditions: ☐ *Wind speed*: Apply when wind speed, measured at boom height, is 3-10 mph. ☐ *Inversions*: DO NOT spray during an inversion; only spray between one hour after sunrise and two hours before sunset. ☐ *Rainfall*: DO NOT apply this product if rain that may exceed soil field capacity and result in soil runoff is forecasted in the next 48 hours.	➢ Environmental Requirements (p. 7)
Downwind Requirements: ☐ *Sensitive crops and certain plants downwind*: DO NOT apply if sensitive crops and/or certain plants, as defined below in this label, are planted on an adjacent downwind field or area. ☐ *Downwind buffer*: After determining no adjacent sensitive crops and/or certain plants are downwind, maintain a 240-ft downwind buffer. ☐ *Endangered species*: Consult Endangered Species Protection Bulletins for ESA counties and restrictions.	➢ Adjacent Sensitive Crops and Certain Plants (p. 8) ➢ Buffer Requirements (p. 8) ➢ Protecting Endangered Species (p. 3)
Drift Reduction Technology: ☐ See "Optional Use of Drift Reduction Technology" section for details on application requirements and the potential to qualify for reduced use restrictions.	➢ Optional Use of Drift Reduction Technology (pp. 8-9)

USE RESTRICTIONS

- DO NOT USE ANY TANK MIX PRODUCT OR ANY NOZZLE AND PRESSURE COMBINATION WITH XTENDIMAX® WITH VAPORGRIP® TECHNOLOGY THAT IS NOT IDENTIFIED ON THE LIST OF APPROVED PRODUCTS FOUND AT www.xtendimaxapplicationrequirements.com.
- DO NOT TANK MIX AMMONIUM SULFATE (AMS) WITH THIS PRODUCT.
- DO NOT EXCEED 88 FLUID OUNCES (2 POUNDS ACID EQUIVALENT (A.E.) DICAMBA) OF XTENDIMAX® WITH VAPORGRIP® TECHNOLOGY PER ACRE PER YEAR.
- DO NOT EXCEED 88 FLUID OUNCES (2 POUNDS A.E. DICAMBA) PER ACRE PER YEAR FROM ALL DICAMBA APPLICATIONS IF MORE THAN ONE DICAMBA-CONTAINING PRODUCT IS APPLIED TO THE SAME SITE WITHIN THE SAME YEAR.
- DO NOT MAKE APPLICATION OF THIS PRODUCT IF RAIN IS EXPECTED IN THE NEXT 48 HOURS THAT MAY EXCEED SOIL FIELD CAPACITY AND RESULT IN SOIL RUNOFF.
- DO NOT APPLY THROUGH ANY TYPE OF IRRIGATION EQUIPMENT. DO NOT TREAT IRRIGATION DITCHES OR WATER USED FOR CROP IRRIGATION OR DOMESTIC PURPOSES.
- DO NOT APPLY TO CROPS UNDER STRESS DUE TO LACK OF MOISTURE, HAIL DAMAGE, FLOODING, HERBICIDE INJURY, MECHANICAL INJURY, INSECTS, OR WIDELY FLUCTUATING TEMPERATURES AS INJURY MAY RESULT.
- DO NOT APPLY THIS PRODUCT IF SENSITIVE CROPS AND CERTAIN PLANTS ARE PLANTED ON AN ADJACENT DOWNWIND FIELD OR AREA.
- DO NOT APPLY THIS PRODUCT AERIALLY.
- Restricted Entry Interval (REI): 24 hours.

USE PRECAUTIONS

- In case material is released or spilled: dike and contain the spill with inert material (sand, earth, etc.) and transfer liquid and solid diking material to separate containers for disposal. Remove contaminated clothing and wash affected skin areas with soap and water. Wash clothing before re-use. Keep the spill out of all sewers and open bodies of water.
- Rainfast period: This product is rainfast four (4) hours after application to most weed species. Rainfall or irrigation occurring within four (4) hours after application may necessitate retreatment or may otherwise result in reduced weed control.

TRAINING

Prior to using this product, users must complete dicamba-specific training to obtain certification. Once completed, dicamba-specific training is then required every other year for all users of this product. If state-specific training is required by the state where the applicator intends to apply this product, the applicator must complete training from the state or state-authorized provider. Otherwise, the applicator

may complete dicamba-specific training provided either by the state/state-authorized provider or by a registrant of a dicamba product approved for in-crop use with dicamba-tolerant crops.

RECORD KEEPING

The following records must be generated as soon as practical but **no later than 72 hours after application**. The certified applicator must keep these records for a period of **two years**. Records must be made available to State Pesticide Control Official(s), USDA, and EPA upon request. See www.xtendimaxapplicationrequirements.com for an example form summarizing record keeping requirements.

Keep records of the following items for each application of XtendiMax® With VaporGrip® Technology:

1. All Items required by 7 CFR Part 110 (RECORDKEEPING ON RESTRICTED USE PESTICIDES BY CERTIFIED APPLICATORS), including:
    a. The brand or product name
    b. The EPA registration number
    c. The total amount applied
    d. The month, day, and year of application
    e. The location of the application
    f. The crop, commodity, stored product, or site of application
    g. The size of treated area
    h. The name of the certified applicator
    i. The certification number of the certified applicator
2. *Training*: Completion date and provider of required training and proof of completion.
3. *Receipts of Purchase*: Receipts or copies for the purchase of this product.
4. *Product Label*: A copy of this product label and any state special local needs label that supplements this label.
5. *Sensitive Crops and Certain Plants Awareness*:
    a. Document that a sensitive crop registry was consulted. At a minimum, documentation must include the name of the sensitive crop registry and the date it was consulted.
    b. Record of a survey of adjacent areas documenting the sensitive crops and/or certain plants (as defined below in the "Adjacent Sensitive Crops and Certain Plants" section of this label) surrounding the field prior to application. At a minimum, records must include documentation of adjacent sensitive crops and/or certain plants and the date the survey was conducted.
6. *Buffer Requirement*: Record of the buffer distance implemented as directed in the "Spray Drift Management" and "Optional Use of Drift Reduction Technology" sections of this label.
7. *Start and Finish Times of Each Application*: Record of the time at which the application started and finished.
8. *Application Timing*: Record of the type of application (for example: preemergence, postemergence) and the number of days after planting if postemergence.
9. *Air Temperature*: Record of the air temperature in degrees Fahrenheit at the start and completion of each application.
10. *Wind Speed and Direction*: Record of the wind speed and direction (the direction from which the wind is blowing) at boom height at the start and completion of each application.
11. *Nozzle and Pressure*: Record of the spray nozzle manufacturer/brand, type, orifice size, and operating pressure used during each application of this product.
12. *Tank Mix Products*: Record of the brand names and EPA registration numbers (if applicable) for all products that were tank mixed with this product for each application, as well as a record of the volume of each added to the tank prior to application.
13. ***Mandatory Volatility and Drift Reduction Adjuvants***: Receipts or copies for the purchase of an approved volatility reduction adjuvant, as well as a record of the volume added to the tank prior to application. Receipts or copies for the purchase of an approved DRA and a record of the volume added to the tank prior to application, unless otherwise indicated on www.xtendimaxapplicationrequirements.com.
14. *Spray System Cleanout*: At a minimum, records must include confirmation that the spray system was clean before using this product and that the post-application cleanout was completed in accordance with the "Proper Spray System Equipment Cleanout" section of this label.

HERBICIDE RESISTANCE MANAGEMENT RECOMMENDATIONS

The dicamba active ingredient in XtendiMax® With VaporGrip® Technology is a Group 4 herbicide. Any weed population may contain or develop plants naturally resistant to XtendiMax® With VaporGrip® Technology and other Group 4 herbicides. The resistant biotypes may dominate the weed population if these herbicides are used repeatedly in the same field. Appropriate resistance management strategies should be followed.

To delay herbicide resistance, take one or more of the following steps:

- Limit cultivation and/or mechanical tillage within 7 days after application, as this may result in reduced efficacy and promote regrowth of treated weeds.
- Rotate the use of XtendiMax® With VaporGrip® Technology within a growing season and among growing seasons with different herbicide groups (other than Group 4) that control the same weeds.
- Use tank mixtures with herbicides from a different herbicide Group if such use is permitted.
- Adopt an integrated weed-management program for herbicide use that includes scouting and uses historical information related to herbicide use and crop rotation and that considers tillage (or other mechanical control methods), cultural (*e.g.*, higher crop seeding rates; precision fertilizer application method and timing to favor the crop and not the weeds), biological (weed-competitive crops or varieties), and other management practices.
- Scout after herbicide application to monitor weed populations for early signs of resistance development. Indicators of possible herbicide resistance include: (1) failure to control a weed species normally controlled by the herbicide at the dose applied,

especially if control is achieved on adjacent weeds; (2) a spreading patch of non-controlled plants of a particular weed species; (3) surviving plants mixed with controlled individuals of the same species. If resistance is suspected, prevent weed seed production in the affected area by an alternative herbicide from a different group or by a mechanical method such as hoeing or tillage. Prevent movement of resistant weed seeds to other fields by cleaning harvesting and tillage equipment when moving between fields and by planting clean seed.

- If a weed pest population continues to progress after treatment with this product, switch to another management strategy or herbicide with an effective mode of action, if available, and contact Bayer at 1-844-RRXTEND (1-844-779-8363).
- Contact your local extension specialist or certified crop advisors for additional pesticide resistance-management and/or integrated weed-management recommendations for specific crops and weed biotypes.
- For further information or to report suspected resistance contact Bayer at 1-844-RRXTEND (1-844-779-8363).

Management of Dicamba-Resistant Biotypes
Appropriate testing is critical in order to determine if a weed is resistant to dicamba. Contact your Bayer representative to determine if resistance in any particular weed biotype has been confirmed in your area or visit www.iwilltakeaction.com or www.weedscience.org.

The following good agronomic practices can reduce the spread of confirmed dicamba-resistant biotypes, particularly if pursued as soon as signs of resistance are observed:

- If a naturally occurring resistant biotype is present in your field, this product may be tank mixed or applied sequentially with an appropriately labeled herbicide with a different mode of action to achieve control (read "Tank Mixing" section for more information).
- Cultural and mechanical control practices (*e.g.*, crop rotation or tillage) can also be used as appropriate.
- Scout treated fields after herbicide application and control weed escapes, including resistant biotypes, before they set seed.
- Thoroughly clean equipment, as practical, for all weed seeds before leaving fields known to contain resistant biotypes.

SPRAY DRIFT MANAGEMENT

THE APPLICATOR IS RESPONSIBLE FOR AVOIDING OFF-SITE SPRAY DRIFT TO THE EXTENT CONSISTENT WITH APPLICABLE LAW. The applicator is responsible for compliance with state and local pesticide regulations, including any state or local pesticide drift regulations. DO NOT allow herbicide solution to mist, drip, drift, or splash onto desirable vegetation because severe injury or destruction to desirable broadleaf plants could result.

Applications using larger droplets reduces drift potential but will not prevent drift if the application is made improperly or under unfavorable environmental conditions. The interaction of weather-related factors and equipment must be monitored to maximize performance and on-target spray deposition. The applicator is responsible for considering all these factors when making a spray decision to the extent consistent with applicable law. BE AWARE OF NEARBY NON-TARGET SITES AND CHANGING ENVIRONMENTAL CONDITIONS (see the "Temperature Inversions" section of this label).

Environmental Requirements

Wind Speed
Wind speed must be measured in the field of application at boom height prior to and after application. Only apply when wind speed at boom height is between 3 MPH and 10 MPH during application.

Temperature Inversions
DO NOT apply this product during a temperature inversion as the off-target movement potential is high.

Applications of this product may ONLY occur one hour after sunrise through two hours before sunset. In general, temperature inversions are more likely during nighttime hours.

- Temperature inversions are characterized by increasing temperature with altitude and are common on nights with limited cloud cover and light to no wind.
- The presence of an inversion can be indicated by ground fog or, if fog is not present, by the movement of smoke from a ground source or an aircraft smoke generator. Smoke that layers and moves laterally in a concentrated cloud (under low wind conditions) indicates an inversion, while smoke that moves upward and rapidly dissipates indicates good vertical air mixing.

Equipment Requirements

DO NOT APPLY THIS PRODUCT USING AERIAL SPRAY EQUIPMENT.

Nozzle Type
To produce minimal amounts of fine spray particles, the applicator must use an approved nozzle within a specified pressure range as found at www.xtendimaxapplicationrequirements.com. DO NOT use any other nozzle and pressure combination not specifically listed on this website.

Equipment Ground Speed
DO NOT exceed a ground speed of 15 miles per hour. Select a ground speed that will deliver the desired spray volume while maintaining the desired spray pressure. Slower speeds generally result in better spray coverage and deposition on the target area. Provided the applicator can maintain the required nozzle pressure, it is recommended that tractor speed is reduced to 5 miles per hour at field edges.

Spray Boom Height
Use the minimum boom height appropriate for spray pattern overlap based on nozzle selection and spacing, according to manufacturer recommendations, or 24 inches above canopy, whichever is smaller.

Adjacent Sensitive Crops and Certain Plants

DO NOT SPRAY this product when wind is blowing toward adjacent sensitive crops and certain plants, as defined immediately below.

It is important for the applicator to be aware that wind direction may vary during the application. If wind direction shifts such that the wind is blowing toward adjacent sensitive crops and/or certain plants, the applicator **must STOP** the application.

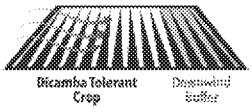
Before making an application, 1) consult a sensitive crop registry (such as FieldWatch or state/federal registry), 2) survey adjacent fields and areas, and 3) confirm the type or variety of plants and crops surrounding the field prior to application. At a minimum, records must include the name of the sensitive crop registry, the date it was consulted, documentation of adjacent plants and crops/areas surrounding the field of application, and the date the survey was conducted.

Dicamba-sensitive crops and/or certain plants include, but are not limited to, non-dicamba-tolerant soybeans and cotton, tomatoes and other fruiting vegetables (EPA crop group 8), fruit trees, cucurbits (EPA crop group 9), grapes, beans, flowers, ornamentals, peas, potatoes, sunflower, tobacco, and other broadleaf plants, including if these plants are in a greenhouse. Severe injury or destruction could occur if any contact between this product and these plants occurs. Sensitive crop registries can provide additional information about sensitive crops and sensitive areas.

If you have questions regarding sensitive crop registries contact Bayer at 1-844-RRXTEND (1-844-779-8363) **prior to application**.

Buffer Requirements

After determining no adjacent sensitive crops and/or certain plants are downwind, the applicator **must always maintain a 240-foot downwind buffer** between the last treated row and the nearest downwind field edge when applying using broadcast open-boom equipment. For reduced downwind buffer distances, refer to "Optional Use of Drift Reduction Technology" section of this label.



The following areas may be included in the buffer distance composition when directly adjacent to the treated field edges:

- Roads, paved or gravel surfaces, mowed ~~and/or managed~~grassy areas adjacent to field, and plowed or graded areas contiguous with the planted area ~~such as rights-of-way~~
- Planted agricultural fields containing: corn, dicamba-tolerant cotton, dicamba-tolerant soybean, sorghum, proso millet, small grains, ~~or~~ sugarcane, and other crops for which dicamba has a post-emergent approved use. If the applicator intends to include such crops as dicamba-tolerant cotton and/or dicamba-tolerant soybeans in the buffer distance composition, the applicator must confirm the crops are in fact dicamba-tolerant.
- Agricultural fields that have been prepared for planting
- Areas covered by the footprint of a building, silo, or other man-made structure with walls and/or roof

If you have questions regarding Buffer Requirement, contact Bayer at 1-844-RRXTEND (1-844-779-8363) **prior to application**.

Optional Use of Drift Reduction Technology

This product may be optionally applied using a hooded/shielded broadcast sprayer or other types of drift reduction technology (DRT) for postemergence weed control as well as residual control of susceptible weeds. The applicator must use an approved nozzle within a specified pressure range as found at www.xtendimaxapplicationrequirements.com. Use of drift reduction technology (DRT) in combination with approved nozzles is recommended to further reduce drift potential.

Applications of this product may qualify for reduced use restrictions, such as a reduced downwind buffer distance, provided a **qualified DRT** listed on www.xtendimaxapplicationrequirements.com is used and operated according to the directions and limitations provided at www.xtendimaxapplicationrequirements.com.

Hooded/Shielded Broadcast Sprayer:
For hooded/shielded sprayers, all application nozzles must be contained within the enclosed area. Shielding the boom or individual nozzles can reduce the effects of wind. However, it is the responsibility of the applicator to verify that the shields are preventing drift and

not interfering with uniform deposition of the product. Applicators must ensure the sprayer system is off or controlled during turns to further prevent spray drift. Refer to the hooded/shielded sprayer manufacturer use specifications prior to use.

Requirements for Reduced Use Restrictions with Optional Hooded/Shielded Sprayer: ONLY **qualified** hooded/shielded sprayers listed on www.xtendimaxapplicationrequirements.com are eligible for reduced use restrictions when applying this product. ~~Refer to the website for specific application requirements~~ wWhen using a **qualified** hooded/shielded sprayer,. the applicator **must always maintain a minimum 110-foot downwind buffer** between the last treated row and the nearest downwind field edge. Consult Endangered Species Protection Bulletins for ESA counties and restrictions. While this product may be applied with other (non-qualified) hooded/shielded sprayers, no reduction in use restrictions is associated with their use.

Formatted: Font: Bold

TANK MIX PARTNERS

Tank Mixing

It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions, limitations, and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.

All applications of this product require the inclusion of a volatility reduction adjuvant (VRA), such as a VaporGrip® Xtra Agent product or an approved VRA equivalent, in the tank mix. The inclusion of a **drift reduction adjuvant (DRA) is also required** in the tank mix, unless otherwise indicated on www.xtendimaxapplicationrequirements.com. Only tank mix products that have been tested and found to not adversely affect the offsite movement potential of XtendiMax® With VaporGrip® Technology may be tank mixed with XtendiMax® With VaporGrip® Technology. The applicator must check the website found at www.xtendimaxapplicationrequirements.com for a list of approved tank mix products no more than 7 days before applying XtendiMax® With VaporGrip® Technology.

DO NOT tank mix any product with XtendiMax® With VaporGrip® Technology unless:

1. The intended tank mix product is identified on the list of tested products found at www.xtendimaxapplicationrequirements.com;
2. The intended products are not prohibited on either this label or the label of the tank mix product; and
3. All requirements and restrictions on www.xtendimaxapplicationrequirements.com are followed.

NOTE: DO NOT use PVA (polyvinyl acetate) packets in a tank mix with products that contain boron or release free chlorine. The resultant reaction of PVA and boron or free chlorine is a plastic that is not soluble in water or solvents.

APPLICATION INSTRUCTIONS

APPLY THIS PRODUCT USING PROPERLY MAINTAINED AND CALIBRATED EQUIPMENT CAPABLE OF DELIVERING THE REQUIRED VOLUMES.

DO NOT APPLY THIS PRODUCT USING AERIAL SPAY EQUIPMENT.

XtendiMax® With VaporGrip® Technology can be applied to actively growing weeds as broadcast, band, or spot spray applications using water as a carrier. For best results, treat weeds early when they are relatively small (less than 4 inches). Timely application to small weeds early in the season will improve control and reduce weed competition.

Ground Application (Broadcast)

Water Volume: Use a minimum of 15 gallons of spray solution per broadcast acre for optimal performance. Use 20 gallons per acre or greater when treating dense weed canopy/vegetation.

Ground Application (Hooded In-Row and Directed Layby)

Using a hooded sprayer or other drift reduction technology in combination with approved nozzles may further reduce drift potential. When applying XtendiMax® With VaporGrip® Technology by hooded in-row or layby sprayers, determine the amount of herbicide and water volume needed using the following formula:

$$\frac{\text{band width (inches)}}{\text{row width (inches)}} * \text{broadcast rate per acre} = \text{rate per treated acre}$$

$$\frac{\text{band width (inches)}}{\text{row width(inches)}} * \text{broadcast spray volume per acre} = \text{spray volume per treated acre}$$

SPRAY SYSTEM EQUIPMENT CLEANOUT

You must ensure that the spray system used to apply this product is clean before using this product. Failure to properly clean the entire spray system can result in inadvertent contamination of the spray system. Contamination of the spray system may cause injury to non-dicamba-tolerant soybeans and other sensitive crops.

Inadvertent contamination can also occur in equipment used for bulk product handling and mixing prior to use in the spray system. Care should be taken to reduce contamination not only in the spray system but in any equipment used to transfer or deliver product. For example, bulk handling and mixing equipment containing this product should be segregated when possible to reduce potential for cross-

contamination. Consider using block and check valves to avoid backflow during transfer. Piping should be reviewed to ensure there is not potential for product build-up. Dedicated nurse trucks and tender equipment should be used when possible.

Clean equipment **immediately after using** this product, using a **triple rinse** procedure as follows:

1. After spraying, drain the sprayer (including boom and lines) immediately. DO NOT allow the spray solution to remain in the spray boom lines overnight prior to flushing.
2. Fill tank with clean water (at least 10% volume) and flush tank, hoses, boom, and nozzles. Ensure agitation for 15 minutes and then spray out solution through boom. If equipped, open boom ends and flush.
3. Inspect and clean all strainers, screens, and filters.
4. Fill tank with clean water (at least 10% of volume) and prepare a cleaning solution with a commercial detergent or sprayer cleaner or ammonia according to the manufacturer's directions.
5. Take care to wash all parts of the tank, including the inside top surface. Start agitation in the sprayer and thoroughly recirculate the cleaning solution for at least 15 minutes. All visible deposits must be removed from the spraying system.
6. Flush hoses, spray lines, and nozzles for at least 1 minute with the cleaning solution.
7. Remove nozzles, screens, and strainers and clean separately in the cleaning solution after completing the above procedures.
8. Drain pump, filter, and lines.
9. Repeat steps 2 and 3.
10. Rinse the complete spraying system with clean water.
11. Clean and wash off the outside of the entire sprayer and boom.
12. All rinse water must be disposed of in compliance with local, state, and federal guidelines.

ROTATIONAL CROPS

When counting days from the application of this product, do not count days when the ground is frozen. Moisture is essential for the degradation of this herbicide in soil. If dry weather prevails, use cultivation to allow herbicide contact with moist soil.

No rotational cropping restrictions apply when rotating to soybean with Roundup Ready 2 Xtend® Technology or XtendFlex® Technology or to cotton seed with XtendFlex® Technology (including Bollgard® 3 XtendFlex® Cotton, Bollgard II® XtendFlex® Cotton, or XtendFlex® Cotton). For other crops, the interval between application and planting rotational crop is given below. Planting at intervals less than specified below may result in crop injury.

For application rates of this product of **22 fluid ounces per acre per year:**

- No planting restrictions apply beyond 120 days after application.
- East of the Mississippi River:
  - Wait a minimum of 30 days for 22 fluid ounces applied per acre before planting.
- West of the Mississippi River:
  - Wait a minimum of 45 days for 22 fluid ounces applied per acre before planting.
  - In areas with less than 30 inches of annual rainfall wait a minimum of 100 days before planting (furrow and/or overhead irrigation can be included in rainfall determination).

For application rates of this product of **44 to 88 fluid ounces per acre per year:**

- In areas with less than 30 inches of annual rainfall:
  - Wait a minimum of 180 days before planting crops (furrow and/or overhead irrigation can be included in rainfall determination).
- In areas with 30 inches or more annual rainfall:
  - Wait a minimum of 120 days after application before planting.

WEEDS CONTROLLED OR SUPPRESSED

General Weed List, Including ALS-, Glyphosate-, and Triazine-Resistant Biotypes

ANNUAL WEEDS		
Alkanet	Flixweed	Pusley, Florida
Amaranth, Palmer, Powell, Spiny	Fumitory	Radish, Wild
Aster, Slender	Goosefoot, Nettleleaf	Ragweed, Common, Giant (Buffaloweed), Lance-Leaf
Bedstraw, Catchweed	Hempnettle	Rocket, London, Yellow
Beggarweed, Florida	Henbit	Rubberweed, Bitter (Bitterweed)
Broomweed, Common	Jacobs-Ladder	Salsify
Buckwheat, Tartary, Wild	Jimsonweed	Senna, Coffee
Buffalobur	Knawel (German Moss)	Sesbania, Hemp
Burclover, California	Knotweed, Prostrate	Shepherdpurse
Burcucumber	Kochia	Sicklepod
Buttercup, Corn, Creeping, Roughseed, Western Field	Ladysthumb	Sida, Prickly (Teaweed)
Carpetweed	Lambsquarters Common	Smartweed, Green, Pennsylvania
Catchfly, Nightflowering	Lettuce, Miners, Prickly	Sneezeweed, Bitter
Chamomile, Corn	Mallow, Common, Venice	Sowthistle, Annual, Spiny
Chevil, Bur	Marestail (Horseweed)	Spanish Needles
Chickweed, Common	Mayweed	Spikeweed, Common
Clovers	Morningglory, Ivyleaf, Tall	Spurge, Prostrate, Leafy
Cockle, Corn, Cow, White	Mustard, Black, Blue, Tansy, Treacle, Tumble, Wild, Yellowtops	Spurry, Corn
Cocklebur, Common	Nightshade, Black, Cutleaf	Starbur, Bristly
Copperleaf, Hophornbeam	Pennycress, Field (Fanweed, Frenchweed, Stinkweed)	Starwort, Little
Cornflower (Bachelor Button)	Pepperweed, Virginia (Peppergrass)	Sumpweed, Rough
Croton, Tropic, Woolly	Pigweed, Prostrate, Redroot (Carelessweed), Rough, Smooth, Tumble	Sunflower, Common (Wild), Volunteer
Daisy, English	Pineappleweed	Thistle, Russian
Dragonhead, American	Poorjoe	Velvetleaf
Eveningprimrose, Cutleaf	Poppy, Red-horned	Waterhemp, Common, Tall
Falseflax, Smallseed	Puncturevine	Waterprimrose, Winged
Fleabane, Annual	Purslane, Common	Wormwood

BIENNIAL WEEDS		
Burdock, Common	Gromwell	Starthistle, Yellow
Carrot, Wild (Queen Anne's Lace)	Knapweed, Diffuse, Spotted	Sweetclover
Cockle, White	Mallow, Dwarf	Teasel
Eveningprimrose, Common	Plantain, Bracted	Thistle, Bull, Milk, Musk, Plumeless
Geranium, Carolina	Ragwort, Tansy	

PERENNIAL WEEDS		
Alfalfa	Garlic, Wild	Smartweed, Swamp
Artichoke, Jerusalem	Goldenrod, Canada, Missouri	Snakeweed, Broom
Aster, Spiny, Whiteheath	Goldenweed, Common	Sorrel, Red (Sheep Sorrel)
Bedstraw, Smooth	Hawkweed	Sowthistle, Perennial
Bindweed, Field, Hedge	Henbane, Black	Spurge, Leafy
Blueweed, Texas	Horsenettle, Carolina	Sundrops
Bursage, Woollyleaf (Bur Ragweed, Povertyweed)	Ironweed	Thistle, Canada, Scotch
Buttercup, Tall	Knapweed, Black, Diffuse, Russian, Spotted	Toadflex, Dalmatian
Campion, Bladder	Milkweed, Climbing, Common, Honeyvine, Western Whorled	Tropical Soda Apple
Chickweed, Field, Mouseear	Nettle, Stinging	Trumpetcreeper (Buckvine)
Chicory	Nightshade, Silverleaf (White Horsenettle)	Vetch
Clover, Hop	Onion, Wild	Waterhemlock, Spotted
Dandelion, Common	Plantain, Broadleaf, Buckhorn	Waterprimrose, Creeping
Dock Broadleaf (Bitterdock), Curly	Pokeweed	Woodsorrel, Creeping, Yellow
Dogbane, Hemp	Ragweed, Western	Wormwood, Absinth, Louisiana
Dogfennel (Cypressweed)	Redvine	Yankeeweed
Fern, Bracken	Sericia Lespedeza	Yarrow, Common

SPECIFIC USE DIRECTIONS

CROPS WITH XTEND® TECHNOLOGY

Cotton with XtendFlex® Technology (including Bollgard II® XtendFlex® COTTON, Bollgard® 3 XtendFlex® COTTON, or XtendFlex® COTTON) and soybean with Roundup Ready 2 Xtend® Technology or XtendFlex® Technology CONTAIN A PATENTED GENE THAT PROVIDES TOLERANCE TO DICAMBA, THE ACTIVE INGREDIENT IN THIS PRODUCT. THIS PRODUCT WILL CAUSE SEVERE CROP INJURY OR DESTRUCTION AND YIELD LOSS IF APPLIED TO COTTON AND SOYBEAN THAT ARE NOT DICAMBA TOLERANT, INCLUDING COTTON AND SOYBEAN WITH A TRAIT ENGINEERED TO CONFER TOLERANCE TO AUXIN HERBICIDES OTHER THAN DICAMBA. FOLLOW THE REQUIREMENTS SET FORTH HEREIN TO PREVENT SEVERE CROP INJURY OR DESTRUCTION AND YIELD LOSS. CONTACT WITH FOLIAGE, GREEN STEMS, OR FRUIT OF CROPS, OR ANY DESIRABLE PLANTS THAT DO NOT CONTAIN A DICAMBA TOLERANCE GENE OR ARE NOT NATURALLY TOLERANT TO DICAMBA, COULD RESULT IN SEVERE PLANT INJURY OR DESTRUCTION.

XtendiMax® With VaporGrip® Technology is approved by U.S. EPA for use in cotton with XtendFlex® Technology and in soybean with Roundup Ready 2 Xtend® Technology or XtendFlex® Technology only in the following states, subject to county restriction as noted: Alabama, Arkansas, Arizona, Colorado, Delaware, Florida (excluding Palm Beach County), Georgia, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maryland, Michigan, Minnesota, Mississippi, Missouri, Nebraska, New Jersey, New Mexico, New York, North Carolina, North Dakota, Oklahoma, Ohio, Pennsylvania, South Carolina, South Dakota, Tennessee (excluding Wilson County), Texas, Virginia, West Virginia, Wisconsin.

Information on cotton with XtendFlex® Technology and on soybean with Roundup Ready 2 Xtend® Technology or XtendFlex® Technology can be obtained from your seed supplier or Bayer representative. Cotton with XtendFlex® Technology and soybean with Roundup Ready 2 Xtend® Technology or XtendFlex® Technology must be purchased from an authorized licensed seed supplier.

Cotton with XtendFlex® Technology, soybean with Roundup Ready 2 Xtend® Technology or XtendFlex® Technology, and methods of controlling weeds and applying dicamba in cotton with XtendFlex® Technology and in soybean with Roundup Ready 2 Xtend® Technology or XtendFlex® Technology are protected under U.S. patent law. No license to use cotton with XtendFlex® Technology or soybean with Roundup Ready 2 Xtend® Technology or XtendFlex® Technology is granted or implied with the purchase of this herbicide product. Cotton with XtendFlex® Technology and soybean with Roundup Ready 2 Xtend® Technology or XtendFlex® Technology are owned by Bayer and a license must be obtained from Bayer before using it. Contact your Authorized Bayer Retailer for information on obtaining a license to use cotton with XtendFlex® Technology and soybean with Roundup Ready 2 Xtend® Technology or XtendFlex® Technology.

COTTON WITH XTENDFLEX® TECHNOLOGY	
Application Rate	• **Burndown/Early Preplant, Preplant, At-Planting, Preemergence:** Apply ONLY 22 fluid ounces (0.5 lb. acid equivalent (a.e.) dicamba) per acre for a single burndown/early preplant, preplant, at-planting, or preemergence application. • **Postemergence (in-crop):** For any single, in-crop application, apply ONLY 22 fluid ounces (0.5 lb. a.e. dicamba) per acre.
Maximum Annual Rates	• *Total of all Burndown/Early Preplant, Preplant, At-Planting, and Preemergence applications*: 44 fluid ounces per acre (1.0 lb. a.e. dicamba per acre)

	• *Total of all in-crop applications*: 44 fluid ounces per acre (1.0 lb. a.e. dicamba per acre) • *Combined total per year for all applications*: 88 fluid ounces per acre (2.0 lb. a.e. dicamba per acre)
Application Timing	• **Burndown/Early Preplant, Preplant, At-Planting, Preemergence:** This product may be applied before, during, or immediately after planting. • **Postemergence (in-crop):** This product may be applied in-crop up to and including July 30.
Number of Applications	• Sequential applications of this product may be necessary to control new flushes of weeds or on tough-to-control weeds. Allow at least 7 days between applications. • A maximum of **two** burndown/early preplant, preplant, at-planting, and preemergence and **two** in-crop applications may be made.
Spray Volume	• Apply this product in a minimum of 15 gallons of spray solution per acre as a broadcast application. • Use 20 gallons per acre or greater when treating dense weed canopy/vegetation.
Preharvest Interval	• Allow a minimum of 7 days between application and harvest.
Livestock Grazing or Feeding	• Permitted.
Use Precautions	• Refer to the "Weeds Controlled or Suppressed" section of this label for specific weeds controlled. • For best performance, control weeds early when they are less than 4 inches. • Postemergence applications of this product mixed with adjuvants may cause a leaf response to cotton with XtendFlex® Technology. The symptoms usually appear as necrotic spots on fully expanded leaves. EC-based products that are tank mixed with products containing dicamba may increase the severity of the leaf damage. • For postemergence applications with a hooded in-row sprayer, cotton must be a minimum of 15 inches tall at the time of application. • For postemergence applications with a directed layby sprayer, the release point for the herbicide must not be more than 10 inches from the soil and cotton must be at least 20 inches in height. Spray tip must be angled downward to the soil making sure no spray droplets remain in the air.
Use Restrictions	• DO NOT apply **less than** 22 fluid ounces (0.5 lb. a.e. dicamba) per acre. • DO NOT apply **more than** 22 fluid ounces (0.5 lb. a.e. dicamba) per acre. • DO NOT exceed two pre-emergent applications. • DO NOT exceed two post-emergent applications. • DO NOT exceed 88 fluid ounces per acre (2.0 lb. a.e. dicamba per acre) per year.

SOYBEAN WITH ROUNDUP READY 2 XTEND® TECHNOLOGY OR XTENDFLEX® TECHNOLOGY	
Application Rate	• **Burndown/Early Preplant, Preplant, At-Planting, Preemergence:** Apply ONLY 22 fluid ounces (0.5 lb. acid equivalent (a.e.) dicamba) per acre for a single burndown/early preplant, preplant, at-planting, or preemergence application. • **Postemergence (in-crop):** For any single, in-crop application, apply ONLY 22 fluid ounces (0.5 lb. a.e. dicamba) per acre.
Maximum Annual Rates	• *Total of all Burndown/Early Preplant, Preplant, At-Planting, and Preemergence applications*: 44 fluid ounces per acre (1.0 lb. a.e. dicamba per acre) • *Total of all in-crop applications*: 44 fluid ounces per acre (1.0 lb. a.e. dicamba per acre) • *Combined total per year for all applications*: 88 fluid ounces per acre (2.0 lb. a.e. dicamba per acre)
Application Timing	• **Burndown/Early Preplant, Preplant, At-Planting, Preemergence:** This product may be applied before, during, or immediately after planting. • **Postemergence (in-crop):** This product may only be applied in-crop up to and including June 30. Applications occurring after R1 are prohibited as crop response may occur.
Number of Applications	• A second application may be necessary to control new flushes of weeds. Allow at least 7 days between applications. For best results, apply after some weed re-growth has occurred. • A maximum of **two** burndown/early preplant, preplant, at-planting, and preemergence and **two** in-crop applications may be made.
Spray Volume	• Apply this product in a minimum of 15 gallons of spray solution per acre as a broadcast application. • Use 20 gallons per acre or greater when treating dense weed canopy/vegetation.
Preharvest Interval	• Allow a minimum of 7 days between application and harvest.
Livestock Grazing or Feeding	• Permitted.
Use Precautions	• Refer to the "Weeds Controlled or Suppressed" section of this label for specific weeds controlled. • For best performance, control weeds early when they are less than 4 inches. • Postemergence application under stressful environments may cause temporary loss of turgor, a response commonly described as leaf droop in soybean with Roundup Ready 2 Xtend® Technology or XtendFlex® Technology. Typically, affected plants recover in 1-3 days depending on the level of droop and environmental conditions. • For postemergence applications with a hooded in-row sprayer, soybeans must be a minimum of 15 inches tall at the time of application.

	• For postemergence applications with a directed layby sprayer, the release point for the herbicide must not be more than 10 inches from the soil and soybeans must be at least 20 inches in height. Spray tip must be angled downward to the soil making sure no spray droplets remain in the air
Use Restrictions	• DO NOT apply **less than** 22 fluid ounces (0.5 lb. a.e. dicamba) per acre. • DO NOT apply **more than** 22 fluid ounces (0.5 lb. a.e. dicamba) per acre. • DO NOT exceed two pre-emergent applications. • DO NOT exceed two post-emergent applications. • DO NOT exceed 88 fluid ounces per acre (2.0 lb. a.e. dicamba per acre) per year.

STORAGE AND DISPOSAL

Proper pesticide storage and disposal are essential to protect against exposure to people and the environment due to leaks and spills, excess product or waste, and vandalism. Do not allow this product to contaminate water, foodstuffs, feed or seed by storage or disposal.

Pesticide storage
Store pesticides away from food, pet food, feed, seed, fertilizers, and veterinary supplies. Keep container closed to prevent spills and contamination.

Pesticide disposal
To avoid wastes, use all material in this container, including rinsate, by application according to label directions. If wastes cannot be avoided, offer remaining product to a waste disposal facility or pesticide disposal program. Such programs are often run by state or local governments or by industry. All disposal must be in accordance with applicable federal, state, and local regulations and procedures.

Container handling and disposal
[*Insert appropriate Container Handling and Disposal Statement and Refilling Limitation from the following options*]

[*CONTAINER HANDLING AND DISPOSAL STATEMENT AND REFILLING LIMITATION FOR NONREFILLABLE RIGID CONTAINERS OF LESS THAN 1-GALLON CAPACITY*]
Nonrefillable container. Do not reuse or refill this container.

[*Alternative container statement:* Nonrefillable container. Do not reuse this container to hold materials other than pesticides or dilute pesticides (rinsate). After emptying and cleaning, it may be allowable to temporarily hold rinsate or other pesticide-related materials in this container. Contact your state regulatory agency to determine allowable practices in your state.]

Triple rinse this container promptly after emptying.

Triple rinse as follows: Empty the remaining contents into application equipment or mix-tank and continue to drain for 10 seconds after the flow begins to drip. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or mix-tank, or store rinsate for later use or disposal. Continue to drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times.

Once properly rinsed, some plastic [*Optional text:* agricultural] pesticide containers can be taken to a container collection site or picked up for recycling. [*Alternative container disposal statement:* Then offer the container for recycling, if available.]

[*Optional container disposal statement:* To find the nearest collection site, contact your chemical dealer or Bayer at 1-866-99BAYER (1-866-992-2937).]
If recycling is not available, dispose of in accordance with federal, state and local regulations and procedures, which may include puncturing the properly rinsed container and disposing in a sanitary landfill.

[*CONTAINER HANDLING AND DISPOSAL STATEMENT AND REFILLING LIMITATION FOR NONREFILLABLE RIGID PLASTIC 2.5-GALLON CONTAINER AND OTHER NONREFILLABLE CONTAINERS OF GREATER THAN 1-GALLON BUT EQUAL TO OR LESS THAN 5-GALLON CAPACITY*]
Nonrefillable container. Do not reuse this container to hold materials other than pesticides or dilute pesticides (rinsate). After emptying and cleaning, it may be allowable to temporarily hold rinsate or other pesticide-related materials in this container. Contact your state regulatory agency to determine allowable practices in your state.

[*Alternative container statement:* Nonrefillable container. Do not reuse or refill this container.]

Triple rinse or pressure rinse (or equivalent) this container promptly after emptying.

Triple rinse as follows: Empty the remaining contents into application equipment or mix-tank and continue to drain for 10 seconds after the flow begins to drip. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or mix-tank, or store rinsate for later use or disposal. Continue to drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times.

Pressure rinse as follows: Empty the remaining contents into application equipment or mix-tank and continue to drain for 10 seconds after the flow begins to drip. Place container so that it can drain directly into application equipment or mix-tank while rinsing, or collect rinsate for later use or disposal. Insert pressure rinsing nozzle into the side of the container and rinse at about 40 PSI for at least 30 seconds. Continue to drain for 10 seconds after the flow begins to drip.
Once properly rinsed, some plastic [*Optional text:* agricultural] pesticide containers can be taken to a container collection site or picked up for recycling. [*Alternative container disposal statement:* Then offer the container for recycling, if available.]

[*Optional container disposal statement:* To find the nearest collection site, contact your chemical dealer or Bayer at 1-866-99BAYER (1-866-992-2937).]

If recycling is not available, dispose of in accordance with federal, state and local regulations and procedures, which may include puncturing the properly rinsed container and disposing in a sanitary landfill.

[*CONTAINER HANDLING AND DISPOSAL STATEMENT AND REFILLING LIMITATION FOR NONREFILLABLE RIGID PLASTIC 30-GALLON CONTAINER AND OTHER NONREFILLABLE CONTAINERS OF GREATER THAN 5-GALLON CAPACITY*]
Nonrefillable container. Do not reuse or refill this container.

[*Alternative container statement:* Nonrefillable container. Do not reuse this container to hold materials other than pesticides or dilute pesticides (rinsate). After emptying and cleaning, it may be allowable to temporarily hold rinsate or other pesticide-related materials in this container. Contact your state regulatory agency to determine allowable practices in your state.]

Triple rinse or pressure rinse (or equivalent) this container promptly after emptying.

[*Optional label text:* For containers not equipped with pumping systems,] Triple rinse as follows: Empty the remaining contents into application equipment or mix-tank. Fill the container ¼ full with water. Replace and tighten closures. Tip the container on its side and roll it back and forth for 30 seconds, ensuring at least one complete revolution. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or mix-tank, or store rinsate for later use or disposal. Repeat this procedure two more times.

[*Alternative or additional triple rinsing instructions for large containers equipped with pumping systems:* [*Optional label text:* For large containers equipped with pumping systems,] Triple rinse as follows: Empty the remaining contents into application equipment or mix-tank. Fill the container about 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times.]

Pressure rinse as follows: Empty the remaining contents into application equipment or mix-tank and continue to drain for 10 seconds after the flow begins to drip. Place container so that it can drain directly into application equipment or mix-tank while rinsing, or collect rinsate for later use or disposal. Insert pressure rinsing nozzle into the side of the container and rinse at about 40 PSI for at least 30 seconds. Continue to drain for 10 seconds after the flow begins to drip.

Once properly rinsed, some plastic [*Optional text:* agricultural] pesticide containers can be taken to a container collection site or picked up for recycling. [*Alternative container disposal statement:* Then offer the container for recycling, if available.]

[*Optional container disposal statement:* Some container manufacturers offer container recycling. See additional information regarding manufacturer recycling programs attached to this container, if available. If no recycling information is available on this container, contact your chemical dealer or Bayer at 1-866-99BAYER (1-866-992-2937) to find the nearest recycling location.]

[*Optional container disposal statement:* To find the nearest collection site, contact your chemical dealer or Bayer at 1-866-99BAYER (1-866-992-2937).]

If recycling is not available, dispose of in accordance with federal, state and local regulations and procedures, which may include puncturing the properly rinsed container and disposing in a sanitary landfill.

[*Optional container disposal statement:* Return Properly Rinsed Container to Bayer for Recycling – Call 1-866-99BAYER (1-866-992-2937).]

[*Optional additional container disposal statement:* IBC EMPTY? – FREE CALL – 1-888-SCHUETZ (1-888-724-8389) www.schuetz.net/ticket; Schuetz ticket service]

[*Optional additional container disposal statement:* FREE IBC PICKUP] [For continental USA and Canada only.]

[*Optional additional container disposal statement:* RETURNnet SYSTEM – To return empty IBC's Email or Call – www.returnnetsystem.com – 1-888-758-SHIP (1-888-758-7447) – United States and Canada – IBCNA – Clarkston, Michigan – USA]

[*CONTAINER HANDLING AND DISPOSAL STATEMENT AND REFILLING LIMITATION FOR ALL REFILLABLE CONTAINERS, EXCEPT TRANSPORT VEHICLES*]

Refillable container. Refill this container with pesticide only. Do not reuse this container for any other purpose.

Cleaning this container before refilling is the responsibility of the refiller. Cleaning this container before final disposal is the responsibility of the person disposing of the container.

To clean this container before final disposal, empty the remaining contents from the container into application equipment or mix-tank. Fill the container about 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times.

[*Optional container disposal statement:* Then offer the container for recycling, if available.]

[*Optional container disposal statement:* Some container manufacturers offer container recycling. See additional information regarding manufacturer recycling programs attached to this container, if available. If no recycling information is available on this container, contact your chemical dealer or Bayer at 1-866-99BAYER (1-866-992-2937) to find the nearest recycling location.]

[*Optional additional container disposal statement:* IBC EMPTY? – FREE CALL – 1-888-SCHUETZ (1-888-724-8389) www.schuetz.net/ticket; Schuetz ticket service]

[*Optional additional container disposal statement:* FREE IBC PICKUP] [For continental USA and Canada only.]

[*Optional additional container disposal statement:* RETURNnet SYSTEM – To return empty IBC's Email or Call – www.returnnetsystem.com – 1-888-758-SHIP (1-888-758-7447) – United States and Canada – IBCNA – Clarkston, Michigan – USA]

[*Optional container disposal statement:* To obtain information about recycling refillable containers, contact Bayer at 1-866-99BAYER (1-866-992-2937).]

[*Optional container disposal statement:* Return Properly Rinsed Container to Bayer for Recycling – Call 1-866-99BAYER (1-866-992-2937).]

[*Optional additional container label statements for the CUBE refillable packaging system only:*

CUBE Bayer Refillable Delivery System
FEATURES INCLUDE:
- Automatic Venting
- Heavy duty one-way 2-inch camloc ball valve with protective shield door
- Complete coated steel protective enclosure
- Durable 4-way plastic pallet
- Lift door to access one-way valve]

CONDITIONS OF SALE AND LIMITATIONS OF WARRANTY AND LIABILITY

Read the entire Directions for Use, Conditions, Disclaimer of Warranties, and Limitations of Liability before buying or using this product. If terms are not acceptable, return the unopened product container at once.

By using this product, user or buyer accepts the following Conditions, Disclaimer of Warranties, and Limitations of Liability.

CONDITIONS: The directions for use of this product are believed to be adequate and must be followed carefully. However, it is impossible to eliminate all risks associated with the use of this product. Crop injury, ineffectiveness, or other unintended consequences may result because of such factors as weather conditions, presence of other materials, or the manner of use or application inconsistent with this label (including conditions noted on the label , such as unfavorable soil conditions, unfavorable climate conditions, etc.), all of which are beyond the control of Bayer CropScience LP ("Bayer") or the seller. To the extent consistent with applicable law, all such risks shall be assumed by the user or buyer. Buyer and all users shall promptly notify Bayer of any claims whether based in contract, negligence, strict liability, other tort or otherwise

DISCLAIMER OF WARRANTIES: Subject to risks as set forth in the Conditions above, Bayer warrants that this product is reasonably fit for the purposes stated on the label when used for the purposes stated on the label when used in accordance with directions. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, BAYER MAKES NO OTHER WARRANTIES, EXPRESS OR IMPLIED, OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE OR OTHERWISE. BAYER MAKES NO RECOMMENDATION OR WARRANTY HEREIN REGARDING THE USE OF ANY PRODUCTS THAT MAY APPEAR ON THE WEBSITE REFERENCED IN THE TANK MIXING INSTRUCTIONS HEREIN, REGARDLESS OF WHETHER SUCH PRODUCT IS USED ALONE OR IN A TANK MIX WITH XtendiMax® With VaporGrip® Technology. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, BAYER DISCLAIMS ANY LIABILITY WHATSOEVER FOR SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, FOR IN-CROP (OVER-THE-TOP) USES ON CROPS WITH XTEND® TECHNOLOGY, CROP SAFETY AND WEED CONTROL PERFORMANCE ARE NOT WARRANTED BY BAYER WHEN THIS PRODUCT IS USED IN CONJUNCTION WITH "BROWN BAG" OR "BIN RUN" SEED SAVED FROM PREVIOUS YEAR'S PRODUCTION AND REPLANTED. FURTHER, TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, BAYER DOES NOT WARRANT THE WEED CONTROL PERFORMANCE OF DICAMBA-RESISTANT WEED BIOTYPES.

LIMITATIONS OF LIABILITY: To the extent consistent with applicable law, the exclusive remedy of the user or buyer for any and all losses, injuries, or damages resulting from the use or handling of this product, whether in contract, warranty, tort, negligence, strict liability or otherwise, shall not exceed the purchase price paid, or at Bayer's election, the replacement of product.

These Conditions of Sales, Disclaimer of Warranties and Limitations of Liability cannot be varied by any written or verbal statements or agreements. No employee or sales agent of Bayer or seller is authorized to vary or exceed the terms of the Disclaimer of Warranties or Limitations of Liability in any manner.

Bollgard II®, Bollgard®, Degree Xtra®, Field Master®, Harness®, Roundup Ready®, Roundup Ready 2 Xtend®, Roundup PowerMAX®, RT 3®, Roundup WeatherMAX®, XtendiMax®, XtendFlex®, and VaporGrip® are registered trademarks of Bayer Technology LLC. All other trademarks are the property of their respective owners.

PRODUCED FOR

Bayer CropScience

Bayer CropScience LP
800 N. Lindbergh Blvd.
St. Louis, MO 63167
1-866-99BAYER (1-866-992-2937)

XTENDIMAX® WITH VAPORGRIP® TECHNOLOGY (PENDING) 10/~~24~~26/2020

Message

From: MARVIN, THOMAS [AG/1920] [thomas.marvin@bayer.com]
Sent: 8/28/2019 1:59:24 PM
To: Kenny, Daniel [Kenny.Dan@epa.gov]; MARVIN, THOMAS [AG/1920] [thomas.marvin@bayer.com]
Subject: RE: Invora

Dan, there are 3 actions in the table below we are proposing to withdraw that would come off the list. Is that what you meant?

Tom Marvin
Head of Regulatory Science North America

////////////////////

Bayer Crop Science
1300 I Street, NW
Suite 450 East
Washington, DC, USA
Tel: +1 202-383-2851
Cell: +1 202-676-7846

From: Kenny, Daniel [mailto:Kenny.Dan@epa.gov]
Sent: Wednesday, August 28, 2019 9:56 AM
To: MARVIN, THOMAS [AG/1920] <thomas.marvin@bayer.com>
Subject: RE: Invora

Thanks Tom, I'll pass this on. There was another question about this, were there any applications that you are no longer needing and that could be removed from the list?

Daniel Kenny, Chief
Herbicide Branch
Registration Division
Office of Pesticide Programs
U.S. Environmental Protection Agency

From: MARVIN, THOMAS [AG/1920] <thomas.marvin@bayer.com>
Sent: Wednesday, August 28, 2019 8:36 AM
To: Kenny, Daniel <Kenny.Dan@epa.gov>
Subject: RE: Invora

Hi Dan. Circling back to your question below on prioritizing Bayer's pending dicamba HT applications. We identified 7 pending dicamba HT applications (please let us know if we missed any). We propose that OPP prioritize 2 of those 7 pending applications per the table below. Happy to discuss next steps or to provide any additional info.

Application	Identifier	Proposed Status
Roundup Xtend 2 Premix, M1833 Herbicide (Ethanolamine Salt)	Submission ID: RD 1833	Prioritize. Latest PRIA date is 12/31/2019; submitted on 6/29/2017

M1834 Dicamba MUP (Ethanolamine Salt)	Submission ID: RD 1834	Prioritize. Latest PRIA date is 12/31/2019; submitted on 6/29/2017
Roundup Xtend 1 Premix, M1769 Herbicide, Uses on HT Soy and HT Cotton	Pending over the top use of EPA Reg. 524-616 on HT Soy and HT Cotton	withdraw
Warrant Dicamba Premix, AD2611 Herbicide	Submission No. RD 1827	withdraw
M1691, uses on HT Soy and HT Cotton	Pending over the top use of EPA Reg. 524-582 on HT Soy and HT Cotton.	withdraw
XtendiMax 2, M1832 Herbicide (Ethanolamine Salt)	Submission No. RD 1832	Renegotiate PRIA, which expires on 12/31/2019
XtendiMax 1, M1768 Herbicide, Use on HT Corn	Submission No. RD 1784; pending over the top use of 524-617 Herbicide on HT Corn.	Renegotiate PRIA, which expires on 12/31/2019

Tom Marvin
Head of Regulatory Science North America

////////////////////

Bayer Crop Science
801 Pennsylvania, NW
Washington, DC, USA
Tel: +1 202-383-2851
Cell: +1 202-676-7846

From: MARVIN, THOMAS [AG/1920]
Sent: Thursday, August 08, 2019 9:04 AM
To: Kenny, Daniel <Kenny.Dan@epa.gov>; MARVIN, THOMAS [AG/1920] <thomas.marvin@bayer.com>
Subject: RE: Invora

Thanks Dan, we will discuss and get back to you soon with our proposed priorities.

Tom Marvin
Head of Regulatory Science North America

////////////////////

Bayer Crop Science
1300 I Street, NW
Suite 450 East
Washington, DC, USA
Tel: +1 202-383-2851
Cell: +1 202-676-7846

From: Kenny, Daniel [mailto:Kenny.Dan@epa.gov]
Sent: Thursday, August 08, 2019 7:55 AM
To: MARVIN, THOMAS [AG/1920] <thomas.marvin@bayer.com>
Subject: RE: Invora

Thanks again for your help with this, Tom. When I sent this, I forgot to also ask you about the status of the dicamba premix applications. We are trying to organize our workload and strategize an approach on the various premixes, and remembered that Bayer had indicated that there were some applications that they were willing to withdraw. Because these applications take more resources than usual to complete and because we don't want to spend those resources on applications that aren't actually needed, did you still intend to withdraw any of those? We'd rather spend the time on those that are still important to the applicants.

Let me know what you think, and we'll organize accordingly.

Thanks very much,
Dan

Daniel Kenny, Chief
Herbicide Branch
Registration Division
Office of Pesticide Programs
U.S. Environmental Protection Agency

From: MARVIN, THOMAS [AG/1920] <thomas.marvin@bayer.com>
Sent: Tuesday, August 06, 2019 5:29 PM
To: Kenny, Daniel <Kenny.Dan@epa.gov>; MARVIN, THOMAS [AG/1920] <thomas.marvin@bayer.com>
Subject: RE: Invora

Dan,

Karen Shearer will send you a proposed waiver tomorrow as soon as possible. Hopefully before the afternoon. Please let me know if there are any wrinkles I can assist with. All is well here, hope the same with you and your team.

Tom

-------- Original Message --------
Subject: RE: Invora
From: "Kenny, Daniel" <Kenny.Dan@epa.gov>
Date: Aug 6, 2019, 4:59 PM
To: "MARVIN, THOMAS [AG/1920]" <thomas.marvin@bayer.com>
Thanks Tom.

Daniel Kenny, Chief
Herbicide Branch
Registration Division
Office of Pesticide Programs
U.S. Environmental Protection Agency

From: MARVIN, THOMAS [AG/1920] <thomas.marvin@bayer.com>
Sent: Tuesday, August 06, 2019 4:51 PM
To: Kenny, Daniel <Kenny.Dan@epa.gov>
Subject: Re: Invora

Hi Dan. I'll get back to you shortly on this.

-------- Original Message --------

Subject: Invora
From: "Kenny, Daniel" <Kenny.Dan@epa.gov>
Date: Aug 6, 2019, 4:33 PM
To: "MARVIN, THOMAS [AG/1920]" <thomas.marvin@bayer.com>
Hi Tom. I hope all is well. I don't know if you are planning to attend the workshop on Thursday with the ranchers from Texas to discuss Invora, but it has occurred to us here at EPA that, if we are indeed going to participate, we need to have Bayer waive the pre-registration confidentiality for that application. I don't know of any template that exists for that, so I would leave it up to Bayer, but based on discussions today, it appears that it will be difficult for us to participate without it. Can you or someone authorized to waive the confidentiality email me a letter to such end? Of course, no waiver is needed for CBI such as the CSF components, just the pre-registration confidentiality that protects against sharing information about the application to competitors. If you can help with this, we need something before the workshop, preferably today or tomorrow. If this is not something that you can help with, can you point me in the correct direction?

Thanks for your help,
Dan Kenny

Daniel Kenny, Chief
Herbicide Branch
Registration Division
Office of Pesticide Programs
U.S. Environmental Protection Agency

The information contained in this e-mail is for the exclusive use of the intended recipient(s) and may be confidential, proprietary, and/or legally privileged. Inadvertent disclosure of this message does not constitute a waiver of any privilege. If you receive this message in error, please do not directly or indirectly use, print, copy, forward, or disclose any part of this message. Please also delete this e-mail and all copies and notify the sender. Thank you.

The information contained in this e-mail is for the exclusive use of the intended recipient(s) and may be confidential, proprietary, and/or legally privileged. Inadvertent disclosure of this message does not constitute a waiver of any privilege. If you receive this message in error, please do not directly or indirectly use, print, copy, forward, or disclose any part of this message. Please also delete this e-mail and all copies and notify the sender. Thank you.

The information contained in this e-mail is for the exclusive use of the intended recipient(s) and may be confidential, proprietary, and/or legally privileged. Inadvertent disclosure of this message does not constitute a waiver of any privilege. If you receive this message in error, please do not directly or indirectly use, print, copy, forward, or disclose any part of this message. Please also delete this e-mail and all copies and notify the sender. Thank you.

The information contained in this e-mail is for the exclusive use of the intended recipient(s) and may be confidential, proprietary, and/or legally privileged. Inadvertent disclosure of this message does not constitute a waiver of any privilege. If you receive this message in error, please do not directly or indirectly use, print, copy, forward, or disclose any part of this message. Please also delete this e-mail and all copies and notify the sender. Thank you.

Message

From: George Sabbagh [george.sabbagh@bayer.com]
Sent: 10/25/2020 1:54:43 AM
To: Kenny, Daniel [Kenny.Dan@epa.gov]; MARVIN, THOMAS [AG/1920] [thomas.marvin@monsanto.com]
CC: Echeverria, Marietta [Echeverria.Marietta@epa.gov]; Schmid, Emily [Schmid.Emily@epa.gov]; Rosenblatt, Daniel [Rosenblatt.Dan@epa.gov]; Hathaway, Margaret [Hathaway.Margaret@epa.gov]; Meadows, Sarah [Meadows.Sarah@epa.gov]; Crawford, Lydia [Crawford.Lydia@epa.gov]; BCSReg_Archive [esepamailbox@bayer.com]
Subject: RE: EPA Comments on Draft Labeling
Attachments: MASTER LABEL_XtendiMax_264-RERN_20201024_redline.pdf; MASTER LABEL_XtendiMax_264-RERN_20201024.pdf

Hello Dan,

Attached are copies of the label with Bayer revisions. Revisions and comments are shown in the redline version.

Please, let me know if you have questions.

Freundliche Grüße / Best regards,

George Sabbagh, Ph.D.
Head Regulatory Engagements

Regulatory Engagement
Collaborating Across Organizations

Bayer US LLC
801 Pennsylvania Avenue, NW
Suite 900
Washington, DC 20004
Cel: +1 913 231 6291
E-mail: george.sabbagh@bayer.com
Web: http://www.bayercropscience.com

From: Kenny, Daniel <Kenny.Dan@epa.gov>
Sent: Friday, October 23, 2020 10:06 PM
To: MARVIN, THOMAS [AG/1920] <thomas.marvin@monsanto.com>; George Sabbagh <george.sabbagh@bayer.com>
Cc: Echeverria, Marietta <Echeverria.Marietta@epa.gov>; Schmid, Emily <Schmid.Emily@epa.gov>; Rosenblatt, Daniel <Rosenblatt.Dan@epa.gov>; Hathaway, Margaret <Hathaway.Margaret@epa.gov>; Meadows, Sarah <Meadows.Sarah@epa.gov>; Crawford, Lydia <Crawford.Lydia@epa.gov>
Subject: EPA Comments on Draft Labeling

Hello George and Tom. Please see attached for EPA comments on the latest draft labeling.

Thanks,
Dan

Daniel Kenny, Chief

Herbicide Branch
Registration Division
Office of Pesticide Programs
U.S. Environmental Protection Agency

The information contained in this e-mail is for the exclusive use of the intended recipient(s) and may be confidential, proprietary, and/or legally privileged. Inadvertent disclosure of this message does not constitute a waiver of any privilege. If you receive this message in error, please do not directly or indirectly use, print, copy, forward, or disclose any part of this message. Please also delete this e-mail and all copies and notify the sender. Thank you.

RESTRICTED USE PESTICIDE
To be used by certified applicators only; NOT to be used by uncertified persons working under the supervision of a certified applicator, except that uncertified persons may transport containers.

This labeling expires on 12/20/2025. DO NOT use or distribute this product after 12/20/2025.

DICAMBA	GROUP	4	HERBICIDE

XtendiMax® With VaporGrip® Technology

ABN: M1768 Herbicide

For weed control in cotton with XtendFlex® Technology (dicamba-tolerant cotton) and soybean with Roundup Ready 2 Xtend® Technology or XtendFlex® Technology (dicamba-tolerant soybean).

XtendiMax® With VaporGrip® Technology is approved by U.S. EPA for use in dicamba-tolerant cotton and dicamba-tolerant soybeans only in the following states, subject to county restrictions as noted: Alabama, Arkansas, Arizona, Colorado, Delaware, Florida (excluding Palm Beach County), Georgia, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maryland, Michigan, Minnesota, Mississippi, Missouri, Nebraska, New Jersey, New Mexico, New York, North Carolina, North Dakota, Oklahoma, Ohio, Pennsylvania, South Carolina, South Dakota, Tennessee (excluding Wilson County), Texas, Virginia, West Virginia, Wisconsin.

Check the registration status of each product in each state before using.

ACTIVE INGREDIENT: Dicamba
Diglycolamine salt of dicamba (3,6-dichloro-*o*-anisic acid)* **42.80%**
OTHER INGREDIENTS: **57.20%**
TOTAL: **100.00%**
*Contains 29.0% 3,6-dichloro-*o*-anisic acid (2.9 pounds acid equivalent per U.S. gallon or 350 grams per liter)

EPA Reg. No. 264-RERN **EPA Est. No.**

CAUTION

KEEP OUT OF REACH OF CHILDREN

For MEDICAL and TRANSPORTATION Emergencies ONLY Call 24 Hours a Day 1-800-334-7577

For PRODUCT USE Information Call 1-866-99BAYER (1-866-992-2937)

For Incidence of Non-performance or Off-Target Movement or for Questions Regarding Buffer Requirements or Sensitive Crop Registries Call 1-844-RRXTEND (1-844-779-8363)

Please refer to [back panel] [booklet] for additional precautionary statements and directions for use. [Note to reviewer: Location of additional precautionary statements and directions for use will vary between those listed, depending on container type/size.]

Net Contents:

FIRST AID	
IF IN EYES:	• Hold eye open and rinse slowly and gently with water for 15 to 20 minutes. • Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. • Call a poison control center or doctor for treatment advice.

IF SWALLOWED:	• Call a poison control center or doctor immediately for treatment advice. • Have person sip a glass of water if able to swallow. • DO NOT induce vomiting unless told to do so by a poison control center or doctor. • DO NOT give anything by mouth to an unconscious person.
IF ON SKIN OR CLOTHING:	• Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15 to 20 minutes. • Call a poison control center or doctor for treatment advice.
In case of emergency, call the toll-free Bayer Emergency Response telephone number: 1-800-334-7577. Have the product container or label with you when calling a poison control center or doctor or when going for treatment.	

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION

- Causes moderate eye irritation.
- Avoid contact with eyes or clothing.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

All mixers, loaders, applicators, and other handlers must wear:

- Long-sleeved shirt and long pants
- Waterproof gloves
- Shoes plus socks

Follow the manufacturer's instructions for cleaning and maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

ENGINEERING CONTROLS

When handlers use closed systems, or enclosed cabs in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240 (d) (4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

IMPORTANT: When reduced PPE is worn because a closed system is being used, handlers must be provided all PPE specified above for "all mixers, loaders, applicators, and other handlers" and have such PPE immediately available for use in an emergency, such as a spill or equipment breakdown.

USER SAFETY RECOMMENDATIONS

User should:

- Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet.
- Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

ENVIRONMENTAL HAZARDS

DO NOT apply directly to water, or to areas where surface water is present, or to intertidal areas below the mean high-water mark. DO NOT contaminate water when disposing of equipment washwaters or rinsate. Apply this product only as directed on the label.

Ground Water Advisory: This chemical is known to leach through soil into ground water under certain conditions as a result of agricultural use. Use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in ground water contamination.

GROUND AND SURFACE WATER PROTECTION

Point source contamination: To prevent point source contamination, DO NOT mix or load this pesticide product within 50 feet of wells (including abandoned wells and drainage wells), sink holes, perennial or intermittent streams and rivers, and natural or impounded lakes and reservoirs. DO NOT apply pesticide product within 50 feet of wells. This setback does not apply to properly capped or plugged abandoned wells and does not apply to impervious pad or properly diked mixing/loading areas as described below.

Mixing, loading, rinsing, or washing operations performed within 50 feet of a well are allowed only when conducted on an impervious pad constructed to withstand the weight of the heaviest load that may be on or move across the pad. The pad must be self-contained to prevent surface water flow over or from the pad. The pad capacity must be maintained at 110% that of the largest pesticide container or application equipment used on the pad and have sufficient capacity to contain all product spills, equipment or container leaks, equipment washwaters, and rainwater that may fall on the pad. The containment capacity does not apply to vehicles delivering pesticide shipments to the mixing/loading site. States may have in effect additional requirements regarding wellhead setbacks and operational containment.

Care must be taken when using this product to prevent: a) back siphoning into wells, b) spills, or c) improper disposal of excess pesticide, spray mixtures, or rinsates. Check valves or anti-siphoning devices must be used on all mixing equipment.

Movement by surface runoff or through soil: DO NOT apply under conditions that favor runoff. DO NOT apply if soil is saturated with water or when rainfall that may exceed soil field capacity is forecasted to occur within 48 hours.

Under some conditions, dicamba has the potential for runoff several days after application. Poorly draining, wet, or erodible soils with readily visible slopes toward adjacent sensitive areas are more prone to produce runoff. When used on erodible soils, best management practices for minimizing runoff should be employed. Consult your local Soil Conservation Service for recommendations in your use area.

Ground water contamination may occur in areas where soils are permeable or coarse and ground water is near the surface. DO NOT apply to impervious substrates such as paved or highly compacted surfaces in areas with high potential for ground water contamination. DO NOT apply to soils classified as sand with less than 3% organic matter and where ground water depth is shallow.

Movement by water erosion of treated soil: DO NOT apply or incorporate this product through any type of irrigation equipment nor by flood or furrow irrigation. Ensure treated areas have received at least one-half inch rainfall (or irrigation) before using tailwater for subsequent irrigation of other fields.

PROTECTING ENDANGERED SPECIES / PESTICIDE USE LIMITATION AREAS

The use of any pesticide in a manner that may kill or otherwise harm an endangered species or adversely modify their habitat is a violation of federal law. Use of this product in a manner inconsistent with its labeling may pose a hazard to endangered or threatened species. **When using this product, you must follow the measures contained in the Endangered Species Protection Bulletin for the area in which you are applying the product.** To obtain Bulletins, no more than six months before using this product, consult https://www.epa.gov/endangered-species/bulletins-live-two-view-bulletins or call 1-844-447-3813. You must use the Bulletin valid for the month in which you will apply the product.

It is a Federal offense to use any pesticide in a manner that results in the death of an endangered species.

PHYSICAL OR CHEMICAL HAZARDS

DO NOT store or heat near oxidizing agents as a hazardous chemical reaction may occur.

DIRECTIONS FOR USE

RESTRICTED USE PESTICIDE

Only for retail sale to and use by Certified Applicators. NOT to be used by uncertified persons working under the supervision of a certified applicator, except that uncertified persons may transport containers.

It is a violation of Federal law to use this product in any manner inconsistent with its labeling. This labeling must be in the user's possession during application. Read the entire label before using this product.

DO NOT apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

For important crop safety information, refer to the "Specific Use Directions" section for each crop.

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. This standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses and of handlers of agricultural pesticides. It contains requirements for training, decontamination, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about Personal Protective Equipment (PPE), notification to workers, and restricted-entry intervals. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

DO NOT enter or allow worker entry into treated areas during the restricted-entry interval **(REI) of 24 hours.** **PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water is:** • Coveralls worn over short-sleeved shirt and short pants • Chemical-resistant footwear plus socks • Waterproof gloves • Chemical-resistant headgear for overhead exposure • Protective eyewear

PRODUCT INFORMATION

XtendiMax® With VaporGrip® Technology is:

- a water-soluble formulation intended for control and suppression of many annual, biennial, and perennial broadleaf weeds listed in the "Weeds Controlled or Suppressed" section of this label. This product may be used for control of these weeds in cotton with XtendFlex® Technology and soybean with Roundup Ready 2 Xtend® Technology or XtendFlex® Technology.
- a contact, systemic herbicide, with limited soil activity on small seeded broadleaf weeds, including waterhemp, lambsquarters, and Palmer pigweed.
- readily absorbed by plants through shoot and root uptake, translocates throughout the plant's system, and accumulates in areas of active growth. XtendiMax® With VaporGrip® Technology interferes with plant growth hormones (auxins) resulting in death of many broadleaf weeds.

Additional state restrictions and requirements may apply. The user must comply with any additional state requirements and restrictions.

Refer to the specific use directions and restrictions in each crop table. Follow all requirements and restrictions on www.xtendimaxapplicationrequirements.com.

APPLICATION REQUIREMENTS OVERVIEW

Read and follow all applicable restrictions, precautions, and directions on the container label and booklet and at www.xtendimaxapplicationrequirements.com. For product questions or inquiries and/or to report any nonperformance of this product against any particular weed species, call 1-844-RRXTEND (1-844-779-8363). It is recommended that the certified applicator visit www.xtendimaxapplicationrequirements.com to obtain a copy of the Overview of Application Requirements for reference prior to and during application.

REQUIREMENTS	LABEL SECTIONS
Mandatory Training: ☐ Prior to applying, applicator must complete dicamba-specific training. Only certified applicators may apply this product; NOT to be used by uncertified persons working under the supervision of a certified applicator, except that uncertified persons may transport containers.	➢ Training (pp. 5-6)
Record Keeping: ☐ Records must be created within 72 hours of every application. Records must be kept for a period of two years.	➢ Record Keeping (p. 6)
Application: ☐ For EVERY application of XtendiMax® With VaporGrip® Technology, an approved **Volatility Reduction Adjuvant (VRA)** must be included in the spray solution. An approved **Drift Reduction Adjuvant (DRA)** must also be included in the spray solution, unless otherwise indicated on www.xtendimaxapplicationrequirements.com. Refer to the website for a list of approved DRAs and VRAs. ☐ *Rate and Timing*: Apply 22 fluid ounces per acre (0.5 lb. a.e. dicamba) for any single pre-emergent or in-crop application in: ○ Cotton with XtendFlex® Technology up to and including July 30 (DO NOT apply after July 30 regardless of growth stage), and ○ Soybean with Roundup Ready 2 Xtend® Technology or XtendFlex® Technology up to and including June 30. Applications occurring after R1 are prohibited as crop response may occur and in no event can applications be made after June 30 regardless of growth stage. ○ For details, see the "Specific Use Directions" section. ☐ *Spray volume:* Apply in a minimum of 15 gallons of spray solution per acre. ☐ *Tank mixing*: Use only approved tank-mix partners found at www.xtendimaxapplicationrequirements.com.	➢ Tank Mix Partners (p. 9) ➢ Specific Use Directions (pp. 12-14) ➢ Specific Use Directions (pp. 12-14) ➢ Tank Mix Partners (p. 9)

○ Refer to all product labels to determine mix order or perform a mix compatibility test.	
Application Equipment: ☐ *Spray system equipment cleanout*: Ensure entire sprayer system is properly cleaned before and after application. ☐ *Nozzles*: Use only approved nozzles within specified pressures found at www.xtendimaxapplicationrequirements.com. ☐ *Spray boom height*: Maximum boom height is 24 inches above target pest or crop canopy. ☐ *Ground speed*: DO NOT exceed 15 mph.	➢ Equipment Requirements (pp. 7-8)
Environmental Conditions: ☐ *Wind speed*: Apply when wind speed, measured at boom height, is 3-10 mph. ☐ *Inversions*: DO NOT spray during an inversion; only spray between one hour after sunrise and two hours before sunset. ☐ *Rainfall*: DO NOT apply this product if rain that may exceed soil field capacity and result in soil runoff is forecasted in the next 48 hours.	➢ Environmental Requirements (p. 7)
Downwind Requirements: ☐ *Sensitive crops and certain plants downwind*: DO NOT apply if sensitive crops and/or certain plants, as defined below in this label, are planted on an adjacent downwind field or area. ☐ *Downwind buffer*: After determining no adjacent sensitive crops and/or certain plants are downwind, maintain a 240-ft downwind buffer. ☐ *Endangered species*: Consult Endangered Species Protection Bulletins for ESA counties and restrictions.	➢ Adjacent Sensitive Crops and Certain Plants (p. 8) ➢ Buffer Requirements (p. 8) ➢ Protecting Endangered Species (p. 3)
Drift Reduction Technology: ☐ See "Optional Use of Drift Reduction Technology" section for details on application requirements and the potential to qualify for reduced use restrictions.	➢ Optional Use of Drift Reduction Technology (pp. 8-9)

USE RESTRICTIONS

- DO NOT USE ANY TANK MIX PRODUCT OR ANY NOZZLE AND PRESSURE COMBINATION WITH XTENDIMAX® WITH VAPORGRIP® TECHNOLOGY THAT IS NOT IDENTIFIED ON THE LIST OF APPROVED PRODUCTS FOUND AT www.xtendimaxapplicationrequirements.com.
- DO NOT TANK MIX AMMONIUM SULFATE (AMS) WITH THIS PRODUCT.
- DO NOT EXCEED 88 FLUID OUNCES (2 POUNDS ACID EQUIVALENT (A.E.) DICAMBA) OF XTENDIMAX® WITH VAPORGRIP® TECHNOLOGY PER ACRE PER YEAR.
- DO NOT EXCEED 88 FLUID OUNCES (2 POUNDS A.E. DICAMBA) PER ACRE PER YEAR FROM ALL DICAMBA APPLICATIONS IF MORE THAN ONE DICAMBA-CONTAINING PRODUCT IS APPLIED TO THE SAME SITE WITHIN THE SAME YEAR.
- DO NOT MAKE APPLICATION OF THIS PRODUCT IF RAIN IS EXPECTED IN THE NEXT 48 HOURS THAT MAY EXCEED SOIL FIELD CAPACITY AND RESULT IN SOIL RUNOFF.
- DO NOT APPLY THROUGH ANY TYPE OF IRRIGATION EQUIPMENT. DO NOT TREAT IRRIGATION DITCHES OR WATER USED FOR CROP IRRIGATION OR DOMESTIC PURPOSES.
- DO NOT APPLY TO CROPS UNDER STRESS DUE TO LACK OF MOISTURE, HAIL DAMAGE, FLOODING, HERBICIDE INJURY, MECHANICAL INJURY, INSECTS, OR WIDELY FLUCTUATING TEMPERATURES AS INJURY MAY RESULT.
- DO NOT APPLY THIS PRODUCT IF SENSITIVE CROPS AND CERTAIN PLANTS ARE PLANTED ON AN ADJACENT DOWNWIND FIELD OR AREA.
- DO NOT APPLY THIS PRODUCT AERIALLY.
- Restricted Entry Interval (REI): 24 hours.

USE PRECAUTIONS

- In case material is released or spilled: dike and contain the spill with inert material (sand, earth, etc.) and transfer liquid and solid diking material to separate containers for disposal. Remove contaminated clothing and wash affected skin areas with soap and water. Wash clothing before re-use. Keep the spill out of all sewers and open bodies of water.
- Rainfast period: This product is rainfast four (4) hours after application to most weed species. Rainfall or irrigation occurring within four (4) hours after application may necessitate retreatment or may otherwise result in reduced weed control.

TRAINING

Prior to using this product, users must complete dicamba-specific training to obtain certification. Once completed, dicamba-specific training is then required every other year for all users of this product. If state-specific training is required by the state where the applicator intends to apply this product, the applicator must complete training from the state or state-authorized provider. Otherwise, the applicator

may complete dicamba-specific training provided either by the state/state-authorized provider or by a registrant of a dicamba product approved for in-crop use with dicamba-tolerant crops.

RECORD KEEPING

The following records must be generated as soon as practical but **no later than 72 hours after application**. The certified applicator must keep these records for a period of **two years**. Records must be made available to State Pesticide Control Official(s), USDA, and EPA upon request. See www.xtendimaxapplicationrequirements.com for an example form summarizing record keeping requirements.

Keep records of the following items for each application of XtendiMax® With VaporGrip® Technology:

1. All Items required by 7 CFR Part 110 (RECORDKEEPING ON RESTRICTED USE PESTICIDES BY CERTIFIED APPLICATORS), including:
    a. The brand or product name
    b. The EPA registration number
    c. The total amount applied
    d. The month, day, and year of application
    e. The location of the application
    f. The crop, commodity, stored product, or site of application
    g. The size of treated area
    h. The name of the certified applicator
    i. The certification number of the certified applicator
2. *Training*: Completion date and provider of required training and proof of completion.
3. *Receipts of Purchase*: Receipts or copies for the purchase of this product.
4. *Product Label*: A copy of this product label and any state special local needs label that supplements this label.
5. *Sensitive Crops and Certain Plants Awareness*:
    a. Document that a sensitive crop registry was consulted. At a minimum, documentation must include the name of the sensitive crop registry and the date it was consulted.
    b. Record of a survey of adjacent areas documenting the sensitive crops and/or certain plants (as defined below in the "Adjacent Sensitive Crops and Certain Plants" section of this label) surrounding the field prior to application. At a minimum, records must include documentation of adjacent sensitive crops and/or certain plants and the date the survey was conducted.
6. *Buffer Requirement*: Record of the buffer distance implemented as directed in the "Spray Drift Management" and "Optional Use of Drift Reduction Technology" sections of this label.
7. *Start and Finish Times of Each Application*: Record of the time at which the application started and finished.
8. *Application Timing*: Record of the type of application (for example: preemergence, postemergence) and the number of days after planting if postemergence.
9. *Air Temperature*: Record of the air temperature in degrees Fahrenheit at the start and completion of each application.
10. *Wind Speed and Direction*: Record of the wind speed and direction (the direction from which the wind is blowing) at boom height at the start and completion of each application.
11. *Nozzle and Pressure*: Record of the spray nozzle manufacturer/brand, type, orifice size, and operating pressure used during each application of this product.
12. *Tank Mix Products*: Record of the brand names and EPA registration numbers (if applicable) for all products that were tank mixed with this product for each application, as well as a record of the volume of each added to the tank prior to application.
13. ***Mandatory Volatility and Drift Reduction Adjuvants***: Receipts or copies for the purchase of an approved volatility reduction adjuvant, as well as a record of the volume added to the tank prior to application. Receipts or copies for the purchase of an approved DRA and a record of the volume added to the tank prior to application, unless otherwise indicated on www.xtendimaxapplicationrequirements.com.
14. *Spray System Cleanout*: At a minimum, records must include confirmation that the spray system was clean before using this product and that the post-application cleanout was completed in accordance with the "Proper Spray System Equipment Cleanout" section of this label.

HERBICIDE RESISTANCE MANAGEMENT RECOMMENDATIONS

The dicamba active ingredient in XtendiMax® With VaporGrip® Technology is a Group 4 herbicide. Any weed population may contain or develop plants naturally resistant to XtendiMax® With VaporGrip® Technology and other Group 4 herbicides. The resistant biotypes may dominate the weed population if these herbicides are used repeatedly in the same field. Appropriate resistance management strategies should be followed.

To delay herbicide resistance, take one or more of the following steps:

- Limit cultivation and/or mechanical tillage within 7 days after application, as this may result in reduced efficacy and promote regrowth of treated weeds.
- Rotate the use of XtendiMax® With VaporGrip® Technology within a growing season and among growing seasons with different herbicide groups (other than Group 4) that control the same weeds.
- Use tank mixtures with herbicides from a different herbicide Group if such use is permitted.
- Adopt an integrated weed-management program for herbicide use that includes scouting and uses historical information related to herbicide use and crop rotation and that considers tillage (or other mechanical control methods), cultural (*e.g.*, higher crop seeding rates; precision fertilizer application method and timing to favor the crop and not the weeds), biological (weed-competitive crops or varieties), and other management practices.
- Scout after herbicide application to monitor weed populations for early signs of resistance development. Indicators of possible herbicide resistance include: (1) failure to control a weed species normally controlled by the herbicide at the dose applied,

especially if control is achieved on adjacent weeds; (2) a spreading patch of non-controlled plants of a particular weed species; (3) surviving plants mixed with controlled individuals of the same species. If resistance is suspected, prevent weed seed production in the affected area by an alternative herbicide from a different group or by a mechanical method such as hoeing or tillage. Prevent movement of resistant weed seeds to other fields by cleaning harvesting and tillage equipment when moving between fields and by planting clean seed.

- If a weed pest population continues to progress after treatment with this product, switch to another management strategy or herbicide with an effective mode of action, if available, and contact Bayer at 1-844-RRXTEND (1-844-779-8363).
- Contact your local extension specialist or certified crop advisors for additional pesticide resistance-management and/or integrated weed-management recommendations for specific crops and weed biotypes.
- For further information or to report suspected resistance contact Bayer at 1-844-RRXTEND (1-844-779-8363).

Management of Dicamba-Resistant Biotypes

Appropriate testing is critical in order to determine if a weed is resistant to dicamba. Contact your Bayer representative to determine if resistance in any particular weed biotype has been confirmed in your area or visit www.iwilltakeaction.com or www.weedscience.org.

The following good agronomic practices can reduce the spread of confirmed dicamba-resistant biotypes, particularly if pursued as soon as signs of resistance are observed:

- If a naturally occurring resistant biotype is present in your field, this product may be tank mixed or applied sequentially with an appropriately labeled herbicide with a different mode of action to achieve control (read "Tank Mixing" section for more information).
- Cultural and mechanical control practices (*e.g.*, crop rotation or tillage) can also be used as appropriate.
- Scout treated fields after herbicide application and control weed escapes, including resistant biotypes, before they set seed.
- Thoroughly clean equipment, as practical, for all weed seeds before leaving fields known to contain resistant biotypes.

SPRAY DRIFT MANAGEMENT

THE APPLICATOR IS RESPONSIBLE FOR AVOIDING OFF-SITE SPRAY DRIFT TO THE EXTENT CONSISTENT WITH APPLICABLE LAW. The applicator is responsible for compliance with state and local pesticide regulations, including any state or local pesticide drift regulations. DO NOT allow herbicide solution to mist, drip, drift, or splash onto desirable vegetation because severe injury or destruction to desirable broadleaf plants could result.

Applications using larger droplets reduces drift potential but will not prevent drift if the application is made improperly or under unfavorable environmental conditions. The interaction of weather-related factors and equipment must be monitored to maximize performance and on-target spray deposition. The applicator is responsible for considering all these factors when making a spray decision to the extent consistent with applicable law. BE AWARE OF NEARBY NON-TARGET SITES AND CHANGING ENVIRONMENTAL CONDITIONS (see the "Temperature Inversions" section of this label).

Environmental Requirements

Wind Speed

Wind speed must be measured in the field of application at boom height prior to and after application. Only apply when wind speed at boom height is between 3 MPH and 10 MPH during application.

Temperature Inversions

DO NOT apply this product during a temperature inversion as the off-target movement potential is high.

Applications of this product may ONLY occur one hour after sunrise through two hours before sunset. In general, temperature inversions are more likely during nighttime hours.

- Temperature inversions are characterized by increasing temperature with altitude and are common on nights with limited cloud cover and light to no wind.
- The presence of an inversion can be indicated by ground fog or, if fog is not present, by the movement of smoke from a ground source or an aircraft smoke generator. Smoke that layers and moves laterally in a concentrated cloud (under low wind conditions) indicates an inversion, while smoke that moves upward and rapidly dissipates indicates good vertical air mixing.

Equipment Requirements

DO NOT APPLY THIS PRODUCT USING AERIAL SPRAY EQUIPMENT.

Nozzle Type

To produce minimal amounts of fine spray particles, the applicator must use an approved nozzle within a specified pressure range as found at www.xtendimaxapplicationrequirements.com. DO NOT use any other nozzle and pressure combination not specifically listed on this website.

Equipment Ground Speed

DO NOT exceed a ground speed of 15 miles per hour. Select a ground speed that will deliver the desired spray volume while maintaining the desired spray pressure. Slower speeds generally result in better spray coverage and deposition on the target area. Provided the applicator can maintain the required nozzle pressure, it is recommended that tractor speed is reduced to 5 miles per hour at field edges.

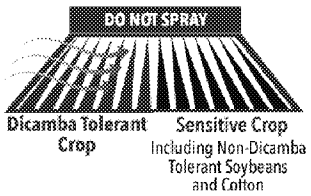
Spray Boom Height

Use the minimum boom height appropriate for spray pattern overlap based on nozzle selection and spacing, according to manufacturer recommendations, or 24 inches above canopy, whichever is smaller.

Adjacent Sensitive Crops and Certain Plants

DO NOT SPRAY this product when wind is blowing toward adjacent sensitive crops and certain plants, as defined immediately below.

It is important for the applicator to be aware that wind direction may vary during the application. If wind direction shifts such that the wind is blowing toward adjacent sensitive crops and/or certain plants, the applicator **must STOP** the application.



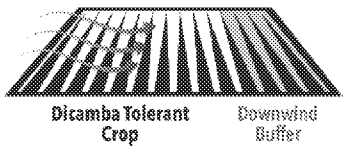
Before making an application, 1) consult a sensitive crop registry (such as FieldWatch or state/federal registry), 2) survey adjacent fields and areas, and 3) confirm the type or variety of plants and crops surrounding the field prior to application. At a minimum, records must include the name of the sensitive crop registry, the date it was consulted, documentation of adjacent plants and crops/areas surrounding the field of application, and the date the survey was conducted.

Dicamba-sensitive crops and/or certain plants include, but are not limited to, non-dicamba-tolerant soybeans and cotton, tomatoes and other fruiting vegetables (EPA crop group 8), fruit trees, cucurbits (EPA crop group 9), grapes, beans, flowers, ornamentals, peas, potatoes, sunflower, tobacco, and other broadleaf plants, including if these plants are in a greenhouse. Severe injury or destruction could occur if any contact between this product and these plants occurs. Sensitive crop registries can provide additional information about sensitive crops and sensitive areas.

If you have questions regarding sensitive crop registries contact Bayer at 1-844-RRXTEND (1-844-779-8363) **prior to application**.

Buffer Requirements

After determining no adjacent sensitive crops and/or certain plants are downwind, the applicator **must always maintain a 240-foot downwind buffer** between the last treated row and the nearest downwind field edge when applying using broadcast open-boom equipment. For reduced downwind buffer distances, refer to "Optional Use of Drift Reduction Technology" section of this label.



The following areas may be included in the buffer distance composition when directly adjacent to the treated field edges:

- Roads, paved or gravel surfaces, mowed and/or managed areas adjacent to field such as rights-of-way
- Planted agricultural fields containing: corn, dicamba-tolerant cotton, dicamba-tolerant soybean, sorghum, proso millet, small grains, or sugarcane. If the applicator intends to include such crops as dicamba-tolerant cotton and/or dicamba-tolerant soybeans in the buffer distance composition, the applicator must confirm the crops are in fact dicamba-tolerant.
- Agricultural fields that have been prepared for planting
- Areas covered by the footprint of a building, silo, or other man-made structure with walls and/or roof

If you have questions regarding Buffer Requirement, contact Bayer at 1-844-RRXTEND (1-844-779-8363) **prior to application**.

Optional Use of Drift Reduction Technology

This product may be optionally applied using a hooded/shielded broadcast sprayer or other types of drift reduction technology (DRT) for postemergence weed control as well as residual control of susceptible weeds. The applicator must use an approved nozzle within a specified pressure range as found at www.xtendimaxapplicationrequirements.com. Use of drift reduction technology (DRT) in combination with approved nozzles is recommended to further reduce drift potential.

Applications of this product may qualify for reduced use restrictions, such as a reduced downwind buffer distance, provided a **qualified DRT** listed on www.xtendimaxapplicationrequirements.com is used and operated according to the directions and limitations provided at www.xtendimaxapplicationrequirements.com.

Hooded/Shielded Broadcast Sprayer:

For hooded/shielded sprayers, all application nozzles must be contained within the enclosed area. Shielding the boom or individual nozzles can reduce the effects of wind. However, it is the responsibility of the applicator to verify that the shields are preventing drift and not interfering with uniform deposition of the product. Applicators must ensure the sprayer system is off or controlled during turns to further prevent spray drift. Refer to the hooded/shielded sprayer manufacturer use specifications prior to use.

Requirements for Reduced Use Restrictions with Optional Hooded/Shielded Sprayer: ONLY **qualified** hooded/shielded sprayers listed on www.xtendimaxapplicationrequirements.com are eligible for reduced use restrictions when applying this product. Refer to the website for specific application requirements when using a **qualified** hooded/shielded sprayer. While this product may be applied with other (non-qualified) hooded/shielded sprayers, no reduction in use restrictions is associated with their use.

TANK MIX PARTNERS

Tank Mixing

It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions, limitations, and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.

All applications of this product require the inclusion of a volatility reduction adjuvant (VRA), such as a VaporGrip® Xtra Agent product or an approved VRA equivalent, in the tank mix. The inclusion of a **drift reduction adjuvant (DRA) is also required** in the tank mix, unless otherwise indicated on www.xtendimaxapplicationrequirements.com. Only tank mix products that have been tested and found to not adversely affect the offsite movement potential of XtendiMax® With VaporGrip® Technology may be tank mixed with XtendiMax® With VaporGrip® Technology. The applicator must check the website found at www.xtendimaxapplicationrequirements.com for a list of approved tank mix products no more than 7 days before applying XtendiMax® With VaporGrip® Technology.

DO NOT tank mix any product with XtendiMax® With VaporGrip® Technology unless:

1. The intended tank mix product is identified on the list of tested products found at www.xtendimaxapplicationrequirements.com;
2. The intended products are not prohibited on either this label or the label of the tank mix product; and
3. All requirements and restrictions on www.xtendimaxapplicationrequirements.com are followed.

NOTE: DO NOT use PVA (polyvinyl acetate) packets in a tank mix with products that contain boron or release free chlorine. The resultant reaction of PVA and boron or free chlorine is a plastic that is not soluble in water or solvents.

APPLICATION INSTRUCTIONS

APPLY THIS PRODUCT USING PROPERLY MAINTAINED AND CALIBRATED EQUIPMENT CAPABLE OF DELIVERING THE REQUIRED VOLUMES.

DO NOT APPLY THIS PRODUCT USING AERIAL SPAY EQUIPMENT.

XtendiMax® With VaporGrip® Technology can be applied to actively growing weeds as broadcast, band, or spot spray applications using water as a carrier. For best results, treat weeds early when they are relatively small (less than 4 inches). Timely application to small weeds early in the season will improve control and reduce weed competition.

Ground Application (Broadcast)

Water Volume: Use a minimum of 15 gallons of spray solution per broadcast acre for optimal performance. Use 20 gallons per acre or greater when treating dense weed canopy/vegetation.

Ground Application (Hooded In-Row and Directed Layby)

Using a hooded sprayer or other drift reduction technology in combination with approved nozzles may further reduce drift potential. When applying XtendiMax® With VaporGrip® Technology by hooded in-row or layby sprayers, determine the amount of herbicide and water volume needed using the following formula:

$$\frac{\text{band width (inches)}}{\text{row width (inches)}} * \text{broadcast rate per acre} = \text{rate per treated acre}$$

$$\frac{\text{band width (inches)}}{\text{row width(inches)}} * \text{broadcast spray volume per acre} = \text{spray volume per treated acre}$$

SPRAY SYSTEM EQUIPMENT CLEANOUT

You must ensure that the spray system used to apply this product is clean before using this product. Failure to properly clean the entire spray system can result in inadvertent contamination of the spray system. Contamination of the spray system may cause injury to non-dicamba-tolerant soybeans and other sensitive crops.

Inadvertent contamination can also occur in equipment used for bulk product handling and mixing prior to use in the spray system. Care should be taken to reduce contamination not only in the spray system but in any equipment used to transfer or deliver product. For example, bulk handling and mixing equipment containing this product should be segregated when possible to reduce potential for cross-contamination. Consider using block and check valves to avoid backflow during transfer. Piping should be reviewed to ensure there is not potential for product build-up. Dedicated nurse trucks and tender equipment should be used when possible.

Clean equipment **immediately after using** this product, using a **triple rinse** procedure as follows:

1. After spraying, drain the sprayer (including boom and lines) immediately. DO NOT allow the spray solution to remain in the spray boom lines overnight prior to flushing.

2. Fill tank with clean water (at least 10% volume) and flush tank, hoses, boom, and nozzles. Ensure agitation for 15 minutes and then spray out solution through boom. If equipped, open boom ends and flush.
3. Inspect and clean all strainers, screens, and filters.
4. Fill tank with clean water (at least 10% of volume) and prepare a cleaning solution with a commercial detergent or sprayer cleaner or ammonia according to the manufacturer's directions.
5. Take care to wash all parts of the tank, including the inside top surface. Start agitation in the sprayer and thoroughly recirculate the cleaning solution for at least 15 minutes. All visible deposits must be removed from the spraying system.
6. Flush hoses, spray lines, and nozzles for at least 1 minute with the cleaning solution.
7. Remove nozzles, screens, and strainers and clean separately in the cleaning solution after completing the above procedures.
8. Drain pump, filter, and lines.
9. Repeat steps 2 and 3.
10. Rinse the complete spraying system with clean water.
11. Clean and wash off the outside of the entire sprayer and boom.
12. All rinse water must be disposed of in compliance with local, state, and federal guidelines.

ROTATIONAL CROPS

When counting days from the application of this product, do not count days when the ground is frozen. Moisture is essential for the degradation of this herbicide in soil. If dry weather prevails, use cultivation to allow herbicide contact with moist soil.

No rotational cropping restrictions apply when rotating to soybean with Roundup Ready 2 Xtend® Technology or XtendFlex® Technology or to cotton seed with XtendFlex® Technology (including Bollgard® 3 XtendFlex® Cotton, Bollgard II® XtendFlex® Cotton, or XtendFlex® Cotton). For other crops, the interval between application and planting rotational crop is given below. Planting at intervals less than specified below may result in crop injury.

For application rates of this product of **22 fluid ounces per acre per year:**

- No planting restrictions apply beyond 120 days after application.
- East of the Mississippi River:
  - Wait a minimum of 30 days for 22 fluid ounces applied per acre before planting.
- West of the Mississippi River:
  - Wait a minimum of 45 days for 22 fluid ounces applied per acre before planting.
  - In areas with less than 30 inches of annual rainfall wait a minimum of 100 days before planting (furrow and/or overhead irrigation can be included in rainfall determination).

For application rates of this product of **44 to 88 fluid ounces per acre per year:**

- In areas with less than 30 inches of annual rainfall:
  - Wait a minimum of 180 days before planting crops (furrow and/or overhead irrigation can be included in rainfall determination).
- In areas with 30 inches or more annual rainfall:
  - Wait a minimum of 120 days after application before planting.

WEEDS CONTROLLED OR SUPPRESSED

General Weed List, Including ALS-, Glyphosate-, and Triazine-Resistant Biotypes

ANNUAL WEEDS		
Alkanet	Flixweed	Pusley, Florida
Amaranth, Palmer, Powell, Spiny	Fumitory	Radish, Wild
Aster, Slender	Goosefoot, Nettleleaf	Ragweed, Common, Giant (Buffaloweed), Lance-Leaf
Bedstraw, Catchweed	Hempnettle	Rocket, London, Yellow
Beggarweed, Florida	Henbit	Rubberweed, Bitter (Bitterweed)
Broomweed, Common	Jacobs-Ladder	Salsify
Buckwheat, Tartary, Wild	Jimsonweed	Senna, Coffee
Buffalobur	Knawel (German Moss)	Sesbania, Hemp
Burclover, California	Knotweed, Prostrate	Shepherdpurse
Burcucumber	Kochia	Sicklepod
Buttercup, Corn, Creeping, Roughseed, Western Field	Ladysthumb	Sida, Prickly (Teaweed)
Carpetweed	Lambsquarters Common	Smartweed, Green, Pennsylvania
Catchfly, Nightflowering	Lettuce, Miners, Prickly	Sneezeweed, Bitter
Chamomile, Corn	Mallow, Common, Venice	Sowthistle, Annual, Spiny
Chevil, Bur	Marestail (Horseweed)	Spanish Needles
Chickweed, Common	Mayweed	Spikeweed, Common
Clovers	Morningglory, Ivyleaf, Tall	Spurge, Prostrate, Leafy
Cockle, Corn, Cow, White	Mustard, Black, Blue, Tansy, Treacle, Tumble, Wild, Yellowtops	Spurry, Corn
Cocklebur, Common	Nightshade, Black, Cutleaf	Starbur, Bristly
Copperleaf, Hophornbeam	Pennycress, Field (Fanweed, Frenchweed, Stinkweed)	Starwort, Little
Cornflower (Bachelor Button)	Pepperweed, Virginia (Peppergrass)	Sumpweed, Rough
Croton, Tropic, Woolly	Pigweed, Prostrate, Redroot (Carelessweed), Rough, Smooth, Tumble	Sunflower, Common (Wild), Volunteer
Daisy, English	Pineappleweed	Thistle, Russian
Dragonhead, American	Poorjoe	Velvetleaf
Eveningprimrose, Cutleaf	Poppy, Red-horned	Waterhemp, Common, Tall
Falseflax, Smallseed	Puncturevine	Waterprimrose, Winged
Fleabane, Annual	Purslane, Common	Wormwood

BIENNIAL WEEDS		
Burdock, Common	Gromwell	Starthistle, Yellow
Carrot, Wild (Queen Anne's Lace)	Knapweed, Diffuse, Spotted	Sweetclover
Cockle, White	Mallow, Dwarf	Teasel
Eveningprimrose, Common	Plantain, Bracted	Thistle, Bull, Milk, Musk, Plumeless
Geranium, Carolina	Ragwort, Tansy	

PERENNIAL WEEDS		
Alfalfa	Garlic, Wild	Smartweed, Swamp
Artichoke, Jerusalem	Goldenrod, Canada, Missouri	Snakeweed, Broom
Aster, Spiny, Whiteheath	Goldenweed, Common	Sorrel, Red (Sheep Sorrel)
Bedstraw, Smooth	Hawkweed	Sowthistle, Perennial
Bindweed, Field, Hedge	Henbane, Black	Spurge, Leafy
Blueweed, Texas	Horsenettle, Carolina	Sundrops
Bursage, Woollyleaf (Bur Ragweed, Povertyweed)	Ironweed	Thistle, Canada, Scotch
Buttercup, Tall	Knapweed, Black, Diffuse, Russian, Spotted	Toadflex, Dalmatian
Campion, Bladder	Milkweed, Climbing, Common, Honeyvine, Western Whorled	Tropical Soda Apple
Chickweed, Field, Mouseear	Nettle, Stinging	Trumpetcreeper (Buckvine)
Chicory	Nightshade, Silverleaf (White Horsenettle)	Vetch
Clover, Hop	Onion, Wild	Waterhemlock, Spotted
Dandelion, Common	Plantain, Broadleaf, Buckhorn	Waterprimrose, Creeping
Dock Broadleaf (Bitterdock), Curly	Pokeweed	Woodsorrel, Creeping, Yellow
Dogbane, Hemp	Ragweed, Western	Wormwood, Absinth, Louisiana
Dogfennel (Cypressweed)	Redvine	Yankeeweed
Fern, Bracken	Sericia Lespedeza	Yarrow, Common

SPECIFIC USE DIRECTIONS

CROPS WITH XTEND® TECHNOLOGY

Cotton with XtendFlex® Technology (including Bollgard II® XtendFlex® COTTON, Bollgard® 3 XtendFlex® COTTON, or XtendFlex® COTTON) and soybean with Roundup Ready 2 Xtend® Technology or XtendFlex® Technology CONTAIN A PATENTED GENE THAT PROVIDES TOLERANCE TO DICAMBA, THE ACTIVE INGREDIENT IN THIS PRODUCT. THIS PRODUCT WILL CAUSE SEVERE CROP INJURY OR DESTRUCTION AND YIELD LOSS IF APPLIED TO COTTON AND SOYBEAN THAT ARE NOT DICAMBA TOLERANT, INCLUDING COTTON AND SOYBEAN WITH A TRAIT ENGINEERED TO CONFER TOLERANCE TO AUXIN HERBICIDES OTHER THAN DICAMBA. FOLLOW THE REQUIREMENTS SET FORTH HEREIN TO PREVENT SEVERE CROP INJURY OR DESTRUCTION AND YIELD LOSS. CONTACT WITH FOLIAGE, GREEN STEMS, OR FRUIT OF CROPS, OR ANY DESIRABLE PLANTS THAT DO NOT CONTAIN A DICAMBA TOLERANCE GENE OR ARE NOT NATURALLY TOLERANT TO DICAMBA, COULD RESULT IN SEVERE PLANT INJURY OR DESTRUCTION.

XtendiMax® With VaporGrip® Technology is approved by U.S. EPA for use in cotton with XtendFlex® Technology and in soybean with Roundup Ready 2 Xtend® Technology or XtendFlex® Technology only in the following states, subject to county restriction as noted: Alabama, Arkansas, Arizona, Colorado, Delaware, Florida (excluding Palm Beach County), Georgia, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maryland, Michigan, Minnesota, Mississippi, Missouri, Nebraska, New Jersey, New Mexico, New York, North Carolina, North Dakota, Oklahoma, Ohio, Pennsylvania, South Carolina, South Dakota, Tennessee (excluding Wilson County), Texas, Virginia, West Virginia, Wisconsin.

Information on cotton with XtendFlex® Technology and on soybean with Roundup Ready 2 Xtend® Technology or XtendFlex® Technology can be obtained from your seed supplier or Bayer representative. Cotton with XtendFlex® Technology and soybean with Roundup Ready 2 Xtend® Technology or XtendFlex® Technology must be purchased from an authorized licensed seed supplier.

Cotton with XtendFlex® Technology, soybean with Roundup Ready 2 Xtend® Technology or XtendFlex® Technology, and methods of controlling weeds and applying dicamba in cotton with XtendFlex® Technology and in soybean with Roundup Ready 2 Xtend® Technology or XtendFlex® Technology are protected under U.S. patent law. No license to use cotton with XtendFlex® Technology or soybean with Roundup Ready 2 Xtend® Technology or XtendFlex® Technology is granted or implied with the purchase of this herbicide product. Cotton with XtendFlex® Technology and soybean with Roundup Ready 2 Xtend® Technology or XtendFlex® Technology are owned by Bayer and a license must be obtained from Bayer before using it. Contact your Authorized Bayer Retailer for information on obtaining a license to use cotton with XtendFlex® Technology and soybean with Roundup Ready 2 Xtend® Technology or XtendFlex® Technology.

COTTON WITH XTENDFLEX® TECHNOLOGY	
Application Rate	• **Burndown/Early Preplant, Preplant, At-Planting, Preemergence:** Apply ONLY 22 fluid ounces (0.5 lb. acid equivalent (a.e.) dicamba) per acre for a single burndown/early preplant, preplant, at-planting, or preemergence application. • **Postemergence (in-crop):** For any single, in-crop application, apply ONLY 22 fluid ounces (0.5 lb. a.e. dicamba) per acre.
Maximum Annual Rates	• *Total of all Burndown/Early Preplant, Preplant, At-Planting, and Preemergence applications*: 44 fluid ounces per acre (1.0 lb. a.e. dicamba per acre)

	• *Total of all in-crop applications*: 44 fluid ounces per acre (1.0 lb. a.e. dicamba per acre) • *Combined total per year for all applications*: 88 fluid ounces per acre (2.0 lb. a.e. dicamba per acre)
Application Timing	• **Burndown/Early Preplant, Preplant, At-Planting, Preemergence:** This product may be applied before, during, or immediately after planting. • **Postemergence (in-crop):** This product may be applied in-crop up to and including July 30.
Number of Applications	• Sequential applications of this product may be necessary to control new flushes of weeds or on tough-to-control weeds. Allow at least 7 days between applications. • A maximum of **two** burndown/early preplant, preplant, at-planting, and preemergence and **two** in-crop applications may be made.
Spray Volume	• Apply this product in a minimum of 15 gallons of spray solution per acre as a broadcast application. • Use 20 gallons per acre or greater when treating dense weed canopy/vegetation.
Livestock Grazing or Feeding	• Permitted.
Use Precautions	• Refer to the "Weeds Controlled or Suppressed" section of this label for specific weeds controlled. • For best performance, control weeds early when they are less than 4 inches. • Postemergence applications of this product mixed with adjuvants may cause a leaf response to cotton with XtendFlex® Technology. The symptoms usually appear as necrotic spots on fully expanded leaves. EC-based products that are tank mixed with products containing dicamba may increase the severity of the leaf damage. • For postemergence applications with a hooded in-row sprayer, cotton must be a minimum of 15 inches tall at the time of application. • For postemergence applications with a directed layby sprayer, the release point for the herbicide must not be more than 10 inches from the soil and cotton must be at least 20 inches in height. Spray tip must be angled downward to the soil making sure no spray droplets remain in the air.
Use Restrictions	• DO NOT apply **less than** 22 fluid ounces (0.5 lb. a.e. dicamba) per acre. • DO NOT apply **more than** 22 fluid ounces (0.5 lb. a.e. dicamba) per acre. • DO NOT exceed two pre-emergent applications. • DO NOT exceed two post-emergent applications. • DO NOT exceed 88 fluid ounces per acre (2.0 lb. a.e. dicamba per acre) per year.

SOYBEAN WITH ROUNDUP READY 2 XTEND® TECHNOLOGY OR XTENDFLEX® TECHNOLOGY	
Application Rate	• **Burndown/Early Preplant, Preplant, At-Planting, Preemergence:** Apply ONLY 22 fluid ounces (0.5 lb. acid equivalent (a.e.) dicamba) per acre for a single burndown/early preplant, preplant, at-planting, or preemergence application. • **Postemergence (in-crop):** For any single, in-crop application, apply ONLY 22 fluid ounces (0.5 lb. a.e. dicamba) per acre.
Maximum Annual Rates	• *Total of all Burndown/Early Preplant, Preplant, At-Planting, and Preemergence applications*: 44 fluid ounces per acre (1.0 lb. a.e. dicamba per acre) • *Total of all in-crop applications*: 44 fluid ounces per acre (1.0 lb. a.e. dicamba per acre) • *Combined total per year for all applications*: 88 fluid ounces per acre (2.0 lb. a.e. dicamba per acre)
Application Timing	• **Burndown/Early Preplant, Preplant, At-Planting, Preemergence:** This product may be applied before, during, or immediately after planting. • **Postemergence (in-crop):** This product may only be applied in-crop up to and including June 30. Applications occurring after R1 are prohibited as crop response may occur.
Number of Applications	• A second application may be necessary to control new flushes of weeds. Allow at least 7 days between applications. For best results, apply after some weed re-growth has occurred. • A maximum of **two** burndown/early preplant, preplant, at-planting, and preemergence and **two** in-crop applications may be made.
Spray Volume	• Apply this product in a minimum of 15 gallons of spray solution per acre as a broadcast application. • Use 20 gallons per acre or greater when treating dense weed canopy/vegetation.
Livestock Grazing or Feeding	• Permitted.
Use Precautions	• Refer to the "Weeds Controlled or Suppressed" section of this label for specific weeds controlled. • For best performance, control weeds early when they are less than 4 inches. • Postemergence application under stressful environments may cause temporary loss of turgor, a response commonly described as leaf droop in soybean with Roundup Ready 2 Xtend® Technology or XtendFlex® Technology. Typically, affected plants recover in 1-3 days depending on the level of droop and environmental conditions. • For postemergence applications with a hooded in-row sprayer, soybeans must be a minimum of 15 inches tall at the time of application. • For postemergence applications with a directed layby sprayer, the release point for the herbicide must not be more than 10 inches from the soil and soybeans must be at least 20 inches in height. Spray tip must be angled downward to the soil making sure no spray droplets remain in the air
Use Restrictions	• DO NOT apply **less than** 22 fluid ounces (0.5 lb. a.e. dicamba) per acre. • DO NOT apply **more than** 22 fluid ounces (0.5 lb. a.e. dicamba) per acre.

	• DO NOT exceed two pre-emergent applications. • DO NOT exceed two post-emergent applications. • DO NOT exceed 88 fluid ounces per acre (2.0 lb. a.e. dicamba per acre) per year.

STORAGE AND DISPOSAL

Proper pesticide storage and disposal are essential to protect against exposure to people and the environment due to leaks and spills, excess product or waste, and vandalism. Do not allow this product to contaminate water, foodstuffs, feed or seed by storage or disposal.

Pesticide storage
Store pesticides away from food, pet food, feed, seed, fertilizers, and veterinary supplies. Keep container closed to prevent spills and contamination.

Pesticide disposal
To avoid wastes, use all material in this container, including rinsate, by application according to label directions. If wastes cannot be avoided, offer remaining product to a waste disposal facility or pesticide disposal program. Such programs are often run by state or local governments or by industry. All disposal must be in accordance with applicable federal, state, and local regulations and procedures.

Container handling and disposal
[*Insert appropriate Container Handling and Disposal Statement and Refilling Limitation from the following options*]

[*CONTAINER HANDLING AND DISPOSAL STATEMENT AND REFILLING LIMITATION FOR NONREFILLABLE RIGID CONTAINERS OF LESS THAN 1-GALLON CAPACITY*]
Nonrefillable container. Do not reuse or refill this container.

[*Alternative container statement:* Nonrefillable container. Do not reuse this container to hold materials other than pesticides or dilute pesticides (rinsate). After emptying and cleaning, it may be allowable to temporarily hold rinsate or other pesticide-related materials in this container. Contact your state regulatory agency to determine allowable practices in your state.]

Triple rinse this container promptly after emptying.

Triple rinse as follows: Empty the remaining contents into application equipment or mix-tank and continue to drain for 10 seconds after the flow begins to drip. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or mix-tank, or store rinsate for later use or disposal. Continue to drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times.

Once properly rinsed, some plastic [*Optional text:* agricultural] pesticide containers can be taken to a container collection site or picked up for recycling. [*Alternative container disposal statement:* Then offer the container for recycling, if available.]

[*Optional container disposal statement:* To find the nearest collection site, contact your chemical dealer or Bayer at 1-866-99BAYER (1-866-992-2937).]
If recycling is not available, dispose of in accordance with federal, state and local regulations and procedures, which may include puncturing the properly rinsed container and disposing in a sanitary landfill.

[*CONTAINER HANDLING AND DISPOSAL STATEMENT AND REFILLING LIMITATION FOR NONREFILLABLE RIGID PLASTIC 2.5-GALLON CONTAINER AND OTHER NONREFILLABLE CONTAINERS OF GREATER THAN 1-GALLON BUT EQUAL TO OR LESS THAN 5-GALLON CAPACITY*]
Nonrefillable container. Do not reuse this container to hold materials other than pesticides or dilute pesticides (rinsate). After emptying and cleaning, it may be allowable to temporarily hold rinsate or other pesticide-related materials in this container. Contact your state regulatory agency to determine allowable practices in your state.

[*Alternative container statement:* Nonrefillable container. Do not reuse or refill this container.]

Triple rinse or pressure rinse (or equivalent) this container promptly after emptying.

Triple rinse as follows: Empty the remaining contents into application equipment or mix-tank and continue to drain for 10 seconds after the flow begins to drip. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or mix-tank, or store rinsate for later use or disposal. Continue to drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times.

Pressure rinse as follows: Empty the remaining contents into application equipment or mix-tank and continue to drain for 10 seconds after the flow begins to drip. Place container so that it can drain directly into application equipment or mix-tank while rinsing, or collect rinsate for later use or disposal. Insert pressure rinsing nozzle into the side of the container and rinse at about 40 PSI for at least 30 seconds. Continue to drain for 10 seconds after the flow begins to drip.

Once properly rinsed, some plastic [*Optional text:* agricultural] pesticide containers can be taken to a container collection site or picked up for recycling. [*Alternative container disposal statement:* Then offer the container for recycling, if available.]

[*Optional container disposal statement:* To find the nearest collection site, contact your chemical dealer or Bayer at 1-866-99BAYER (1-866-992-2937).]

If recycling is not available, dispose of in accordance with federal, state and local regulations and procedures, which may include puncturing the properly rinsed container and disposing in a sanitary landfill.

[*CONTAINER HANDLING AND DISPOSAL STATEMENT AND REFILLING LIMITATION FOR NONREFILLABLE RIGID PLASTIC 30-GALLON CONTAINER AND OTHER NONREFILLABLE CONTAINERS OF GREATER THAN 5-GALLON CAPACITY*]
Nonrefillable container. Do not reuse or refill this container.

[*Alternative container statement:* Nonrefillable container. Do not reuse this container to hold materials other than pesticides or dilute pesticides (rinsate). After emptying and cleaning, it may be allowable to temporarily hold rinsate or other pesticide-related materials in this container. Contact your state regulatory agency to determine allowable practices in your state.]

Triple rinse or pressure rinse (or equivalent) this container promptly after emptying.

[*Optional label text:* For containers not equipped with pumping systems,] Triple rinse as follows: Empty the remaining contents into application equipment or mix-tank. Fill the container ¼ full with water. Replace and tighten closures. Tip the container on its side and roll it back and forth for 30 seconds, ensuring at least one complete revolution. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or mix-tank, or store rinsate for later use or disposal. Repeat this procedure two more times.

[*Alternative or additional triple rinsing instructions for large containers equipped with pumping systems:* [*Optional label text:* For large containers equipped with pumping systems,] Triple rinse as follows: Empty the remaining contents into application equipment or mix-tank. Fill the container about 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times.]

Pressure rinse as follows: Empty the remaining contents into application equipment or mix-tank and continue to drain for 10 seconds after the flow begins to drip. Place container so that it can drain directly into application equipment or mix-tank while rinsing, or collect rinsate for later use or disposal. Insert pressure rinsing nozzle into the side of the container and rinse at about 40 PSI for at least 30 seconds. Continue to drain for 10 seconds after the flow begins to drip.

Once properly rinsed, some plastic [*Optional text:* agricultural] pesticide containers can be taken to a container collection site or picked up for recycling. [*Alternative container disposal statement:* Then offer the container for recycling, if available.]

[*Optional container disposal statement:* Some container manufacturers offer container recycling. See additional information regarding manufacturer recycling programs attached to this container, if available. If no recycling information is available on this container, contact your chemical dealer or Bayer at 1-866-99BAYER (1-866-992-2937) to find the nearest recycling location.]

[*Optional container disposal statement:* To find the nearest collection site, contact your chemical dealer or Bayer at 1-866-99BAYER (1-866-992-2937).]

If recycling is not available, dispose of in accordance with federal, state and local regulations and procedures, which may include puncturing the properly rinsed container and disposing in a sanitary landfill.

[*Optional container disposal statement:* Return Properly Rinsed Container to Bayer for Recycling – Call 1-866-99BAYER (1-866-992-2937).]

[*Optional additional container disposal statement:* IBC EMPTY? – FREE CALL – 1-888-SCHUETZ (1-888-724-8389) www.schuetz.net/ticket; Schuetz ticket service]

[*Optional additional container disposal statement:* FREE IBC PICKUP] [For continental USA and Canada only.]

[*Optional additional container disposal statement:* RETURNnet SYSTEM – To return empty IBC's Email or Call – www.returnnetsystem.com – 1-888-758-SHIP (1-888-758-7447) – United States and Canada – IBCNA – Clarkston, Michigan – USA]

[*CONTAINER HANDLING AND DISPOSAL STATEMENT AND REFILLING LIMITATION FOR ALL REFILLABLE CONTAINERS, EXCEPT TRANSPORT VEHICLES*]
Refillable container. Refill this container with pesticide only. Do not reuse this container for any other purpose.

Cleaning this container before refilling is the responsibility of the refiller. Cleaning this container before final disposal is the responsibility of the person disposing of the container.

To clean this container before final disposal, empty the remaining contents from the container into application equipment or mix-tank. Fill the container about 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times.

[*Optional container disposal statement:* Then offer the container for recycling, if available.]

[*Optional container disposal statement:* Some container manufacturers offer container recycling. See additional information regarding manufacturer recycling programs attached to this container, if available. If no recycling information is available on this container, contact your chemical dealer or Bayer at 1-866-99BAYER (1-866-992-2937) to find the nearest recycling location.]

[*Optional additional container disposal statement:* IBC EMPTY? – FREE CALL – 1-888-SCHUETZ (1-888-724-8389) www.schuetz.net/ticket; Schuetz ticket service]

[*Optional additional container disposal statement:* FREE IBC PICKUP] [For continental USA and Canada only.]

[*Optional additional container disposal statement:* RETURNnet SYSTEM – To return empty IBC's Email or Call – www.returnnetsystem.com – 1-888-758-SHIP (1-888-758-7447) – United States and Canada – IBCNA – Clarkston, Michigan – USA]

[*Optional container disposal statement:* To obtain information about recycling refillable containers, contact Bayer at 1-866-99BAYER (1-866-992-2937).]

[*Optional container disposal statement:* Return Properly Rinsed Container to Bayer for Recycling – Call 1-866-99BAYER (1-866-992-2937).]

[*Optional additional container label statements for the CUBE refillable packaging system only:*

CUBE Bayer Refillable Delivery System
FEATURES INCLUDE:
- Automatic Venting
- Heavy duty one-way 2-inch camloc ball valve with protective shield door
- Complete coated steel protective enclosure
- Durable 4-way plastic pallet
- Lift door to access one-way valve]

CONDITIONS OF SALE AND LIMITATIONS OF WARRANTY AND LIABILITY

Read the entire Directions for Use, Conditions, Disclaimer of Warranties, and Limitations of Liability before buying or using this product. If terms are not acceptable, return the unopened product container at once.

By using this product, user or buyer accepts the following Conditions, Disclaimer of Warranties, and Limitations of Liability.

CONDITIONS: The directions for use of this product are believed to be adequate and must be followed carefully. However, it is impossible to eliminate all risks associated with the use of this product. Crop injury, ineffectiveness, or other unintended consequences may result because of such factors as weather conditions, presence of other materials, or the manner of use or application inconsistent with this label (including conditions noted on the label , such as unfavorable soil conditions, unfavorable climate conditions, etc.), all of which are beyond the control of Bayer CropScience LP ("Bayer") or the seller. To the extent consistent with applicable law, all such risks shall be assumed by the user or buyer. Buyer and all users shall promptly notify Bayer of any claims whether based in contract, negligence, strict liability, other tort or otherwise

DISCLAIMER OF WARRANTIES: Subject to risks as set forth in the Conditions above, Bayer warrants that this product is reasonably fit for the purposes stated on the label when used for the purposes stated on the label when used in accordance with directions. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, BAYER MAKES NO OTHER WARRANTIES, EXPRESS OR IMPLIED, OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE OR OTHERWISE. BAYER MAKES NO RECOMMENDATION OR WARRANTY HEREIN REGARDING THE USE OF ANY PRODUCTS THAT MAY APPEAR ON THE WEBSITE REFERENCED IN THE TANK MIXING INSTRUCTIONS HEREIN, REGARDLESS OF WHETHER SUCH PRODUCT IS USED ALONE OR IN A TANK MIX WITH XtendiMax® With VaporGrip® Technology. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, BAYER DISCLAIMS ANY LIABILITY WHATSOEVER FOR SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, FOR IN-CROP (OVER-THE-TOP) USES ON CROPS WITH XTEND® TECHNOLOGY, CROP SAFETY AND WEED CONTROL PERFORMANCE ARE NOT WARRANTED BY BAYER WHEN THIS PRODUCT IS USED IN CONJUNCTION WITH "BROWN BAG" OR "BIN RUN" SEED SAVED FROM PREVIOUS YEAR'S PRODUCTION AND REPLANTED. FURTHER, TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, BAYER DOES NOT WARRANT THE WEED CONTROL PERFORMANCE OF DICAMBA-RESISTANT WEED BIOTYPES.

LIMITATIONS OF LIABILITY: To the extent consistent with applicable law, the exclusive remedy of the user or buyer for any and all losses, injuries, or damages resulting from the use or handling of this product, whether in contract, warranty, tort, negligence, strict liability or otherwise, shall not exceed the purchase price paid, or at Bayer's election, the replacement of product.

These Conditions of Sales, Disclaimer of Warranties and Limitations of Liability cannot be varied by any written or verbal statements or agreements. No employee or sales agent of Bayer or seller is authorized to vary or exceed the terms of the Disclaimer of Warranties or Limitations of Liability in any manner.

Bollgard II®, Bollgard®, Degree Xtra®, Field Master®, Harness®, Roundup Ready®, Roundup Ready 2 Xtend®, Roundup PowerMAX®, RT 3®, Roundup WeatherMAX®, XtendiMax®, XtendFlex®, and VaporGrip® are registered trademarks of Bayer Technology LLC. All other trademarks are the property of their respective owners.

PRODUCED FOR

Bayer CropScience

Bayer CropScience LP
800 N. Lindbergh Blvd.
St. Louis, MO 63167
1-866-99BAYER (1-866-992-2937)

XTENDIMAX® WITH VAPORGRIP® TECHNOLOGY (PENDING) 10/24/2020

RESTRICTED USE PESTICIDE
To be used by certified applicators only; NOT to be used by uncertified persons working under the supervision of a certified applicator, except that uncertified persons may transport containers.

This labeling expires on ~~XX~~12/~~XX~~20/2025. DO NOT use or distribute this product after ~~XX~~12/~~XX~~20/2025.

DICAMBA	GROUP 4	HERBICIDE

XtendiMax® With VaporGrip® Technology

ABN: M1768 Herbicide

For weed control in cotton with XtendFlex® Technology (dicamba-tolerant cotton) and soybean with Roundup Ready 2 Xtend® Technology or XtendFlex® Technology (dicamba-tolerant soybean).

XtendiMax® With VaporGrip® Technology is approved by U.S. EPA for use in dicamba-tolerant cotton and dicamba-tolerant soybeans only in the following states, subject to county restrictions as noted: Alabama, Arkansas, Arizona, Colorado, Delaware, Florida (excluding Palm Beach County), Georgia, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maryland, Michigan, Minnesota, Mississippi, Missouri, Nebraska, New Jersey, New Mexico, New York, North Carolina, North Dakota, Oklahoma, Ohio, Pennsylvania, South Carolina, South Dakota, Tennessee (excluding Wilson County), Texas, Virginia, West Virginia, Wisconsin.

Check the registration status of each product in each state before using.

ACTIVE INGREDIENT: Dicamba
Diglycolamine salt of dicamba (3,6-dichloro-*o*-anisic acid)* **42.80%**
OTHER INGREDIENTS: **57.20%**
TOTAL: **100.00%**
*Contains 29.0% 3,6-dichloro-*o*-anisic acid (2.9 pounds acid equivalent per U.S. gallon or 350 grams per liter)

EPA Reg. No. 264-RERN **EPA Est. No.**

CAUTION

KEEP OUT OF REACH OF CHILDREN

For MEDICAL and TRANSPORTATION Emergencies ONLY Call 24 Hours a Day 1-800-334-7577

For PRODUCT USE Information Call 1-866-99BAYER (1-866-992-2937)

For Incidence of Non-performance or Off-Target Movement or for Questions Regarding Buffer Requirements or Sensitive Crop Registries Call 1-844-RRXTEND (1-844-779-8363)

Please refer to [back panel] [booklet] for additional precautionary statements and directions for use. [Note to reviewer: Location of additional precautionary statements and directions for use will vary between those listed, depending on container type/size.]

Net Contents:

FIRST AID	
IF IN EYES:	• Hold eye open and rinse slowly and gently with water for 15 to 20 minutes. • Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.

	• Call a poison control center or doctor for treatment advice.
IF SWALLOWED:	• Call a poison control center or doctor immediately for treatment advice. • Have person sip a glass of water if able to swallow. • DO NOT induce vomiting unless told to do so by a poison control center or doctor. • DO NOT give anything by mouth to an unconscious person.
IF ON SKIN OR CLOTHING:	• Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15 to 20 minutes. • Call a poison control center or doctor for treatment advice.
In case of emergency, call the toll-free Bayer Emergency Response telephone number: 1-800-334-7577. Have the product container or label with you when calling a poison control center or doctor or when going for treatment.	

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION

- Causes moderate eye irritation.
- Avoid contact with eyes or clothing.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

All mixers, loaders, applicators, and other handlers must wear:

- Long-sleeved shirt and long pants
- Waterproof gloves
- Shoes plus socks

Follow the manufacturer's instructions for cleaning and maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

ENGINEERING CONTROLS

When handlers use closed systems, or enclosed cabs in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240 (d) (4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

IMPORTANT: When reduced PPE is worn because a closed system is being used, handlers must be provided all PPE specified above for "all mixers, loaders, applicators, and other handlers" and have such PPE immediately available for use in an emergency, such as a spill or equipment breakdown.

USER SAFETY RECOMMENDATIONS
User should: • Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet. • Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. • Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

ENVIRONMENTAL HAZARDS

DO NOT apply directly to water, or to areas where surface water is present, or to intertidal areas below the mean high-water mark. DO NOT contaminate water when disposing of equipment washwaters or rinsate. Apply this product only as directed on the label.

Ground Water Advisory: This chemical is known to leach through soil into ground water under certain conditions as a result of agricultural use. Use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in ground water contamination.

GROUND AND SURFACE WATER PROTECTION

Point source contamination: To prevent point source contamination, DO NOT mix or load this pesticide product within 50 feet of wells (including abandoned wells and drainage wells), sink holes, perennial or intermittent streams and rivers, and natural or impounded lakes and reservoirs. DO NOT apply pesticide product within 50 feet of wells. This setback does not apply to properly capped or plugged abandoned wells and does not apply to impervious pad or properly diked mixing/loading areas as described below.

Mixing, loading, rinsing, or washing operations performed within 50 feet of a well are allowed only when conducted on an impervious pad constructed to withstand the weight of the heaviest load that may be on or move across the pad. The pad must be self-contained to prevent surface water flow over or from the pad. The pad capacity must be maintained at 110% that of the largest pesticide container or application equipment used on the pad and have sufficient capacity to contain all product spills, equipment or container leaks, equipment washwaters, and rainwater that may fall on the pad. The containment capacity does not apply to vehicles delivering pesticide shipments to the mixing/loading site. States may have in effect additional requirements regarding wellhead setbacks and operational containment.

Care must be taken when using this product to prevent: a) back siphoning into wells, b) spills, or c) improper disposal of excess pesticide, spray mixtures, or rinsates. Check valves or anti-siphoning devices must be used on all mixing equipment.

Movement by surface runoff or through soil: DO NOT apply under conditions that favor runoff. DO NOT apply if soil is saturated with water or when rainfall that may exceed soil field capacity is forecasted to occur within 48 hours.

Under some conditions, dicamba has the potential for runoff several days after application. Poorly draining, wet, or erodible soils with readily visible slopes toward adjacent sensitive areas are more prone to produce runoff. When used on erodible soils, best management practices for minimizing runoff should be employed. Consult your local Soil Conservation Service for recommendations in your use area.

Ground water contamination may occur in areas where soils are permeable or coarse and ground water is near the surface. DO NOT apply to impervious substrates such as paved or highly compacted surfaces in areas with high potential for ground water contamination. DO NOT apply to soils classified as sand with less than 3% organic matter and where ground water depth is shallow.

Movement by water erosion of treated soil: DO NOT apply or incorporate this product through any type of irrigation equipment nor by flood or furrow irrigation. Ensure treated areas have received at least one-half inch rainfall (or irrigation) before using tailwater for subsequent irrigation of other fields.

PROTECTING ENDANGERED SPECIES / PESTICIDE USE LIMITATION AREAS

The use of any pesticide in a manner that may kill or otherwise harm an endangered species or adversely modify their habitat is a violation of federal law. Use of this product in a manner inconsistent with its labeling may pose a hazard to endangered or threatened species. **When using this product, you must follow the measures contained in the Endangered Species Protection Bulletin for the area in which you are applying the product.** To obtain Bulletins, no more than six months before using this product, consult https://www.epa.gov/endangered-species/bulletins-live-two-view-bulletins or call 1-844-447-3813. You must use the Bulletin valid for the month in which you will apply the product.

Commented [SC1]: This terminology was in the 2018 registration. Need to discuss.

It is a Federal offense to use any pesticide in a manner that results in the death of an endangered species.

PHYSICAL OR CHEMICAL HAZARDS

DO NOT store or heat near oxidizing agents as a hazardous chemical reaction may occur.

DIRECTIONS FOR USE

RESTRICTED USE PESTICIDE

Only for retail sale to and use by Certified Applicators. NOT to be used by uncertified persons working under the supervision of a certified applicator, except that uncertified persons may transport containers.

It is a violation of Federal law to use this product in any manner inconsistent with its labeling. This labeling must be in the user's possession during application. Read the entire label before using this product.

DO NOT apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

For important crop safety information, refer to the "Specific Use Directions" section for each crop.

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. This standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses and of handlers of agricultural pesticides. It contains requirements for training, decontamination, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about Personal Protective Equipment (PPE), notification to

workers, and restricted-entry intervals. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.
DO NOT enter or allow worker entry into treated areas during the restricted-entry interval **(REI) of 24 hours.**

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water is:

- Coveralls worn over short-sleeved shirt and short pants
- Chemical-resistant footwear plus socks
- Waterproof gloves
- Chemical-resistant headgear for overhead exposure
- Protective eyewear

~~NON-AGRICULTURAL USE REQUIREMENTS~~

~~The requirements in this box apply to uses of this product that are NOT within the scope of the Worker Protection Standard for agricultural pesticides (40 CFR Part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries, or greenhouses.~~

~~DO NOT enter or allow people (or pets) to enter the treated area until sprays have dried.~~

~~DO NOT apply this product in a way that will contact workers or other persons, either directly or through drift.~~

PRODUCT INFORMATION

XtendiMax® With VaporGrip® Technology is:

- a water-soluble formulation intended for control and suppression of many annual, biennial, and perennial broadleaf weeds listed in the "Weeds Controlled or Suppressed" section of this label. This product may be used for control of these weeds in cotton with XtendFlex® Technology and soybean with Roundup Ready 2 Xtend® Technology or XtendFlex® Technology.
- a contact, systemic herbicide, with limited soil activity on small seeded broadleaf weeds, including waterhemp, lambsquarters, and Palmer pigweed~~, depending on rainfall and soil type~~.
- readily absorbed by plants through shoot and root uptake, translocates throughout the plant's system, and accumulates in areas of active growth. XtendiMax® With VaporGrip® Technology interferes with plant growth hormones (auxins) resulting in death of many broadleaf weeds.

Additional state restrictions and requirements may apply. The user must comply with any additional state requirements and restrictions.

Refer to the specific use directions and restrictions in each crop table. Follow all requirements and restrictions on www.xtendimaxapplicationrequirements.com.

APPLICATION REQUIREMENTS OVERVIEW

Read and follow all applicable restrictions, precautions, and directions on the container label and booklet and at www.xtendimaxapplicationrequirements.com. For product questions or inquiries and/or to report any nonperformance of this product against any particular weed species, call 1-844-RRXTEND (1-844-779-8363). It is recommended that the certified applicator visit www.xtendimaxapplicationrequirements.com to obtain a copy of the Overview of Application Requirements for reference prior to and during application.

REQUIREMENTS	LABEL SECTIONS
Mandatory Training: ☐ Prior to applying, applicator must complete dicamba-specific training. Only certified applicators may apply this product; NOT to be used by uncertified persons working under the supervision of a certified applicator, except that uncertified persons may transport containers.	➢ Training (pp. 5-6)
Record Keeping: ☐ Records must be created within 72 hours of every application. Records must be kept for a period of two years.	➢ Record Keeping (p. 6)
Application: ☐ For EVERY application of XtendiMax® With VaporGrip® Technology, an ~~EPA~~-approved **Volatility Reduction Adjuvant (VRA)** must be included in the spray solution. An ~~EPA~~-approved **Drift Reduction Adjuvant (DRA)** must also be included in the spray solution, unless otherwise indicated on www.xtendimaxapplicationrequirements.com. Refer to the website for a list of ~~EPA~~-approved DRAs and VRAs.	➢ Tank Mix Partners ~~and Compatibility Testing~~ (p. 9) ➢ Specific Use Directions (pp. 12-14)

☐ *Rate and Timing*: Apply 22 fluid ounces per acre (0.5 lb. a.e. dicamba) for any single pre-emergent or in-crop application in: ○ Cotton with XtendFlex® Technology up to and including July 30 (DO NOT apply after July 30 regardless of growth stage), and ○ Soybean with Roundup Ready 2 Xtend® Technology or XtendFlex® Technology up to and including June 30. Applications occurring after R1 are prohibited as crop response may occur and in no event can applications be made after June 30 regardless of growth stage. ○ For details, see the "Specific Use Directions" section. ☐ *Spray volume:* Apply in a minimum of 15 gallons of spray solution per acre. ☐ *Tank mixing*: Use only approved tank-mix partners found at www.xtendimaxapplicationrequirements.com. ○ Refer to all product labels to determine mix order or perform a mix compatibility test.	➢ Specific Use Directions (pp. 12-14) ➢ Tank Mix Partners and ~~Compatibility Testing~~ (p. 9)
Application Equipment: ☐ *Spray system equipment cleanout*: Ensure entire sprayer system is properly cleaned before and after application. ☐ *Nozzles*: Use only approved nozzles within specified pressures found at www.xtendimaxapplicationrequirements.com. ☐ *Spray boom height*: Maximum boom height is 24 inches above target pest or crop canopy. ☐ *Ground speed*: DO NOT exceed 15 mph.	➢ Equipment Requirements (pp. 7-8)
Environmental Conditions: ☐ *Wind speed*: Apply when wind speed, measured at boom height, is 3-10 mph. ☐ *Inversions*: DO NOT spray during an inversion; only spray between one hour after sunrise and two hours before sunset. ☐ *Rainfall*: DO NOT apply this product if rain that may exceed soil field capacity and result in soil runoff is forecasted in the next 48 hours.	➢ Environmental Requirements (p. 7)
Downwind Requirements: ☐ *Sensitive crops and certain plants downwind*: DO NOT apply if sensitive crops and/or certain plants, as defined below in this label, are planted on an adjacent downwind field or area. ☐ *Downwind buffer*: After determining no adjacent sensitive crops and/or certain plants are downwind, maintain a 240-ft downwind buffer. ☐ *Endangered species*: ~~In counties where endangered species are present,~~ ~~c~~Consult Endangered Species Protection Bulletins for ESA counties and restrictions.	➢ Adjacent Sensitive Crops and Certain Plants (p. 8) ➢ Buffer Requirements (p. 8) ➢ Protecting Endangered Species (p. 3)
Drift Reduction Technology: ☐ See "Optional Use of Drift Reduction Technology" section for details on application requirements and the potential to qualify for reduced use restrictions.	➢ Optional Use of Drift Reduction Technology (pp. 8-9)

Commented [SC2]: It's a seed biology issue related to soybean only.

Formatted: Font: (Default) Arial, 9 pt

Formatted: Indent: Left: 0.5", Don't add space between paragraphs of the same style, No bullets or numbering

USE RESTRICTIONS

- DO NOT USE ANY TANK MIX PRODUCT OR ANY NOZZLE AND PRESSURE COMBINATION WITH XTENDIMAX® WITH VAPORGRIP® TECHNOLOGY THAT IS NOT IDENTIFIED ON THE LIST OF APPROVED PRODUCTS FOUND AT www.xtendimaxapplicationrequirements.com.
- DO NOT TANK MIX AMMONIUM SULFATE (AMS) WITH THIS PRODUCT.
- DO NOT EXCEED 88 FLUID OUNCES (2 POUNDS ACID EQUIVALENT (A.E.) DICAMBA) OF XTENDIMAX® WITH VAPORGRIP® TECHNOLOGY PER ACRE PER YEAR.
- DO NOT EXCEED 88 FLUID OUNCES (2 POUNDS A.E. DICAMBA) PER ACRE PER YEAR FROM ALL DICAMBA APPLICATIONS IF MORE THAN ONE DICAMBA-CONTAINING PRODUCT IS APPLIED TO THE SAME SITE WITHIN THE SAME YEAR.
- DO NOT MAKE APPLICATION OF THIS PRODUCT IF RAIN IS EXPECTED IN THE NEXT 48 HOURS THAT MAY EXCEED SOIL FIELD CAPACITY AND RESULT IN SOIL RUNOFF.
- DO NOT APPLY THROUGH ANY TYPE OF IRRIGATION EQUIPMENT. DO NOT TREAT IRRIGATION DITCHES OR WATER USED FOR CROP IRRIGATION OR DOMESTIC PURPOSES.
- DO NOT APPLY TO CROPS UNDER STRESS DUE TO LACK OF MOISTURE, HAIL DAMAGE, FLOODING, HERBICIDE INJURY, MECHANICAL INJURY, INSECTS, OR WIDELY FLUCTUATING TEMPERATURES AS INJURY MAY RESULT.
- DO NOT APPLY THIS PRODUCT IF SENSITIVE CROPS AND CERTAIN PLANTS ARE PLANTED ON AN ADJACENT DOWNWIND FIELD OR AREA.
- DO NOT APPLY THIS PRODUCT AERIALLY.
- Restricted Entry Interval (REI): 24 hours.

USE PRECAUTIONS

- In case material is released or spilled: dike and contain the spill with inert material (sand, earth, etc.) and transfer liquid and solid diking material to separate containers for disposal. Remove contaminated clothing and wash affected skin areas with soap and water. Wash clothing before re-use. Keep the spill out of all sewers and open bodies of water.
- Rainfast period: This product is rainfast four (4) hours after application to most weed species. Rainfall or irrigation occurring within four (~~4~~) hours after ~~postemergence~~ applications ~~may~~ necessitate retreatment or may otherwise result in reduced ~~the effectiveness of this product~~weed control.

Commented [SC3]: Updated this section to make it consistent with the Liberty label from Nov 2019. The runoff language is already repeated twice in this label and is not related to rainfastness.

TRAINING

Prior to using this product, users must complete dicamba-specific training to obtain certification. Once completed, dicamba-specific training is then required every other year for all users of this product. If state-specific training is required by the state where the applicator intends to apply this product, the applicator must complete training from the state or state-authorized provider. Otherwise, the applicator may complete dicamba-specific training provided either by the state/state-authorized provider or by a registrant of a dicamba product approved for in-crop use with dicamba-tolerant crops.

RECORD KEEPING

The following records must be generated as soon as practical but **no later than 72 hours after application**. The certified applicator must keep these records for a period of **two years**. Records must be made available to State Pesticide Control Official(s), USDA, and EPA upon request. See www.xtendimaxapplicationrequirements.com for an example form summarizing record keeping requirements.

Keep records of the following items for each application of XtendiMax® With VaporGrip® Technology:

1. All Items required by 7 CFR Part 110 (RECORDKEEPING ON RESTRICTED USE PESTICIDES BY CERTIFIED APPLICATORS), including:
    a. The brand or product name
    b. The EPA registration number
    c. The total amount applied
    d. The month, day, and year of application
    e. The location of the application
    f. The crop, commodity, stored product, or site of application
    g. The size of treated area
    h. The name of the certified applicator
    i. The certification number of the certified applicator
2. *Training*: Completion date and provider of required training and proof of completion.
3. *Receipts of Purchase*: Receipts or copies for the purchase of this product.
4. *Product Label*: A copy of this product label and any state special local needs label that supplements this label.

Commented [SC4]: VRA and DRA are covered specifically in #13.

~~5. *Crop Planting Date*: Record of the date at which the crop was planted.~~

~~6.~~5. *Sensitive Crops and Certain Plants Awareness*:
    a. Document that a sensitive crop registry was consulted. At a minimum, documentation must include the name of the sensitive crop registry and the date it was consulted.
    b. Record of a survey of adjacent areas documenting the sensitive crops and/or certain plants (as defined below in the "Adjacent Sensitive Crops and Certain Plants" section of this label) surrounding the field prior to application. At a minimum, records must include documentation of adjacent sensitive crops and/or certain plants and the date the survey was conducted.

~~7.~~6. *Buffer Requirement*: Record of the buffer distance implemented as directed in the "Spray Drift Management" and "Optional Use of Drift Reduction Technology" sections of this label.

~~8.~~7. *Start and Finish Times of Each Application*: Record of the time at which the application started and finished.

~~9.~~8. *Application Timing*: Record of the type of application (for example: preemergence, postemergence) and the number of days after planting if postemergence.

~~10.~~9. *Air Temperature*: Record of the air temperature in degrees Fahrenheit at the start and completion of each application.

~~11.~~10. *Wind Speed and Direction*: Record of the wind speed and direction (the direction from which the wind is blowing) at boom height at the start and completion of each application.

~~12.~~11. *Nozzle and Pressure*: Record of the spray nozzle manufacturer/brand, type, orifice size, and operating pressure used during each application of this product.

~~13.~~12. *Tank Mix Products*: Record of the brand names and EPA registration numbers (if applicable) for all products that were tank mixed with this product for each application, as well as a record of the volume of each added to the tank prior to application.

~~14.~~13. ***Mandatory Volatility and Drift Reduction Adjuvants***: Receipts or copies for the purchase of an ~~EPA~~-approved volatility reduction adjuvant, as well as a record of the volume added to the tank prior to application. Receipts or copies for the purchase of an ~~EPA~~-approved DRA and a record of the volume added to the tank prior to application, unless otherwise indicated on www.xtendimaxapplicationrequirements.com.

~~15.~~14. *Spray System Cleanout*: At a minimum, records must include confirmation that the spray system was clean before using this product and that the post-application cleanout was completed in accordance with the "Proper Spray System Equipment Cleanout" section of this label.

HERBICIDE RESISTANCE MANAGEMENT RECOMMENDATIONS

The dicamba active ingredient in XtendiMax® With VaporGrip® Technology is a Group 4 herbicide. Any weed population may contain or develop plants naturally resistant to XtendiMax® With VaporGrip® Technology and other Group 4 herbicides. The resistant biotypes may

dominate the weed population if these herbicides are used repeatedly in the same field. Appropriate resistance management strategies should be followed.

To delay herbicide resistance, take one or more of the following steps:

- Limit cultivation and/or mechanical tillage within 7 days after application, as this may result in reduced efficacy and promote regrowth of treated weeds.
- Rotate the use of XtendiMax® With VaporGrip® Technology within a growing season and among growing seasons with different herbicide groups (other than Group 4) that control the same weeds.
- Use tank mixtures with herbicides from a different herbicide Group if such use is permitted.
- Adopt an integrated weed-management program for herbicide use that includes scouting and uses historical information related to herbicide use and crop rotation and that considers tillage (or other mechanical control methods), cultural (*e.g.*, higher crop seeding rates; precision fertilizer application method and timing to favor the crop and not the weeds), biological (weed-competitive crops or varieties), and other management practices.
- Scout after herbicide application to monitor weed populations for early signs of resistance development. Indicators of possible herbicide resistance include: (1) failure to control a weed species normally controlled by the herbicide at the dose applied, especially if control is achieved on adjacent weeds; (2) a spreading patch of non-controlled plants of a particular weed species; (3) surviving plants mixed with controlled individuals of the same species. If resistance is suspected, prevent weed seed production in the affected area by an alternative herbicide from a different group or by a mechanical method such as hoeing or tillage. Prevent movement of resistant weed seeds to other fields by cleaning harvesting and tillage equipment when moving between fields and by planting clean seed.
- If a weed pest population continues to progress after treatment with this product, switch to another management strategy or herbicide with an effective mode of action, if available, and contact Bayer at 1-844-RRXTEND (1-844-779-8363).
- Contact your local extension specialist or certified crop advisors for additional pesticide resistance-management and/or integrated weed-management recommendations for specific crops and weed biotypes.
- For further information or to report suspected resistance contact Bayer at 1-844-RRXTEND (1-844-779-8363).

Management of Dicamba-Resistant Biotypes

Appropriate testing is critical in order to determine if a weed is resistant to dicamba. Contact your Bayer representative to determine if resistance in any particular weed biotype has been confirmed in your area or visit www.iwilltakeaction.com or www.weedscience.org.

The following good agronomic practices can reduce the spread of confirmed dicamba-resistant biotypes, particularly if pursued as soon as signs of resistance are observed:

- If a naturally occurring resistant biotype is present in your field, this product may be tank mixed or applied sequentially with an appropriately labeled herbicide with a different mode of action to achieve control (read "Tank Mixing" section for more information).
- Cultural and mechanical control practices (*e.g.*, crop rotation or tillage) can also be used as appropriate.
- Scout treated fields after herbicide application and control weed escapes, including resistant biotypes, before they set seed.
- Thoroughly clean equipment, as practical, for all weed seeds before leaving fields known to contain resistant biotypes.

SPRAY DRIFT MANAGEMENT

THE APPLICATOR IS RESPONSIBLE FOR AVOIDING OFF-SITE SPRAY DRIFT TO THE EXTENT CONSISTENT WITH APPLICABLE LAW. The applicator is responsible for compliance with state and local pesticide regulations, including any state or local pesticide drift regulations. DO NOT allow herbicide solution to mist, drip, drift, or splash onto desirable vegetation because severe injury or destruction to desirable broadleaf plants could result.

Applications using larger droplets reduces drift potential but will not prevent drift if the application is made improperly or under unfavorable environmental conditions. The interaction of weather-related factors and equipment must be monitored to maximize performance and on-target spray deposition. The applicator is responsible for considering all these factors when making a spray decision to the extent consistent with applicable law. BE AWARE OF NEARBY NON-TARGET SITES AND CHANGING ENVIRONMENTAL CONDITIONS (see the "Temperature Inversions" section of this label).

Environmental Requirements

Wind Speed

Wind speed must be measured in the field of application at boom height prior to and after application. Only apply when wind speed at boom height is between 3 MPH and 10 MPH during application.

Temperature Inversions

DO NOT apply this product during a temperature inversion as the off-target movement potential is high.

Applications of this product may ONLY occur one hour after sunrise through two hours before sunset. In general, temperature inversions are more likely during nighttime hours.

- Temperature inversions are characterized by increasing temperature with altitude and are common on nights with limited cloud cover and light to no wind.
- The presence of an inversion can be indicated by ground fog or, if fog is not present, by the movement of smoke from a ground source or an aircraft smoke generator. Smoke that layers and moves laterally in a concentrated cloud (under low wind conditions) indicates an inversion, while smoke that moves upward and rapidly dissipates indicates good vertical air mixing.

Equipment Requirements

DO NOT APPLY THIS PRODUCT USING AERIAL SPRAY EQUIPMENT.

Nozzle Type
To produce minimal amounts of fine spray particles, the applicator must use an approved nozzle within a specified pressure range as found at www.xtendimaxapplicationrequirements.com. DO NOT use any other nozzle and pressure combination not specifically listed on this website.

Equipment Ground Speed
DO NOT exceed a ground speed of 15 miles per hour. Select a ground speed that will deliver the desired spray volume while maintaining the desired spray pressure. Slower speeds generally result in better spray coverage and deposition on the target area. Provided the applicator can maintain the required nozzle pressure, it is recommended that tractor speed is reduced to 5 miles per hour at field edges.

Spray Boom Height
Use the minimum boom height appropriate for spray pattern overlap~~, according to~~based on nozzle selection and spacing, according to manufacturer recommendations, or 24 inches above ~~target pest or crop~~ canopy, whichever is smaller.

Adjacent Sensitive Crops and Certain Plants
DO NOT SPRAY this product when wind is blowing toward adjacent sensitive crops and certain plants, as defined immediately below.

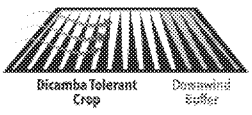
It is important for the applicator to be aware that wind direction may vary during the application. If wind direction shifts such that the wind is blowing toward adjacent sensitive crops and/or certain plants, the applicator **must STOP** the application.

Before making an application, 1) consult a sensitive crop registry (such as FieldWatch or state/federal registry), 2) survey adjacent fields and areas, and 3) confirm the type or variety of plants and crops surrounding the field prior to application. At a minimum, records must include the name of the sensitive crop registry, the date it was consulted, documentation of adjacent plants and crops/areas surrounding the field of application, and the date the survey was conducted.

Dicamba-sensitive crops and/or certain plants include, but are not limited to, non-dicamba-tolerant soybeans and cotton, tomatoes and other fruiting vegetables (EPA crop group 8), fruit trees, cucurbits (EPA crop group 9), grapes, beans, flowers, ornamentals, peas, potatoes, sunflower, tobacco, and other broadleaf plants, including if these plants are in a greenhouse. Severe injury or destruction could occur if any contact between this product and these plants occurs. Sensitive crop registries can provide additional information about sensitive crops and sensitive areas.

If you have questions regarding sensitive crop registries contact Bayer at 1-844-RRXTEND (1-844-779-8363) **prior to application**.

Buffer Requirements
After determining no adjacent sensitive crops and/or certain plants are downwind, the applicator **must always maintain a 240-foot downwind buffer** between the last treated row and the nearest downwind field edge when applying using broadcast open-boom equipment. For reduced downwind buffer distances, refer to "Optional Use of Drift Reduction Technology" section of this label.



The following areas may be included in the buffer distance composition when directly adjacent to the treated field edges:

- Roads, paved or gravel surfaces, mowed and/or managed areas adjacent to field such as rights-of-way
- Planted agricultural fields containing: corn, dicamba-tolerant cotton, dicamba-tolerant soybean, sorghum, proso millet, small grains, or sugarcane. If the applicator intends to include such crops as dicamba-tolerant cotton and/or dicamba-tolerant soybeans in the buffer distance ~~calculation~~composition, the applicator must confirm the crops are in fact dicamba-tolerant.
- Agricultural fields that have been prepared for planting
- Areas covered by the footprint of a building, silo, or other man-made structure with walls and/or roof

Commented [SC5]: Need to discuss further.

If you have questions regarding Buffer Requirement, contact Bayer at 1-844-RRXTEND (1-844-779-8363) **prior to application**.

Optional Use of Drift Reduction Technology
This product may be optionally applied using a hooded/shielded broadcast sprayer or other types of drift reduction technology (DRT)~~, such as hooded/shielded in-row or directed layby equipment,~~ for postemergence weed control as well as residual control of susceptible

weeds. The applicator must use an approved nozzle within a specified pressure range as found at www.xtendimaxapplicationrequirements.com. Use of drift reduction technology (DRT) in combination with approved nozzles is recommended to further reduce drift potential.

Applications of this product may qualify for reduced use restrictions, such as a reduced downwind buffer distance, provided a **qualified DRT** listed on www.xtendimaxapplicationrequirements.com is used and operated according to the directions and limitations provided at www.xtendimaxapplicationrequirements.com.

Hooded/Shielded Broadcast Sprayer:
For hooded/shielded sprayers, all application nozzles must be contained within the enclosed area. Shielding the boom or individual nozzles can reduce the effects of wind. However, it is the responsibility of the applicator to verify that the shields are preventing drift and not interfering with uniform deposition of the product. Applicators must ensure the sprayer system is off or controlled during turns to further prevent spray drift. Refer to the hooded/shielded sprayer manufacturer use specifications prior to use.

Requirements for Reduced Use Restrictions with Optional Hooded/Shielded Sprayer: ONLY **qualified** hooded/shielded sprayers listed on www.xtendimaxapplicationrequirements.com are eligible for reduced use restrictions when applying this product. Refer to the website for specific application requirements when using a **qualified** hooded/shielded sprayer. While this product may be applied with other (non-qualified) hooded/shielded sprayers, no reduction in use restrictions is associated with their use.

Commented [SC6]: FIFRA buffers with qualified hooded sprayers will be listed only on the XtendiMax website, which will also reference Bulletins Live! 2; ESA buffers will be listed only on the Bulletins Live! 2 website.

TANK MIX PARTNERS ~~AND COMPATIBILITY TESTING~~

Tank Mixing

It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions, limitations, and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.

All applications of this product require the inclusion of a volatility reduction adjuvant (VRA), such as a VaporGrip® Xtra Agent product or an approved VRA equivalent, in the tank mix. The inclusion of a **drift reduction adjuvant (DRA) is also required** in the tank mix, unless otherwise indicated on www.xtendimaxapplicationrequirements.com. Only tank mix products that have been tested and found to not adversely affect the offsite movement potential of XtendiMax® With VaporGrip® Technology may be tank mixed with XtendiMax® With VaporGrip® Technology. The applicator must check the website found at www.xtendimaxapplicationrequirements.com for a list of approved tank mix products no more than 7 days before applying XtendiMax® With VaporGrip® Technology.

DO NOT tank mix any product with XtendiMax® With VaporGrip® Technology unless:

1. The intended tank mix product is identified on the list of tested products found at www.xtendimaxapplicationrequirements.com;
2. The intended products are not prohibited on either this label or the label of the tank mix product; and
3. All requirements and restrictions on www.xtendimaxapplicationrequirements.com are followed.

NOTE: DO NOT use PVA (polyvinyl acetate) packets in a tank mix with products that contain boron or release free chlorine. The resultant reaction of PVA and boron or free chlorine is a plastic that is not soluble in water or solvents.

APPLICATION INSTRUCTIONS

APPLY THIS PRODUCT USING PROPERLY MAINTAINED AND CALIBRATED EQUIPMENT CAPABLE OF DELIVERING THE REQUIRED VOLUMES.

DO NOT APPLY THIS PRODUCT USING AERIAL SPAY EQUIPMENT.

XtendiMax® With VaporGrip® Technology can be applied to actively growing weeds as broadcast, band, or spot spray applications using water as a carrier. For best results, treat weeds early when they are relatively small (less than 4 inches). Timely application to small weeds early in the season will improve control and reduce weed competition.

Ground Application (Broadcast)

Water Volume: Use a minimum of 15 gallons of spray solution per broadcast acre for optimal performance. Use 20 gallons per acre or greater when treating dense weed canopy/vegetation.

Ground Application (Hooded In-Row and Directed Layby)

Using a hooded sprayer or other drift reduction technology in combination with approved nozzles may further reduce drift potential. When applying XtendiMax® With VaporGrip® Technology by hooded in-row or layby sprayers, determine the amount of herbicide and water volume needed using the following formula:

$$\frac{\text{band width (inches)}}{\text{row width (inches)}} * \text{broadcast rate per acre} = \text{rate per treated acre}$$

$$\frac{\text{band width (inches)}}{\text{row width(inches)}} * \text{broadcast spray volume per acre} = \text{spray volume per treated acre}$$

SPRAY SYSTEM EQUIPMENT CLEANOUT

You must ensure that the spray system used to apply this product is clean before using this product. Failure to properly clean the entire spray system can result in inadvertent contamination of the spray system. Contamination of the spray system may cause injury to non-dicamba-tolerant soybeans and other sensitive crops.

Inadvertent contamination can also occur in equipment used for bulk product handling and mixing prior to use in the spray system. Care should be taken to reduce contamination not only in the spray system but in any equipment used to transfer or deliver product. For example, bulk handling and mixing equipment containing this product should be segregated when possible to reduce potential for cross-contamination. Consider using block and check valves to avoid backflow during transfer. Piping should be reviewed to ensure there is not potential for product build-up. Dedicated nurse trucks and tender equipment should be used when possible.

Clean equipment **immediately after using** this product, using a **triple rinse** procedure as follows:

1. After spraying, drain the sprayer (including boom and lines) immediately. DO NOT allow the spray solution to remain in the spray boom lines overnight prior to flushing.
2. Fill tank with clean water (at least 10% volume) and ~~F~~flush tank, hoses, boom, and nozzles ~~with clean water~~. Ensure agitation for 15 minutes and then spray out solution through boom. If equipped, open boom ends and flush.
3. Inspect and clean all strainers, screens, and filters.
4. Fill tank with clean water (at least 10% of volume) and ~~P~~prepare a cleaning solution with a commercial detergent or sprayer cleaner or ammonia according to the manufacturer's directions.
5. Take care to wash all parts of the tank, including the inside top surface. Start agitation in the sprayer and thoroughly recirculate the cleaning solution for at least 15 minutes. All visible deposits must be removed from the spraying system.
6. Flush hoses, spray lines, and nozzles for at least 1 minute with the cleaning solution.
7. Remove nozzles, screens, and strainers and clean separately in the cleaning solution after completing the above procedures.
8. Drain pump, filter, and lines.
9. Repeat steps 2 and 3.
~~9.~~ 10. Rinse the complete spraying system with clean water.
~~10.~~ 11. Clean and wash off the outside of the entire sprayer and boom.
~~11.~~ 12. All rinse water must be disposed of in compliance with local, state, and federal guidelines.

Commented [SC7]: Updated the following steps to make clear how the procedure is a triple rinse.

Commented [SC8]: This is referring to the cleaning solution not the sprayer manufacturer.

ROTATIONAL CROPS

When counting days from the application of this product, do not count days when the ground is frozen. Moisture is essential for the degradation of this herbicide in soil. If dry weather prevails, use cultivation to allow herbicide contact with moist soil.

No rotational cropping restrictions apply when rotating to soybean with Roundup Ready 2 Xtend® Technology or XtendFlex® Technology or to cotton seed with XtendFlex® Technology (including Bollgard® 3 XtendFlex® Cotton, Bollgard II® XtendFlex® Cotton, or XtendFlex® Cotton). For other crops, the interval between application and planting rotational crop is given below. Planting at intervals less than specified below may result in crop injury.

For application rates of this product of **22 fluid ounces per acre per year:**

- No planting restrictions apply beyond 120 days after application.
- East of the Mississippi River:
  - Wait a minimum of 30 days for 22 fluid ounces applied per acre before planting.
- West of the Mississippi River:
  - Wait a minimum of 45 days for 22 fluid ounces applied per acre before planting.
  - In areas with less than 30 inches of annual rainfall wait a minimum of 100 days before planting (furrow and/or overhead irrigation can be included in rainfall determination).

For application rates of this product of **44 to 88 fluid ounces per acre per year:**

- In areas with less than 30 inches of annual rainfall:
  - Wait a minimum of 180 days before planting crops (furrow and/or overhead irrigation can be included in rainfall determination).
- In areas with 30 inches or more annual rainfall:
  - Wait a minimum of 120 days after application before planting.

WEEDS CONTROLLED OR SUPPRESSED

General Weed List, Including ALS-, Glyphosate-, and Triazine-Resistant Biotypes

ANNUAL WEEDS		
Alkanet	Flixweed	Pusley, Florida
Amaranth, Palmer, Powell, Spiny	Fumitory	Radish, Wild
Aster, Slender	Goosefoot, Nettleleaf	Ragweed, Common, Giant (Buffaloweed), Lance-Leaf
Bedstraw, Catchweed	Hempnettle	Rocket, London, Yellow
Beggarweed, Florida	Henbit	Rubberweed, Bitter (Bitterweed)
Broomweed, Common	Jacobs-Ladder	Salsify
Buckwheat, Tartary, Wild	Jimsonweed	Senna, Coffee
Buffalobur	Knawel (German Moss)	Sesbania, Hemp
Burclover, California	Knotweed, Prostrate	Shepherdpurse
Burcucumber	Kochia	Sicklepod
Buttercup, Corn, Creeping, Roughseed, Western Field	Ladysthumb	Sida, Prickly (Teaweed)
Carpetweed	Lambsquarters Common	Smartweed, Green, Pennsylvania
Catchfly, Nightflowering	Lettuce, Miners, Prickly	Sneezeweed, Bitter
Chamomile, Corn	Mallow, Common, Venice	Sowthistle, Annual, Spiny
Chevil, Bur	Marestail (Horseweed)	Spanish Needles
Chickweed, Common	Mayweed	Spikeweed, Common
Clovers	Morningglory, Ivyleaf, Tall	Spurge, Prostrate, Leafy
Cockle, Corn, Cow, White	Mustard, Black, Blue, Tansy, Treacle, Tumble, Wild, Yellowtops	Spurry, Corn
Cocklebur, Common	Nightshade, Black, Cutleaf	Starbur, Bristly
Copperleaf, Hophornbeam	Pennycress, Field (Fanweed, Frenchweed, Stinkweed)	Starwort, Little
Cornflower (Bachelor Button)	Pepperweed, Virginia (Peppergrass)	Sumpweed, Rough
Croton, Tropic, Woolly	Pigweed, Prostrate, Redroot (Carelessweed), Rough, Smooth, Tumble	Sunflower, Common (Wild), Volunteer
Daisy, English	Pineappleweed	Thistle, Russian
Dragonhead, American	Poorjoe	Velvetleaf
Eveningprimrose, Cutleaf	Poppy, Red-horned	Waterhemp, Common, Tall
Falseflax, Smallseed	Puncturevine	Waterprimrose, Winged
Fleabane, Annual	Purslane, Common	Wormwood

BIENNIAL WEEDS		
Burdock, Common	Gromwell	Starthistle, Yellow
Carrot, Wild (Queen Anne's Lace)	Knapweed, Diffuse, Spotted	Sweetclover
Cockle, White	Mallow, Dwarf	Teasel
Eveningprimrose, Common	Plantain, Bracted	Thistle, Bull, Milk, Musk, Plumeless
Geranium, Carolina	Ragwort, Tansy	

ED_005138A_00000315-00011

PERENNIAL WEEDS		
Alfalfa	Garlic, Wild	Smartweed, Swamp
Artichoke, Jerusalem	Goldenrod, Canada, Missouri	Snakeweed, Broom
Aster, Spiny, Whiteheath	Goldenweed, Common	Sorrel, Red (Sheep Sorrel)
Bedstraw, Smooth	Hawkweed	Sowthistle, Perennial
Bindweed, Field, Hedge	Henbane, Black	Spurge, Leafy
Blueweed, Texas	Horsenettle, Carolina	Sundrops
Bursage, Woollyleaf (Bur Ragweed, Povertyweed)	Ironweed	Thistle, Canada, Scotch
Buttercup, Tall	Knapweed, Black, Diffuse, Russian, Spotted	Toadflex, Dalmatian
Campion, Bladder	Milkweed, Climbing, Common, Honeyvine, Western Whorled	Tropical Soda Apple
Chickweed, Field, Mouseear	Nettle, Stinging	Trumpetcreeper (Buckvine)
Chicory	Nightshade, Silverleaf (White Horsenettle)	Vetch
Clover, Hop	Onion, Wild	Waterhemlock, Spotted
Dandelion, Common	Plantain, Broadleaf, Buckhorn	Waterprimrose, Creeping
Dock Broadleaf (Bitterdock), Curly	Pokeweed	Woodsorrel, Creeping, Yellow
Dogbane, Hemp	Ragweed, Western	Wormwood, Absinth, Louisiana
Dogfennel (Cypressweed)	Redvine	Yankeeweed
Fern, Bracken	Sericia Lespedeza	Yarrow, Common

SPECIFIC USE DIRECTIONS

~~BETWEEN CROP APPLICATIONS~~ ~~Postharvest, fallow, crop stubble, set-aside for broadleaf weed control only~~	
~~Application Rates~~	• ~~Apply 22 fluid ounces of XtendiMax® With VaporGrip® Technology per acre.~~
~~Maximum Rates~~	• ~~Per treated acre per year: 88 fluid ounces (2.0 lb. a.e. dicamba per acre).~~
~~Application Timing~~	• ~~XtendiMax® With VaporGrip® Technology can be applied either postharvest in the fall, spring, or summer during the fallow period or to crop stubble/set-aside acres.~~ • ~~For best performance, apply XtendiMax® With VaporGrip® Technology when annual weeds are less than 4 inches tall, when biennial weeds are in the rosette stage, and to perennial weed regrowth in late summer or fall following a mowing or tillage treatment.~~ • ~~The most effective control of upright perennial broadleaf weeds such as Canada thistle and Jerusalem artichoke occurs if XtendiMax® With VaporGrip® Technology is applied when the majority of weeds have at least 4 – 6 inches of regrowth or for weeds such as field bindweed and hedge bindweed that are in or beyond the full bloom stage.~~
~~Application Method~~	• ~~Apply XtendiMax® With VaporGrip® Technology as a broadcast or spot treatment to emerged and actively growing weeds after crop harvest (postharvest) and before a killing frost or in the fallow cropland or crop stubble the following spring or summer.~~
~~Livestock Grazing or Feeding~~	• ~~Permitted.~~
~~Use Precautions~~	• ~~Avoid disturbing treated areas following application.~~ • ~~Treatments may not kill weeds that develop from seed or underground plant parts, such as rhizomes or bulblets, after the effective period for XtendiMax® With VaporGrip® Technology. For seedling control, a follow-up program or other cultural practices could be instituted.~~ • ~~Refer to the "Rotational Crops" section of this label for the recommended interval between application and planting to prevent crop injury.~~

CROPS WITH XTEND® TECHNOLOGY

Cotton with XtendFlex® Technology (including Bollgard II® XtendFlex® COTTON, Bollgard® 3 XtendFlex® COTTON, or XtendFlex® COTTON) and soybean with Roundup Ready 2 Xtend® Technology or XtendFlex® Technology CONTAIN A PATENTED GENE THAT PROVIDES TOLERANCE TO DICAMBA, THE ACTIVE INGREDIENT IN THIS PRODUCT. THIS PRODUCT WILL CAUSE SEVERE CROP INJURY OR DESTRUCTION AND YIELD LOSS IF APPLIED TO COTTON AND SOYBEAN THAT ARE NOT DICAMBA TOLERANT, INCLUDING COTTON AND SOYBEAN WITH A TRAIT ENGINEERED TO CONFER TOLERANCE TO AUXIN HERBICIDES OTHER THAN DICAMBA. FOLLOW THE REQUIREMENTS SET FORTH HEREIN TO PREVENT SEVERE CROP INJURY OR DESTRUCTION AND YIELD LOSS. CONTACT WITH FOLIAGE, GREEN STEMS, OR FRUIT OF CROPS, OR ANY DESIRABLE PLANTS THAT DO NOT CONTAIN A DICAMBA TOLERANCE GENE OR ARE NOT NATURALLY TOLERANT TO DICAMBA, COULD RESULT IN SEVERE PLANT INJURY OR DESTRUCTION.

XtendiMax® With VaporGrip® Technology is approved by U.S. EPA for use in cotton with XtendFlex® Technology and in soybean with Roundup Ready 2 Xtend® Technology or XtendFlex® Technology only in the following states, subject to county restriction as noted:

Alabama, Arkansas, Arizona, Colorado, Delaware, Florida (excluding Palm Beach County), Georgia, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maryland, Michigan, Minnesota, Mississippi, Missouri, Nebraska, New Jersey, New Mexico, New York, North Carolina, North Dakota, Oklahoma, Ohio, Pennsylvania, South Carolina, South Dakota, Tennessee (excluding Wilson County), Texas, Virginia, West Virginia, Wisconsin.

Information on cotton with XtendFlex® Technology and on soybean with Roundup Ready 2 Xtend® Technology or XtendFlex® Technology can be obtained from your seed supplier or Bayer representative. Cotton with XtendFlex® Technology and soybean with Roundup Ready 2 Xtend® Technology or XtendFlex® Technology must be purchased from an authorized licensed seed supplier.

Cotton with XtendFlex® Technology, soybean with Roundup Ready 2 Xtend® Technology or XtendFlex® Technology, and methods of controlling weeds and applying dicamba in cotton with XtendFlex® Technology and in soybean with Roundup Ready 2 Xtend® Technology or XtendFlex® Technology are protected under U.S. patent law. No license to use cotton with XtendFlex® Technology or soybean with Roundup Ready 2 Xtend® Technology or XtendFlex® Technology is granted or implied with the purchase of this herbicide product. Cotton with XtendFlex® Technology and soybean with Roundup Ready 2 Xtend® Technology or XtendFlex® Technology are owned by Bayer and a license must be obtained from Bayer before using it. Contact your Authorized Bayer Retailer for information on obtaining a license to use cotton with XtendFlex® Technology and soybean with Roundup Ready 2 Xtend® Technology or XtendFlex® Technology.

COTTON WITH XTENDFLEX® TECHNOLOGY	
Application Rate	• **Burndown/Early Preplant, Preplant, At-Planting, Preemergence:** Apply ONLY 22 fluid ounces (0.5 lb. acid equivalent (a.e.) dicamba) per acre for a single burndown/early preplant, preplant, at-planting, or preemergence application. • **Postemergence (in-crop):** For any single, in-crop application, apply ONLY 22 fluid ounces (0.5 lb. a.e. dicamba) per acre.
Maximum Annual Rates	• *Total of all Burndown/Early Preplant, Preplant, At-Planting, and Preemergence applications*: 44 fluid ounces per acre (1.0 lb. a.e. dicamba per acre) • *Total of all in-crop applications*: 44 fluid ounces per acre (1.0 lb. a.e. dicamba per acre) • *Combined total per year for all applications*: 88 fluid ounces per acre (2.0 lb. a.e. dicamba per acre)
Application Timing	• **Burndown/Early Preplant, Preplant, At-Planting, Preemergence:** This product may be applied before, during, or immediately after planting. • **Postemergence (in-crop):** This product may be applied in-crop up to and including July 30.
Number of Applications	• Sequential applications of this product may be necessary to control new flushes of weeds or on tough-to-control weeds. Allow at least 7 days between applications. • A maximum of **two** burndown/early preplant, preplant, at-planting, and preemergence and **two** in-crop applications may be made.
Spray Volume	• Apply this product in a minimum of 15 gallons of spray solution per acre as a broadcast application. • Use 20 gallons per acre or greater when treating dense weed canopy/vegetation.
Livestock Grazing or Feeding	• Permitted.
Use Precautions	• Refer to the "Weeds Controlled or Suppressed" section of this label for specific weeds controlled. • For best performance, control weeds early when they are less than 4 inches. • Postemergence applications of this product mixed with adjuvants may cause a leaf response to cotton with XtendFlex® Technology. The symptoms usually appear as necrotic spots on fully expanded leaves. EC-based products that are tank mixed with products containing dicamba may increase the severity of the leaf damage. • For postemergence applications with a hooded in-row sprayer, cotton must be a minimum of 15 inches tall at the time of application. • For postemergence applications with a directed layby sprayer, the release point for the herbicide must not be more than 10 inches from the soil and cotton must be at least 20 inches in height. Spray tip must be angled downward to the soil making sure no spray droplets remain in the air.
Use Restrictions	• DO NOT apply **less than** 22 fluid ounces (0.5 lb. a.e. dicamba) per acre. • DO NOT apply **more than** 22 fluid ounces (0.5 lb. a.e. dicamba) per acre. • DO NOT exceed two pre-emergent applications. • DO NOT exceed two post-emergent applications. • DO NOT exceed 88 fluid ounces per acre (2.0 lb. a.e. dicamba per acre) per year.

SOYBEAN WITH ROUNDUP READY 2 XTEND® TECHNOLOGY OR XTENDFLEX® TECHNOLOGY	
Application Rate	• **Burndown/Early Preplant, Preplant, At-Planting, Preemergence:** Apply ONLY 22 fluid ounces (0.5 lb. acid equivalent (a.e.) dicamba) per acre for a single burndown/early preplant, preplant, at-planting, or preemergence application. • **Postemergence (in-crop):** For any single, in-crop application, apply ONLY 22 fluid ounces (0.5 lb. a.e. dicamba) per acre.
Maximum Annual Rates	• *Total of all Burndown/Early Preplant, Preplant, At-Planting, and Preemergence applications*: 44 fluid ounces per acre (1.0 lb. a.e. dicamba per acre) • *Total of all in-crop applications*: 44 fluid ounces per acre (1.0 lb. a.e. dicamba per acre)

Commented [SC9]: Need to discuss the preharvest interval addition for soy and cotton.

Commented [SC10]: Rather than include the suggestion for the maximum rate of a single application (which was previously identified as potentially confusing in prior EPA comments as listing it as a maximum could indicate that the application rate could be lower), we have proposed to include "ONLY" in this section and to change the next section to "Maximum Annual Rates."

Formatted: Font: Bold

Formatted: Font: Bold

	• *Combined total per year for all applications*: 88 fluid ounces per acre (2.0 lb. a.e. dicamba per acre)
Application Timing	• **Burndown/Early Preplant, Preplant, At-Planting, Preemergence:** This product may be applied before, during, or immediately after planting. • **Postemergence (in-crop):** This product may only be applied in-crop up to and including June 30. Applications occurring after R1 are prohibited as crop response may occur.
Number of Applications	• A second application may be necessary to control new flushes of weeds. Allow at least 7 days between applications. For best results, apply after some weed re-growth has occurred. • A maximum of **two** burndown/early preplant, preplant, at-planting, and preemergence and **two** in-crop applications may be made.
Spray Volume	• Apply this product in a minimum of 15 gallons of spray solution per acre as a broadcast application. • Use 20 gallons per acre or greater when treating dense weed canopy/vegetation.
Livestock Grazing or Feeding	• Permitted.
Use Precautions	• Refer to the "Weeds Controlled or Suppressed" section of this label for specific weeds controlled. • For best performance, control weeds early when they are less than 4 inches. • Postemergence application under stressful environments may cause temporary loss of turgor, a response commonly described as leaf droop in soybean with Roundup Ready 2 Xtend® Technology or XtendFlex® Technology. Typically, affected plants recover in 1-3 days depending on the level of droop and environmental conditions. • For postemergence applications with a hooded in-row sprayer, soybeans must be a minimum of 15 inches tall at the time of application. • For postemergence applications with a directed layby sprayer, the release point for the herbicide must not be more than 10 inches from the soil and soybeans must be at least 20 inches in height. Spray tip must be angled downward to the soil making sure no spray droplets remain in the air
Use Restrictions	• DO NOT apply **less than** 22 fluid ounces (0.5 lb. a.e. dicamba) per acre. • DO NOT apply **more than** 22 fluid ounces (0.5 lb. a.e. dicamba) per acre. • DO NOT exceed two pre-emergent applications. • DO NOT exceed two post-emergent applications. • DO NOT exceed 88 fluid ounces per acre (2.0 lb. a.e. dicamba per acre) per year.

Formatted: Font: Bold

STORAGE AND DISPOSAL

Proper pesticide storage and disposal are essential to protect against exposure to people and the environment due to leaks and spills, excess product or waste, and vandalism. Do not allow this product to contaminate water, foodstuffs, feed or seed by storage or disposal.

Pesticide storage
Store pesticides away from food, pet food, feed, seed, fertilizers, and veterinary supplies. Keep container closed to prevent spills and contamination.

Pesticide disposal
To avoid wastes, use all material in this container, including rinsate, by application according to label directions. If wastes cannot be avoided, offer remaining product to a waste disposal facility or pesticide disposal program. Such programs are often run by state or local governments or by industry. All disposal must be in accordance with applicable federal, state, and local regulations and procedures.

Container handling and disposal
[*Insert appropriate Container Handling and Disposal Statement and Refilling Limitation from the following options*]

[*CONTAINER HANDLING AND DISPOSAL STATEMENT AND REFILLING LIMITATION FOR NONREFILLABLE RIGID CONTAINERS OF LESS THAN 1-GALLON CAPACITY*]
Nonrefillable container. Do not reuse or refill this container.

[*Alternative container statement:* Nonrefillable container. Do not reuse this container to hold materials other than pesticides or dilute pesticides (rinsate). After emptying and cleaning, it may be allowable to temporarily hold rinsate or other pesticide-related materials in this container. Contact your state regulatory agency to determine allowable practices in your state.]

Triple rinse this container promptly after emptying.

Triple rinse as follows: Empty the remaining contents into application equipment or mix-tank and continue to drain for 10 seconds after the flow begins to drip. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or mix-tank, or store rinsate for later use or disposal. Continue to drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times.

Once properly rinsed, some plastic [*Optional text:* agricultural] pesticide containers can be taken to a container collection site or picked up for recycling. [*Alternative container disposal statement:* Then offer the container for recycling, if available.]

[*Optional container disposal statement:* To find the nearest collection site, contact your chemical dealer or Bayer at 1-866-99BAYER (1-866-992-2937).]
If recycling is not available, dispose of in accordance with federal, state and local regulations and procedures, which may include puncturing the properly rinsed container and disposing in a sanitary landfill.

[*CONTAINER HANDLING AND DISPOSAL STATEMENT AND REFILLING LIMITATION FOR NONREFILLABLE RIGID PLASTIC 2.5-GALLON CONTAINER AND OTHER NONREFILLABLE CONTAINERS OF GREATER THAN 1-GALLON BUT EQUAL TO OR LESS THAN 5-GALLON CAPACITY*]
Nonrefillable container. Do not reuse this container to hold materials other than pesticides or dilute pesticides (rinsate). After emptying and cleaning, it may be allowable to temporarily hold rinsate or other pesticide-related materials in this container. Contact your state regulatory agency to determine allowable practices in your state.

[*Alternative container statement:* Nonrefillable container. Do not reuse or refill this container.]

Triple rinse or pressure rinse (or equivalent) this container promptly after emptying.

Triple rinse as follows: Empty the remaining contents into application equipment or mix-tank and continue to drain for 10 seconds after the flow begins to drip. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or mix-tank, or store rinsate for later use or disposal. Continue to drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times.

Pressure rinse as follows: Empty the remaining contents into application equipment or mix-tank and continue to drain for 10 seconds after the flow begins to drip. Place container so that it can drain directly into application equipment or mix-tank while rinsing, or collect rinsate for later use or disposal. Insert pressure rinsing nozzle into the side of the container and rinse at about 40 PSI for at least 30 seconds. Continue to drain for 10 seconds after the flow begins to drip.

Once properly rinsed, some plastic [*Optional text:* agricultural] pesticide containers can be taken to a container collection site or picked up for recycling. [*Alternative container disposal statement:* Then offer the container for recycling, if available.]

[*Optional container disposal statement:* To find the nearest collection site, contact your chemical dealer or Bayer at 1-866-99BAYER (1-866-992-2937).]

If recycling is not available, dispose of in accordance with federal, state and local regulations and procedures, which may include puncturing the properly rinsed container and disposing in a sanitary landfill.

[*CONTAINER HANDLING AND DISPOSAL STATEMENT AND REFILLING LIMITATION FOR NONREFILLABLE RIGID PLASTIC 30-GALLON CONTAINER AND OTHER NONREFILLABLE CONTAINERS OF GREATER THAN 5-GALLON CAPACITY*]
Nonrefillable container. Do not reuse or refill this container.

[*Alternative container statement:* Nonrefillable container. Do not reuse this container to hold materials other than pesticides or dilute pesticides (rinsate). After emptying and cleaning, it may be allowable to temporarily hold rinsate or other pesticide-related materials in this container. Contact your state regulatory agency to determine allowable practices in your state.]

Triple rinse or pressure rinse (or equivalent) this container promptly after emptying.

[*Optional label text:* For containers not equipped with pumping systems,] Triple rinse as follows: Empty the remaining contents into application equipment or mix-tank. Fill the container ¼ full with water. Replace and tighten closures. Tip the container on its side and roll it back and forth for 30 seconds, ensuring at least one complete revolution. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or mix-tank, or store rinsate for later use or disposal. Repeat this procedure two more times.

[*Alternative or additional triple rinsing instructions for large containers equipped with pumping systems:* [*Optional label text:* For large containers equipped with pumping systems,] Triple rinse as follows: Empty the remaining contents into application equipment or mix-tank. Fill the container about 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times.]

Pressure rinse as follows: Empty the remaining contents into application equipment or mix-tank and continue to drain for 10 seconds after the flow begins to drip. Place container so that it can drain directly into application equipment or mix-tank while rinsing, or collect rinsate for later use or disposal. Insert pressure rinsing nozzle into the side of the container and rinse at about 40 PSI for at least 30 seconds. Continue to drain for 10 seconds after the flow begins to drip.

Once properly rinsed, some plastic [*Optional text:* agricultural] pesticide containers can be taken to a container collection site or picked up for recycling. [*Alternative container disposal statement:* Then offer the container for recycling, if available.]

[*Optional container disposal statement:* Some container manufacturers offer container recycling. See additional information regarding manufacturer recycling programs attached to this container, if available. If no recycling information is available on this container, contact your chemical dealer or Bayer at 1-866-99BAYER (1-866-992-2937) to find the nearest recycling location.]

[*Optional container disposal statement:* To find the nearest collection site, contact your chemical dealer or Bayer at 1-866-99BAYER (1-866-992-2937).]

If recycling is not available, dispose of in accordance with federal, state and local regulations and procedures, which may include puncturing the properly rinsed container and disposing in a sanitary landfill.

[*Optional container disposal statement:* Return Properly Rinsed Container to Bayer for Recycling – Call 1-866-99BAYER (1-866-992-2937).]

[*Optional additional container disposal statement:* IBC EMPTY? – FREE CALL – 1-888-SCHUETZ (1-888-724-8389) www.schuetz.net/ticket; Schuetz ticket service]

[*Optional additional container disposal statement:* FREE IBC PICKUP] [For continental USA and Canada only.]

[*Optional additional container disposal statement:* RETURNnet SYSTEM – To return empty IBC's Email or Call – www.returnnetsystem.com – 1-888-758-SHIP (1-888-758-7447) – United States and Canada – IBCNA – Clarkston, Michigan – USA]

[*CONTAINER HANDLING AND DISPOSAL STATEMENT AND REFILLING LIMITATION FOR ALL REFILLABLE CONTAINERS, EXCEPT TRANSPORT VEHICLES*]
Refillable container. Refill this container with pesticide only. Do not reuse this container for any other purpose.

Cleaning this container before refilling is the responsibility of the refiller. Cleaning this container before final disposal is the responsibility of the person disposing of the container.

To clean this container before final disposal, empty the remaining contents from the container into application equipment or mix-tank. Fill the container about 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times.

[*Optional container disposal statement:* Then offer the container for recycling, if available.]

[*Optional container disposal statement:* Some container manufacturers offer container recycling. See additional information regarding manufacturer recycling programs attached to this container, if available. If no recycling information is available on this container, contact your chemical dealer or Bayer at 1-866-99BAYER (1-866-992-2937) to find the nearest recycling location.]

[*Optional additional container disposal statement:* IBC EMPTY? – FREE CALL – 1-888-SCHUETZ (1-888-724-8389) www.schuetz.net/ticket; Schuetz ticket service]

[*Optional additional container disposal statement:* FREE IBC PICKUP] [For continental USA and Canada only.]

[*Optional additional container disposal statement:* RETURNnet SYSTEM – To return empty IBC's Email or Call – www.returnnetsystem.com – 1-888-758-SHIP (1-888-758-7447) – United States and Canada – IBCNA – Clarkston, Michigan – USA]

[*Optional container disposal statement:* To obtain information about recycling refillable containers, contact Bayer at 1-866-99BAYER (1-866-992-2937).]

[*Optional container disposal statement:* Return Properly Rinsed Container to Bayer for Recycling – Call 1-866-99BAYER (1-866-992-2937).]

[*Optional additional container label statements for the CUBE refillable packaging system only:*
CUBE Bayer Refillable Delivery System
FEATURES INCLUDE:
- Automatic Venting
- Heavy duty one-way 2-inch camloc ball valve with protective shield door
- Complete coated steel protective enclosure
- Durable 4-way plastic pallet
- Lift door to access one-way valve]

CONDITIONS OF SALE AND LIMITATIONS OF WARRANTY AND LIABILITY

Read the entire Directions for Use, Conditions, Disclaimer of Warranties, and Limitations of Liability before buying or using this product. If terms are not acceptable, return the unopened product container at once.

By using this product, user or buyer accepts the following Conditions, Disclaimer of Warranties, and Limitations of Liability.

CONDITIONS: The directions for use of this product are believed to be adequate and must be followed carefully. However, it is impossible to eliminate all risks associated with the use of this product. Crop injury, ineffectiveness, or other unintended consequences may result because of such factors as weather conditions, presence of other materials, or the manner of use or application inconsistent with this label (including conditions noted on the label , such as unfavorable soil conditions, unfavorable climate conditions, etc.), all of which are beyond the control of Bayer CropScience LP ("Bayer") or the seller. To the extent consistent with applicable law, all such risks shall be assumed by the user or buyer. Buyer and all users shall promptly notify Bayer of any claims whether based in contract, negligence, strict liability, other tort or otherwise

DISCLAIMER OF WARRANTIES: Subject to risks as set forth in the Conditions above, Bayer warrants that this product is reasonably fit for the purposes stated on the label when used for the purposes stated on the label when used in accordance with directions. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, BAYER MAKES NO OTHER WARRANTIES, EXPRESS OR IMPLIED, OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE OR OTHERWISE. BAYER MAKES NO RECOMMENDATION OR WARRANTY HEREIN REGARDING THE USE OF ANY PRODUCTS THAT MAY APPEAR ON THE WEBSITE REFERENCED IN THE TANK MIXING INSTRUCTIONS HEREIN, REGARDLESS OF WHETHER SUCH PRODUCT IS USED ALONE OR IN A TANK MIX WITH XtendiMax® With VaporGrip® Technology. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, BAYER DISCLAIMS ANY LIABILITY WHATSOEVER FOR SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, FOR IN-CROP (OVER-THE-TOP) USES ON CROPS WITH XTEND® TECHNOLOGY, CROP SAFETY AND WEED CONTROL PERFORMANCE ARE NOT WARRANTED BY BAYER WHEN THIS PRODUCT IS USED IN CONJUNCTION WITH "BROWN BAG" OR "BIN RUN" SEED SAVED FROM PREVIOUS YEAR'S PRODUCTION AND REPLANTED. FURTHER, TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, BAYER DOES NOT WARRANT THE WEED CONTROL PERFORMANCE OF DICAMBA-RESISTANT WEED BIOTYPES.

LIMITATIONS OF LIABILITY: To the extent consistent with applicable law, the exclusive remedy of the user or buyer for any and all losses, injuries, or damages resulting from the use or handling of this product, whether in contract, warranty, tort, negligence, strict liability or otherwise, shall not exceed the purchase price paid, or at Bayer's election, the replacement of product.

These Conditions of Sales, Disclaimer of Warranties and Limitations of Liability cannot be varied by any written or verbal statements or agreements. No employee or sales agent of Bayer or seller is authorized to vary or exceed the terms of the Disclaimer of Warranties or Limitations of Liability in any manner.

Bollgard II®, Bollgard®, Degree Xtra®, Field Master®, Harness®, Roundup Ready®, Roundup Ready 2 Xtend®, Roundup PowerMAX®, RT 3®, Roundup WeatherMAX®, XtendiMax®, XtendFlex®, and VaporGrip® are registered trademarks of Bayer Technology LLC. All other trademarks are the property of their respective owners.

PRODUCED FOR

Bayer CropScience

Bayer CropScience LP
800 N. Lindbergh Blvd.
St. Louis, MO 63167
1-866-99BAYER (1-866-992-2937)

XTENDIMAX® WITH VAPORGRIP® TECHNOLOGY (PENDING) 10/24~~0~~/2020

Message

From: MARVIN, THOMAS [AG/1920] [thomas.marvin@bayer.com]
Sent: 8/28/2019 12:36:07 PM
To: Kenny, Daniel [Kenny.Dan@epa.gov]
Subject: RE: Invora

Hi Dan. Circling back to your question below on prioritizing Bayer's pending dicamba HT applications. We identified 7 pending dicamba HT applications (please let us know if we missed any). We propose that OPP prioritize 2 of those 7 pending applications per the table below. Happy to discuss next steps or to provide any additional info.

Application	Identifier	Proposed Status
Roundup Xtend 2 Premix, M1833 Herbicide (Ethanolamine Salt)	Submission ID: RD 1833	Prioritize. Latest PRIA date is 12/31/2019; submitted on 6/29/2017
M1834 Dicamba MUP (Ethanolamine Salt)	Submission ID: RD 1834	Prioritize. Latest PRIA date is 12/31/2019; submitted on 6/29/2017
Roundup Xtend 1 Premix, M1769 Herbicide, Uses on HT Soy and HT Cotton	Pending over the top use of EPA Reg. 524-616 on HT Soy and HT Cotton	withdraw
Warrant Dicamba Premix, AD2611 Herbicide	Submission No. RD 1827	withdraw
M1691, uses on HT Soy and HT Cotton	Pending over the top use of EPA Reg. 524-582 on HT Soy and HT Cotton.	withdraw
XtendiMax 2, M1832 Herbicide (Ethanolamine Salt)	Submission No. RD 1832	Renegotiate PRIA, which expires on 12/31/2019
XtendiMax 1, M1768 Herbicide, Use on HT Corn	Submission No. RD 1784; pending over the top use of 524-617 Herbicide on HT Corn.	Renegotiate PRIA, which expires on 12/31/2019

Tom Marvin
Head of Regulatory Science North America

//////////////////

Bayer Crop Science
801 Pennsylvania, NW
Washington, DC, USA
Tel: +1 202-383-2851
Cell: +1 202-676-7846

From: MARVIN, THOMAS [AG/1920]
Sent: Thursday, August 08, 2019 9:04 AM
To: Kenny, Daniel <Kenny.Dan@epa.gov>; MARVIN, THOMAS [AG/1920] <thomas.marvin@bayer.com>
Subject: RE: Invora

Thanks Dan, we will discuss and get back to you soon with our proposed priorities.

Tom Marvin
Head of Regulatory Science North America

//////////////////

Bayer Crop Science
1300 I Street, NW
Suite 450 East
Washington, DC, USA
Tel: +1 202-383-2851
Cell: +1 202-676-7846

From: Kenny, Daniel [mailto:Kenny.Dan@epa.gov]
Sent: Thursday, August 08, 2019 7:55 AM
To: MARVIN, THOMAS [AG/1920] <thomas.marvin@bayer.com>
Subject: RE: Invora

Thanks again for your help with this, Tom. When I sent this, I forgot to also ask you about the status of the dicamba premix applications. We are trying to organize our workload and strategize an approach on the various premixes, and remembered that Bayer had indicated that there were some applications that they were willing to withdraw. Because these applications take more resources than usual to complete and because we don't want to spend those resources on applications that aren't actually needed, did you still intend to withdraw any of those? We'd rather spend the time on those that are still important to the applicants.

Let me know what you think, and we'll organize accordingly.

Thanks very much,
Dan

Daniel Kenny, Chief
Herbicide Branch
Registration Division
Office of Pesticide Programs
U.S. Environmental Protection Agency

From: MARVIN, THOMAS [AG/1920] <thomas.marvin@bayer.com>
Sent: Tuesday, August 06, 2019 5:29 PM
To: Kenny, Daniel <Kenny.Dan@epa.gov>; MARVIN, THOMAS [AG/1920] <thomas.marvin@bayer.com>
Subject: RE: Invora

Dan,

Karen Shearer will send you a proposed waiver tomorrow as soon as possible. Hopefully before the afternoon. Please let me know if there are any wrinkles I can assist with. All is well here, hope the same with you and your team.

Tom

-------- Original Message --------
Subject: RE: Invora
From: "Kenny, Daniel" <Kenny.Dan@epa.gov>
Date: Aug 6, 2019, 4:59 PM
To: "MARVIN, THOMAS [AG/1920]" <thomas.marvin@bayer.com>
Thanks Tom.

Daniel Kenny, Chief
Herbicide Branch
Registration Division
Office of Pesticide Programs
U.S. Environmental Protection Agency

From: MARVIN, THOMAS [AG/1920] <thomas.marvin@bayer.com>
Sent: Tuesday, August 06, 2019 4:51 PM
To: Kenny, Daniel <Kenny.Dan@epa.gov>
Subject: Re: Invora

Hi Dan. I'll get back to you shortly on this.

-------- Original Message --------
Subject: Invora
From: "Kenny, Daniel" <Kenny.Dan@epa.gov>
Date: Aug 6, 2019, 4:33 PM
To: "MARVIN, THOMAS [AG/1920]" <thomas.marvin@bayer.com>
Hi Tom. I hope all is well. I don't know if you are planning to attend the workshop on Thursday with the ranchers from Texas to discuss Invora, but it has occurred to us here at EPA that, if we are indeed going to participate, we need to have Bayer waive the pre-registration confidentiality for that application. I don't know of any template that exists for that, so I would leave it up to Bayer, but based on discussions today, it appears that it will be difficult for us to participate without it. Can you or someone authorized to waive the confidentiality email me a letter to such end? Of course, no waiver is needed for CBI such as the CSF components, just the pre-registration confidentiality that protects against sharing information about the application to competitors. If you can help with this, we need something before the workshop, preferably today or tomorrow. If this is not something that you can help with, can you point me in the correct direction?

Thanks for your help,
Dan Kenny

Daniel Kenny, Chief
Herbicide Branch
Registration Division
Office of Pesticide Programs
U.S. Environmental Protection Agency

The information contained in this e-mail is for the exclusive use of the intended recipient(s) and may be confidential, proprietary, and/or legally privileged. Inadvertent disclosure of this message does not constitute a waiver of any privilege. If you receive this message in error, please do not directly or indirectly use, print, copy, forward, or disclose any part of this message. Please also delete this e-mail and all copies and notify the sender. Thank you.

The information contained in this e-mail is for the exclusive use of the intended recipient(s) and may be confidential, proprietary, and/or legally privileged. Inadvertent disclosure of this message does not constitute a waiver of any

privilege. If you receive this message in error, please do not directly or indirectly use, print, copy, forward, or disclose any part of this message. Please also delete this e-mail and all copies and notify the sender. Thank you.

The information contained in this e-mail is for the exclusive use of the intended recipient(s) and may be confidential, proprietary, and/or legally privileged. Inadvertent disclosure of this message does not constitute a waiver of any privilege. If you receive this message in error, please do not directly or indirectly use, print, copy, forward, or disclose any part of this message. Please also delete this e-mail and all copies and notify the sender. Thank you.

Message

From: Hathaway, Margaret [Hathaway.Margaret@epa.gov]
Sent: 10/23/2020 6:14:37 PM
To: George Sabbagh [george.sabbagh@bayer.com]; Jeffrey H Birk [jeffrey.birk@basf.com]; Dixon Monty USGR [monty.dixon@syngenta.com]; Steven Callen [steven.callen@bayer.com]
CC: Kenny, Daniel [Kenny.Dan@epa.gov]; Thomas Orr [thomas.orr@bayer.com]; BCSReg_Archive [esepamailbox@bayer.com]
Subject: RE: For Concurrence: Bulletins Live Docs - PULAs - Dicamba

Hello George:
Acknowledging receipt. EPA will review this proposed language.

Best regards,

Margaret Hathaway (Meg)
Senior Regulatory Specialist
U.S. Environmental Protection Agency
OCSPP: Office of Pesticide Programs
Registration Division – Herbicide Branch
hathaway.margaret@epa.gov
(703) 305-5076

ALL CONTENTS AND ATTACHMENTS TO THIS EMAIL CORRESPONDENCE ARE TO BE CONSIDERED DRAFT/INTERNAL/DELIBERATIVE ONLY, NOT TO BE SHARED UNLESS SPECIFICALLY AND EXPLICITLY STATED

From: George Sabbagh <george.sabbagh@bayer.com>
Sent: Friday, October 23, 2020 2:12 PM
To: Hathaway, Margaret <Hathaway.Margaret@epa.gov>; Jeffrey H Birk <jeffrey.birk@basf.com>; Dixon Monty USGR <monty.dixon@syngenta.com>; Steven Callen <steven.callen@bayer.com>
Cc: Kenny, Daniel <Kenny.Dan@epa.gov>; Thomas Orr <thomas.orr@bayer.com>; BCSReg_Archive <esepamailbox@bayer.com>
Subject: RE: For Concurrence: Bulletins Live Docs - PULAs - Dicamba

Hi Meg,

The registrants (BASF, BAYER and Syngenta) reviewed the Live Bulletin documents you provided, and are asking to update the D1 section with the language below. The updates are to: (1) include hooded sprayer language, and (2) replace "Planted agricultural fields containing: corn, cotton, and soybeans." with "Planted agricultural fields containing crops for which dicamba has an approved use."

> *To protect federally listed threatened and endangered species, both a 310-foot in-field wind-directional spray drift buffer and a 57-foot omnidirectional in-field buffer are required.* ***If applying with a qualified hooded sprayer****, both a 240-foot in-field wind-directional spray drift buffer and a 57-foot omnidirectional in-field buffer are required to protect federally listed threatened and endangered species. Please see* ***[URL]*** *for a list of qualified hooded sprayers. Non-sensitive areas, defined below, may be included as part of all required buffers.*
>
> *Non-sensitive areas: The following areas may be included in the buffer distance calculation when directly adjacent to the treated field edges:*
>
> 1. *Roads, paved or gravel surfaces, mowed and/or managed areas adjacent to field such as rights-of-way.*
> 2. *Planted agricultural fields containing crops for which dicamba has an approved use.*
> 3. *Areas covered by the footprint of a building, silo, or other man-made structure with walls and/or roof.*

Please, let me know if you need additional information or have questions.

Freundliche Grüße / Best regards,

George Sabbagh, Ph.D.
Head Regulatory Engagements

Regulatory Engagement
Collaborating Across Organizations

Bayer US LLC
801 Pennsylvania Avenue, NW
Suite 900
Washington, DC 20004
Cel: +1 913 231 6291
E-mail: george.sabbagh@bayer.com
Web: http://www.bayercropscience.com

From: Hathaway, Margaret <Hathaway.Margaret@epa.gov>
Sent: Thursday, October 22, 2020 7:14 PM
To: George Sabbagh <george.sabbagh@bayer.com>; Jeffrey H Birk <jeffrey.birk@basf.com>; Dixon Monty USGR <monty.dixon@syngenta.com>
Cc: Kenny, Daniel <Kenny.Dan@epa.gov>
Subject: For Concurrence: Bulletins Live Docs - PULAs - Dicamba
Importance: High

Dear Dicamba Registrants:
Attached are files EPA plans to move forward with for posting to BLT in relation the dicamba registrations currently being considered by the Agency for use on dicamba-tolerant cotton and soybeans. **Concurrence is requested by noon tomorrow (Friday, October 23).**

EPA notes that the total number of counties with restrictions is 289. This is one county greater than previously noted because Palm Beach county, FL was inadvertently left off of the previous counts (it was included in 2018). Palm Beach county has minimal acreage of cotton grown, but it does include possible overlap with a listed species that could be affected.

Best regards,

Margaret Hathaway (Meg)
Senior Regulatory Specialist
U.S. Environmental Protection Agency
OCSPP: Office of Pesticide Programs
Registration Division – Herbicide Branch
hathaway.margaret@epa.gov
(703) 305-5076

ALL CONTENTS AND ATTACHMENTS TO THIS EMAIL CORRESPONDENCE ARE TO BE CONSIDERED DRAFT/INTERNAL/DELIBERATIVE ONLY, NOT TO BE SHARED UNLESS SPECIFICALLY AND EXPLICITLY STATED

The information contained in this e-mail is for the exclusive use of the intended recipient(s) and may be confidential, proprietary, and/or legally privileged. Inadvertent disclosure of this message does not constitute a waiver of any privilege. If you receive this message in error, please do not directly or indirectly use, print, copy, forward, or disclose any part of this message. Please also delete this e-mail and all copies and notify the sender. Thank you.

Message

From: George Sabbagh [george.sabbagh@bayer.com]
Sent: 10/23/2020 6:11:43 PM
To: Hathaway, Margaret [Hathaway.Margaret@epa.gov]; Jeffrey H Birk [jeffrey.birk@basf.com]; Dixon Monty USGR [monty.dixon@syngenta.com]; Steven Callen [steven.callen@bayer.com]
CC: Kenny, Daniel [Kenny.Dan@epa.gov]; Thomas Orr [thomas.orr@bayer.com]; BCSReg_Archive [esepamailbox@bayer.com]
Subject: RE: For Concurrence: Bulletins Live Docs - PULAs - Dicamba

Hi Meg,

The registrants (BASF, BAYER and Syngenta) reviewed the Live Bulletin documents you provided, and are asking to update the D1 section with the language below. The updates are to: (1) include hooded sprayer language, and (2) replace "Planted agricultural fields containing: corn, cotton, and soybeans." with "Planted agricultural fields containing crops for which dicamba has an approved use."

> *To protect federally listed threatened and endangered species, both a 310-foot in-field wind-directional spray drift buffer and a 57-foot omnidirectional in-field buffer are required.* ***If applying with a qualified hooded sprayer****, both a 240-foot in-field wind-directional spray drift buffer and a 57-foot omnidirectional in-field buffer are required to protect federally listed threatened and endangered species. Please see* ***[URL]*** *for a list of qualified hooded sprayers. Non-sensitive areas, defined below, may be included as part of all required buffers.*
>
> *Non-sensitive areas: The following areas may be included in the buffer distance calculation when directly adjacent to the treated field edges:*
>
> 1. *Roads, paved or gravel surfaces, mowed and/or managed areas adjacent to field such as rights-of-way.*
> 2. *Planted agricultural fields containing crops for which dicamba has an approved use.*
> 3. *Areas covered by the footprint of a building, silo, or other man-made structure with walls and/or roof.*

Please, let me know if you need additional information or have questions.

Freundliche Grüße / Best regards,

George Sabbagh, Ph.D.
Head Regulatory Engagements

Regulatory Engagement
Collaborating Across Organizations

Bayer US LLC
801 Pennsylvania Avenue, NW
Suite 900
Washington, DC 20004
Cel: +1 913 231 6291
E-mail: george.sabbagh@bayer.com
Web: http://www.bayercropscience.com

From: Hathaway, Margaret <Hathaway.Margaret@epa.gov>
Sent: Thursday, October 22, 2020 7:14 PM

To: George Sabbagh <george.sabbagh@bayer.com>; Jeffrey H Birk <jeffrey.birk@basf.com>; Dixon Monty USGR <monty.dixon@syngenta.com>
Cc: Kenny, Daniel <Kenny.Dan@epa.gov>
Subject: For Concurrence: Bulletins Live Docs - PULAs - Dicamba
Importance: High

Dear Dicamba Registrants:
Attached are files EPA plans to move forward with for posting to BLT in relation the dicamba registrations currently being considered by the Agency for use on dicamba-tolerant cotton and soybeans. **Concurrence is requested by noon tomorrow (Friday, October 23).**

EPA notes that the total number of counties with restrictions is 289. This is one county greater than previously noted because Palm Beach county, FL was inadvertently left off of the previous counts (it was included in 2018). Palm Beach county has minimal acreage of cotton grown, but it does include possible overlap with a listed species that could be affected.

Best regards,

Margaret Hathaway (Meg)
Senior Regulatory Specialist
U.S. Environmental Protection Agency
OCSPP: Office of Pesticide Programs
Registration Division – Herbicide Branch
hathaway.margaret@epa.gov
(703) 305-5076

ALL CONTENTS AND ATTACHMENTS TO THIS EMAIL CORRESPONDENCE ARE TO BE CONSIDERED DRAFT/INTERNAL/DELIBERATIVE ONLY, NOT TO BE SHARED UNLESS SPECIFICALLY AND EXPLICITLY STATED

The information contained in this e-mail is for the exclusive use of the intended recipient(s) and may be confidential, proprietary, and/or legally privileged. Inadvertent disclosure of this message does not constitute a waiver of any privilege. If you receive this message in error, please do not directly or indirectly use, print, copy, forward, or disclose any part of this message. Please also delete this e-mail and all copies and notify the sender. Thank you.

Message

From: Hathaway, Margaret [Hathaway.Margaret@epa.gov]
Sent: 10/22/2020 11:14:24 PM
To: George Sabbagh [george.sabbagh@bayer.com]; Jeffrey H Birk [jeffrey.birk@basf.com]; Dixon Monty USGR [monty.dixon@syngenta.com]
CC: Kenny, Daniel [Kenny.Dan@epa.gov]
Subject: For Concurrence: Bulletins Live Docs - PULAs - Dicamba
Attachments: Dicamba_Bulletin_22102020.pptx; Dicamba_20102020.gdb.zip; Dicamba_PULA_Counties_20102020.xlsx; Dicamba_Metadata_20102020.xlsx

Importance: High

Dear Dicamba Registrants:
Attached are files EPA plans to move forward with for posting to BLT in relation the dicamba registrations currently being considered by the Agency for use on dicamba-tolerant cotton and soybeans. **Concurrence is requested by noon tomorrow (Friday, October 23).**

EPA notes that the total number of counties with restrictions is 289. This is one county greater than previously noted because Palm Beach county, FL was inadvertently left off of the previous counts (it was included in 2018). Palm Beach county has minimal acreage of cotton grown, but it does include possible overlap with a listed species that could be affected.

Best regards,

Margaret Hathaway (Meg)
Senior Regulatory Specialist
U.S. Environmental Protection Agency
OCSPP: Office of Pesticide Programs
Registration Division – Herbicide Branch
hathaway.margaret@epa.gov
(703) 305-5076

ALL CONTENTS AND ATTACHMENTS TO THIS EMAIL CORRESPONDENCE ARE TO BE CONSIDERED DRAFT/INTERNAL/DELIBERATIVE ONLY, NOT TO BE SHARED UNLESS SPECIFICALLY AND EXPLICITLY STATED

Dicamba Pesticide Use Limitation Areas

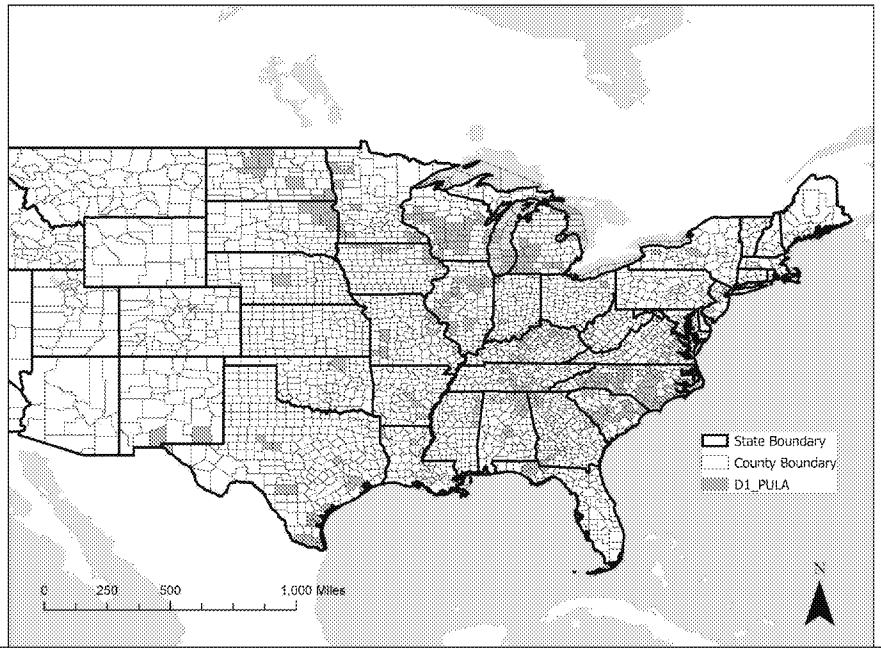
Dicamba Limitation Language (D1)

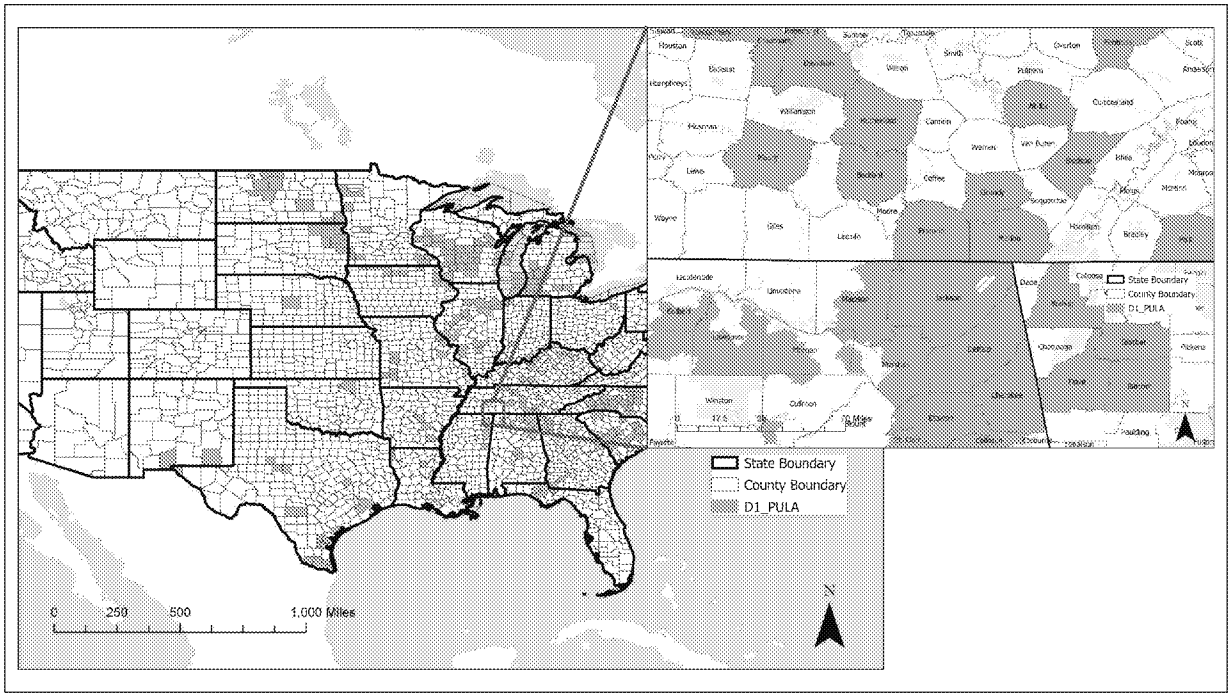
- In combination with the 310 foot in-field wind-directional spray drift buffer, a 57 foot omnidirectional infield buffer is required to protect federally listed threatened and endangered species. Non-sensitive areas, defined below, may be included as part of the buffer.

Non-sensitive areas:

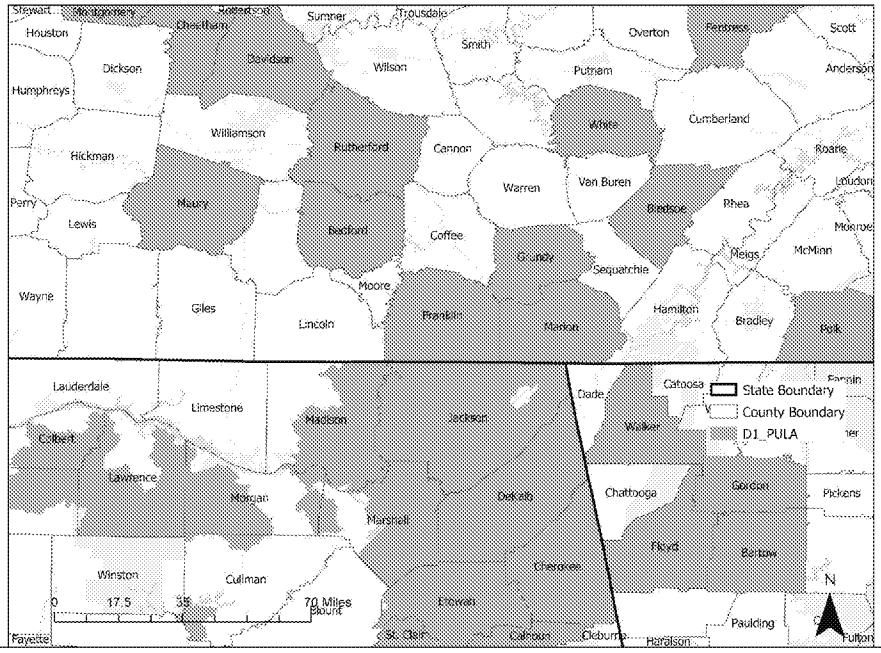
- The following areas may be included in the buffer distance calculation when directly adjacent to the treated field edges:
- Roads, paved or gravel surfaces, mowed and/or managed areas adjacent to field such as rights of way.
- Planted agricultural fields containing: corn, cotton, and soybeans.
- Areas covered by the footprint of a building, silo, or other man made structure with walls and or roof.

PULA 10/20/2020: National Map of D1 Limitation for Dicamba




State Boundary
County Boundary
D1_PULA
0 250 500 1,000 Miles
N

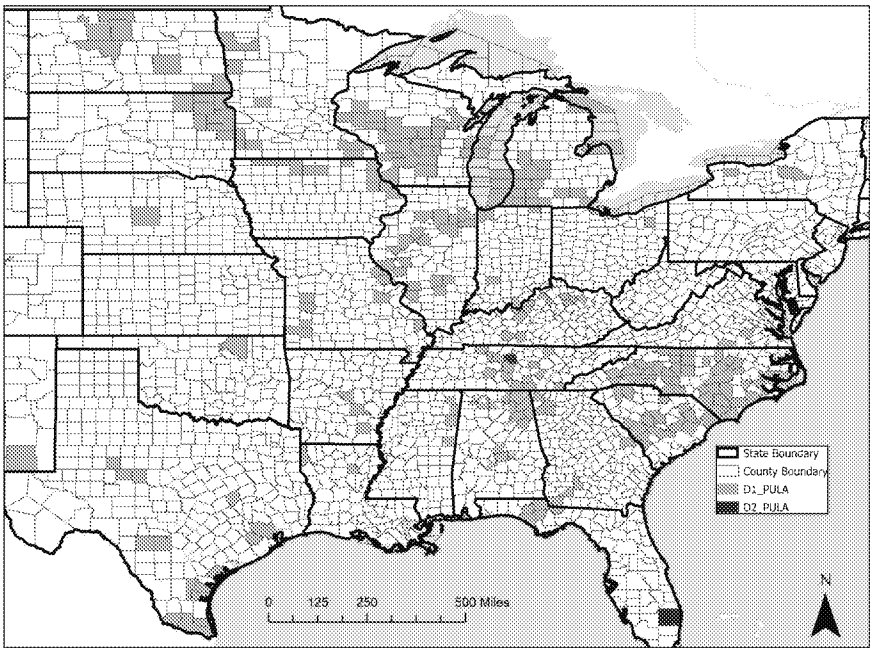
PULA 10/20/2020: Example of County Level Map of D1 Limitation for Dicamba



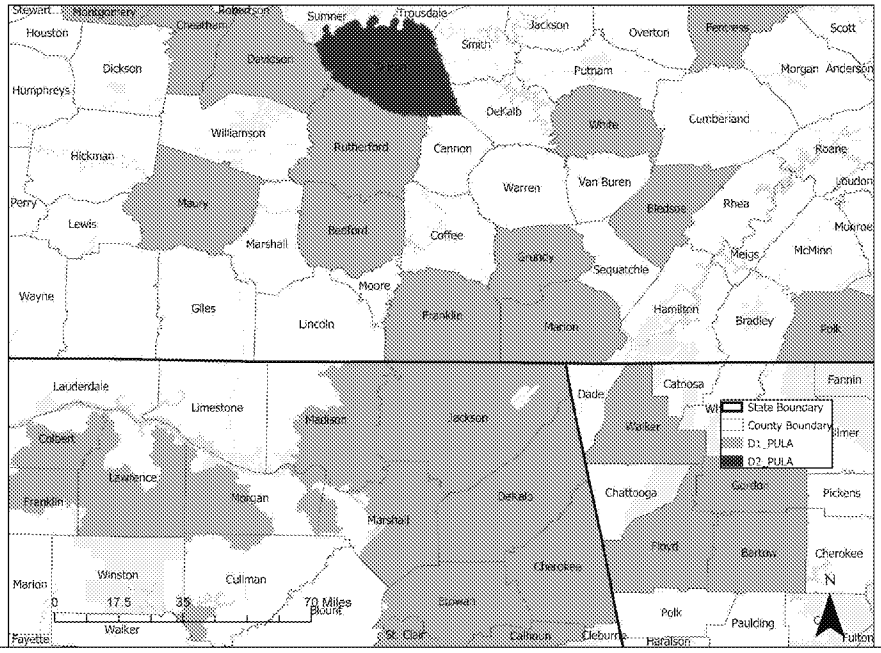
Dicamba Limitation Language (D2)

- "Do not apply in the following counties: Wilson County, TN or Palm Beach County, FL"

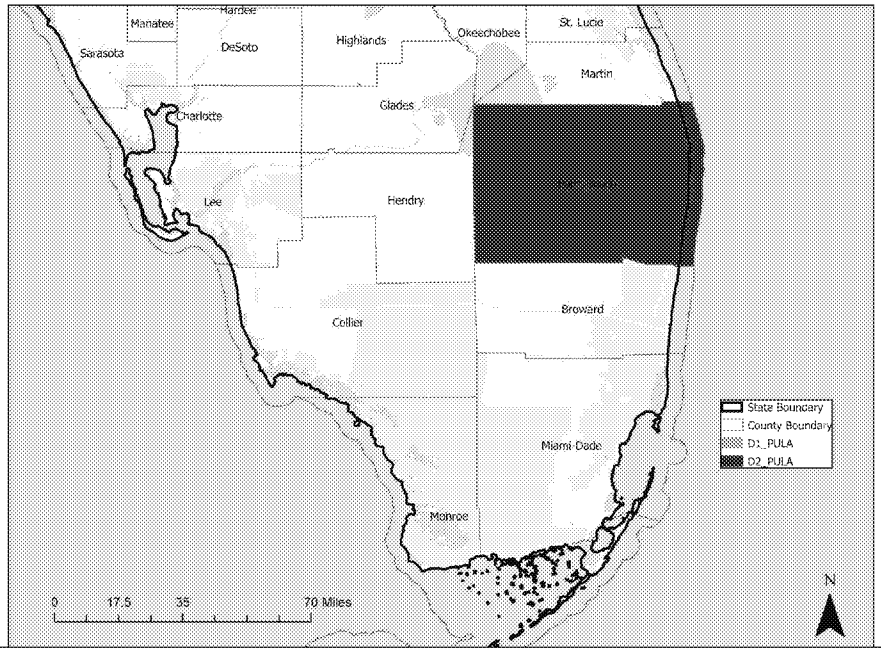
PULA 10/20/2020: National Map of D1 and D2 Limitation for Dicamba



PULA 10/20/2020: Example of County Level Map of D1 and D2 Limitation for Dicamba



PULA 10/20/2020: Example of County Level Map of D1 and D2 Limitation for Dicamba



Attribute
Active Ingredient
Product
Use
Application Method
Formulation
PCCode
EPA Reg Number
CAS Number
AI Class

Limitation

Product information

BAPMA salt of Dicamba
Engenia Herbicide
Dicamba-Tolerant Soybean and Cotton
Ground
Liquid
29801
7969-472 (UTE)
1918-00-9
Herbicide

In combination with the 310 foot in field wind directional spray drift buffer, a 57 foot omnidirectional infield buffer is required to protect federally listed threatened and endangered species. Non-sensitive areas, defined below, may be included as part of the buffer.

Non-sensitive areas:

The following areas may be included in the buffer distance calculation when directly adjacent to the treated field edges:

- Roads, paved or gravel surfaces, mowed and/or managed areas adjacent to field such as rights of way.
- Planted agricultural fields containing: corn, cotton, and soybeans.
- Areas covered by the footprint of a building, silo, or other man made structure with walls and or roof.

OPPIN has just Dicamba listed, but the CSF has BAPMA salt of Dicamba

Attribute
Active Ingredient
Product
Use
Application Method
Formulation
PCCode
EPA Reg Number
CAS Number
AI Class

Limitation

Product information

Diglycolamine salt of dicamba (3,6-dichloro-o-anisic acid)
XtendiMax With VaporGrip Technology
Dicamba-Tolerant Soybean and Cotton
Ground
Liquid
128931
264-1210 (RERN)
104040-79-1
Herbicide

In combination with the 310 foot in field wind directional spray drift buffer, a 57 foot omnidirectional infield buffer is required to protect federally listed threatened and endangered species. Non-sensitive areas, defined below, may be included as part of the buffer.

Non-sensitive areas:

The following areas may be included in the buffer distance calculation when directly adjacent to the treated field edges:

- Roads, paved or gravel surfaces, mowed and/or managed areas adjacent to field such as rights of way.
- Planted agricultural fields containing: corn, cotton, and soybeans.
- Areas covered by the footprint of a building, silo, or other man made structure with walls and or roof.

Attribute

Active Ingredient

Product
Use
Application Method
Formulation

PCCode
EPA Reg Number

CAS Number
AI Class

Limitation

Product Information

Diglycolamine salt of dicamba (3,6-dichloro-o-anisic acid)
S-metolachlor
Tavium plus VaporGrip Technology
A21472 Plus VaporGrip Technology
Dicamba-Tolerant Soybean and Cotton
Ground
Liquid
128931 (Dicamba)
108800 (S-metolachlor)
100-1623
104040-79-1 (Dicamba)
87392-12-9 (S-metolachlor)
Herbicide

In combination with the 310 foot in-field wind-directional spray drift buffer, a 57 foot omnidirectional infield buffer is required to protect federally listed threatened and endangered species. Non-sensitive areas, defined below, may be included as part of the buffer.

Non-sensitive areas:

The following areas may be included in the buffer distance calculation when directly adjacent to the treated field edges:

- Roads, paved or gravel surfaces, mowed and/or managed areas adjacent to field such as rights of way.
- Planted agricultural fields containing: corn, cotton, and soybeans.

EntityID	Common Name	Scientific Name
994	Alabama canebrake pitcher-plant	Sarracenia rubra ssp. alabamensis
1048	Alabama leather flower	Clematis socialis
1195	American hart's-tongue fern	Asplenium scolopendrium var. americanum
615	Ashy dogweed	Thymophylla tephroleuca
125	Audubon's crested caracara	Polyborus plancus audubonii
702	Black lace cactus	Echinocereus reichenbachii var. albertii
1203	Black spored quillwort	Isoetes melanospora
978	Blowout penstemon	Penstemon haydenii
1004	Blue Ridge goldenrod	Solidago spithamaea
630	Braun's rock-cress	Arabis perstellata
818	Bunched arrowhead	Sagittaria fasciculata
976	Canby's dropwort	Oxypolis canbyi
816	Chapman rhododendron	Rhododendron chapmanii
852	Cooley's meadowrue	Thalictrum cooleyi
677	Cumberland rosemary	Conradina verticillata
880	Cumberland sandwort	Arenaria cumberlandensis
3412	Dakota Skipper	Hesperia dacotae
891	Decurrent false aster	Boltonia decurrens
734	Dwarf-flowered heartleaf	Hexastylis naniflora
977	Fassett's locoweed	Oxytropis campestris var. chartacea
1710	Fleshy-fruit gladecress	Leavenworthia crassa
997	Florida skullcap	Scutellaria floridana
1191	Florida torreya	Torreya taxifolia
831	Fringed campion	Silene polypetala
836	Gentian pinkroot	Spigelia gentianoides
6672	Georgia rockcress	Arabis georgiana
982	Godfrey's butterwort	Pinguicula ionantha
819	Green pitcher-plant	Sarracenia oreophila
1087	Guthrie's (=Pyne's) ground-plum	Astragalus bibullatus
709	Gypsum wild-buckwheat	Eriogonum gypsophilum
991	Harperella	Ptilimnium nodosum
959	Heller's blazingstar	Liatris helleri
1003	Houghton's goldenrod	Solidago houghtonii
420	Karner blue butterfly	Lycaeides melissa samuelis
7167	Kentucky glade cress	Leavenworthia exigua laciniata
1064	Kral's water-plantain	Sagittaria secundifolia
1059	Lakeside daisy	Hymenoxys herbacea
998	Large-flowered skullcap	Scutellaria montana
872	Large-fruited sand-verbena	Abronia macrocarpa
920	Leafy prairie-clover	Dalea foliosa
682	Lee pincushion cactus	Coryphantha sneedii var. leei
1150	Leedy's roseroot	Rhodiola integrifolia ssp. leedyi
750	Lyrate bladderpod	Lesquerella lyrata

Species Group	File Type	Limitation
Plants	Range	D1
Plants	Range	D1
Plants	Range	D1
Plants	Range	D1
Birds	Range	D2
Plants	Range	D1
Plants	Range	D1
Plants	Range	D1
Plants	Range	D1
Plants	Range	D1
Plants	Range	D1
Plants	Range	D1
Plants	Range	D1
Plants	Range	D1
Plants	Range	D1
Terrestrial Invertebrates	Range	D1
Plants	Range	D1
Plants	Range	D1
Plants	Range	D1
Plants	Range	D1
Plants	Range	D1
Plants	Range	D1
Plants	Range	D1
Plants	Range	D1
Plants	Range	D1
Plants	Range	D1
Plants	Range	D1
Plants	Range	D1
Plants	Range	D1
Plants	Range	D1
Plants	Range	D1
Plants	Range	D1
Terrestrial Invertebrates	Range	D1
Plants	Range	D1
Plants	Range	D1
Plants	Range	D1
Plants	Range	D1
Plants	Range	D1
Plants	Range	D1
Plants	Range	D1
Plants	Range	D1
Plants	Range	D1

636	Mead's milkweed	Asclepias meadii
817	Miccosukee gooseberry	Ribes echinellum
992	Michaux's sumac	Rhus michauxii
8392	Missouri bladderpod	Physaria filiformis
424	Mitchell's satyr Butterfly	Neonympha mitchellii mitchellii
764	Mohr's Barbara's buttons	Marshallia mohrii
1096	Morefield's leather flower	Clematis morefieldii
1058	Mountain golden heather	Hudsonia montana
995	Mountain sweet pitcher-plant	Sarracenia rubra ssp. jonesii
716	No common name	Geocarpon minimum
620	Northern wild monkshood	Aconitum noveboracense
905	Pitcher's thistle	Cirsium pitcheri
960	Pondberry	Lindera melissifolia
10147	Poweshiek skipperling	Oarisma poweshiek
628	Price's potato-bean	Apios priceana
3670	Rattlesnake-master borer moth	Papaipema eryngii
943	Roan Mountain bluet	Hedyotis purpurea var. montana
1220	Rock gnome lichen	Gymnoderma lineare
967	Rough-leaved loosestrife	Lysimachia asperulaefolia
1036	Ruth's golden aster	Pityopsis ruthii
455	Saint Francis' satyr butterfly	Neonympha mitchellii francisci
945	Schweinitz's sunflower	Helianthus schweinitzii
1019	Seabeach amaranth	Amaranthus pumilus
875	Sensitive joint-vetch	Aeschynomene virginica
1831	Short's bladderpod	Physaria globosa
835	Short's goldenrod	Solidago shortii
739	Slender rush-pea	Hoffmannseggia tenella
655	Small-anthered bittercress	Cardamine micranthera
924	Smooth coneflower	Echinacea laevigata
683	Sneed pincushion cactus	Coryphantha sneedii var. sneedii
624	South Texas ambrosia	Ambrosia cheiranthifolia
718	Spreading avens	Geum radiatum
568	Spring Creek bladderpod	Lesquerella perforata
513	Star cactus	Astrophytum asterias
1077	Texas ayenia	Ayenia limitaris
651	Texas poppy-mallow	Callirhoe scabriuscula
1045	Texas prairie dawn-flower	Hymenoxys texana
627	Tobusch fishhook cactus	Sclerocactus brevihamatus ssp. tobuschii
763	Walker's manioc	Manihot walkerae
761	White birds-in-a-nest	Macbridea alba
569	Zapata bladderpod	Lesquerella thamnophila
41	Alabama beach mouse	Peromyscus polionotus ammobates

Plants	Range	D1
Plants	Range	D1
Plants	Range	D1
Plants	Range	D1
Terrestrial Invertebrates	Range	D1
Plants	Range	D1
Plants	Range	D1
Plants	Range	D1
Plants	Range	D1
Plants	Range	D1
Plants	Range	D1
Plants	Range	D1
Plants	Range	D1
Terrestrial Invertebrates	Range	D1
Plants	Range	D1
Terrestrial Invertebrates	Range	D1
Plants	Range	D1
Plants	Range	D1
Plants	Range	D1
Plants	Range	D1
Terrestrial Invertebrates	Range	D1
Plants	Range	D1
Plants	Range	D1
Plants	Range	D1
Plants	Range	D1
Plants	Range	D1
Plants	Range	D1
Plants	Range	D1
Plants	Range	D1
Plants	Range	D1
Plants	Range	D1
Plants	Range	D1
Plants	Range	D2
Plants	Range	D1
Plants	Range	D1
Plants	Range	D1
Plants	Range	D1
Plants	Range	D1
Plants	Range	D1
Plants	Range	D1
Plants	Range	D1
Mammals	Critical Habitat	D1

630	Braun's rock-cress	Arabis perstellata
3412	Dakota Skipper	Hesperia dacotae
1710	Fleshy-fruit gladecress	Leavenworthia crassa
6672	Georgia rockcress	Arabis georgiana
1189	Golden sedge	Carex lutea
445	Hine's emerald dragonfly	Somatochlora hineana
1	Indiana bat	Myotis sodalis
7167	Kentucky glade cress	Leavenworthia exigua laciniata
3271	Narrow-headed gartersnake	Thamnophis rufipunctatus
558	Pecos (=puzzle =paradox) sunflower	Helianthus paradoxus
10147	Poweshiek skipperling	Oarisma poweshiek
4910	Salt Creek Tiger beetle	Cicindela nevadica lincolniana
1831	Short's bladderpod	Physaria globosa
149	Southwestern willow flycatcher	Empidonax traillii extimus
870	Texas wild-rice	Zizania texana
67	Whooping crane	Grus americana
1881	Whorled Sunflower	Helianthus verticillatus
6901	Yellow-billed Cuckoo	Coccyzus americanus
569	Zapata bladderpod	Lesquerella thamnophila

Plants	Critical Habitat	D1
Terrestrial Invertebrates	Critical Habitat	D1
Plants	Critical Habitat	D1
Plants	Critical Habitat	D1
Plants	Critical Habitat	D1
Terrestrial Invertebrates	Critical Habitat	D1
Mammals	Critical Habitat	D1
Plants	Critical Habitat	D1
Reptiles	Critical Habitat	D1
Plants	Critical Habitat	D1
Terrestrial Invertebrates	Critical Habitat	D1
Terrestrial Invertebrates	Critical Habitat	D1
Plants	Critical Habitat	D1
Birds	Critical Habitat	D1
Plants	Critical Habitat	D1
Birds	Critical Habitat	D1
Plants	Critical Habitat	D1
Birds	Critical Habitat	D1
Plants	Critical Habitat	D1

STUSPS	County Name
AL	Baldwin
AL	Morgan
AL	Cherokee
AL	Dallas
AL	Sumter
AL	Colbert
AL	Franklin
AL	Lawrence
AL	Calhoun
AL	DeKalb
AL	Etowah
AL	Jackson
AL	Marshall
AL	Autauga
AL	Chilton
AL	Elmore
AL	St. Clair
AL	Madison
AL	Cullman
AR	Drew
AR	Jefferson
AR	Pulaski
AZ	Graham
AZ	Greenlee
AZ	Yuma
FL	Bay
FL	Gadsden
FL	Jackson
FL	Calhoun
FL	Washington
FL	Palm Beacg
GA	Mitchell
GA	Worth
GA	Burke
GA	Bartow
GA	Floyd
GA	Gordon
GA	Walker
GA	Decatur
GA	Seminole
IA	Dickinson
IA	Osceola
IA	Allamakee
IA	Clayton
IA	Delaware

IA	Dubuque
IA	Jackson
IA	Cerro Gordo
IA	Emmet
IA	Hancock
IA	Howard
IA	Kossuth
IL	Bureau
IL	LaSalle
IL	Will
IL	Fulton
IL	Greene
IL	Madison
IL	Morgan
IL	Peoria
IL	Pike
IL	St. Clair
IL	Schuyler
IL	Tazewell
IL	Effingham
IL	Fayette
IL	Grundy
IL	Kankakee
IL	Livingston
IL	Marion
IN	Greene
IN	Harrison
IN	Lake
IN	Porter
IN	LaGrange
IN	Posey
KY	Barren
KY	Meade
KY	Warren
KY	Franklin
KY	Bullitt
KY	Jefferson
KY	Henry
KY	Fleming
KY	Harrison
KY	Nicholas
KY	Bourbon
KY	Hardin
LA	Caddo
LA	Caldwell
MI	Allegan
MI	Ionia

MI	Kent
MI	Monroe
MI	Montcalm
MI	Newaygo
MI	Barry
MI	Berrien
MI	Branch
MI	Cass
MI	Jackson
MI	Kalamazoo
MI	St. Joseph
MI	Van Buren
MI	Washtenaw
MI	Huron
MI	Ottawa
MI	Presque Isle
MN	Clay
MN	Lincoln
MN	Murray
MN	Pipestone
MN	Polk
MN	Pope
MN	Mahnomen
MN	Winona
MN	Fillmore
MN	Olmsted
MO	Franklin
MO	Dade
MO	Henry
MO	Jasper
MO	Lawrence
MO	St. Clair
	Cape
MO	Girardeau
MO	Dunklin
MO	Lincoln
MO	Pike
MS	Itawamba
MS	Monroe
MS	Prentiss
MS	Noxubee
NC	Pender
NC	Cumberland
NC	Hoke
NC	Forsyth
NC	Stokes
NC	Burke

NC	Alexander
NC	Catawba
NC	Cleveland
NC	Gaston
NC	Iredell
NC	Lincoln
NC	Rutherford
NC	Buncombe
NC	Henderson
NC	Brunswick
NC	Columbus
NC	Onslow
NC	Beaufort
NC	Craven
NC	Hyde
NC	Lenoir
NC	Granville
NC	Orange
NC	Rockingham
NC	Caldwell
NC	Anson
NC	Cabarrus
NC	Davidson
NC	Guilford
NC	Randolph
NC	Rowan
NC	Stanly
NC	Surry
NC	Union
NC	Sampson
NC	Bladen
NC	Harnett
NC	Franklin
NC	Johnston
NC	Nash
NC	Robeson
NC	Wake
NC	Wilson
NC	McDowell
ND	Bottineau
ND	McHenry
ND	McLean
ND	Stutsman
ND	Ward
ND	Richland
ND	Sargent
NE	Buffalo

NE	Gosper
NE	Kearney
NE	Phelps
NE	Lancaster
NE	Saunders
NE	Custer
NJ	Salem
NM	Chaves
NM	Eddy
NM	Dona Ana
NY	Genesee
NY	Madison
NY	Onondaga
OH	Portage
OH	Erie
OH	Ottawa
OK	Osage
SC	Spartanburg
SC	Edgefield
SC	Greenville
SC	Aiken
SC	Allendale
SC	Barnwell
SC	Lexington
SC	Richland
SC	Horry
SC	Darlington
SC	Clarendon
SC	Florence
SC	Orangeburg
SC	Williamsburg
SC	Lancaster
SD	Brown
SD	Brookings
SD	Clark
SD	Codington
SD	Day
SD	Deuel
SD	Grant
SD	Hamlin
SD	Marshall
SD	Roberts
TN	Cheatham
TN	Montgomery
TN	McNairy
TN	Madison
TN	Wilson

TN	Rutherford
TN	White
TN	Fentress
TN	Bedford
TN	Maury
TN	Bledsoe
TN	Marion
TN	Polk
TN	Davidson
TN	Franklin
TN	Grundy
TX	Starr
TX	Hays
TX	Hidalgo
TX	Cameron
TX	Jim Wells
TX	Kleberg
TX	Nueces
TX	Medina
TX	Uvalde
TX	Coke
TX	Mitchell
TX	Runnels
TX	El Paso
TX	Refugio
TX	Robertson
TX	Fort Bend
TX	Harris
TX	Willacy
VA	Mecklenburg
VA	Dinwiddie
WI	Adams
WI	Barron
WI	Chippewa
WI	Clark
WI	Dunn
WI	Eau Claire
WI	Green Lake
WI	Jackson
WI	Juneau
WI	Marquette
WI	Monroe
WI	Oconto
WI	Portage
WI	St. Croix
WI	Sauk
WI	Shawano

WI	Waupaca
WI	Waushara
WI	Wood
WI	Grant
WI	Richland
WI	Vernon
WI	Columbia
WI	Dane
WI	Manitowoc
WI	Sheboygan

Message

From: George Sabbagh [george.sabbagh@bayer.com]
Sent: 10/20/2020 9:27:43 PM
To: Crawford, Lydia [Crawford.Lydia@epa.gov]; Hathaway, Margaret [Hathaway.Margaret@epa.gov]; Schmid, Emily [Schmid.Emily@epa.gov]
CC: Meadows, Sarah [Meadows.Sarah@epa.gov]; Kenny, Daniel [Kenny.Dan@epa.gov]; Echeverria, Marietta [Echeverria.Marietta@epa.gov]; BCSReg_Archive [esepamailbox@bayer.com]
Subject: RE: Xtendimax label comments
Attachments: MASTER LABEL_XtendiMax_264-RERN_20201020.pdf; MASTER LABEL_XtendiMax_264-RERN_20201020_redline.pdf

Attached please find updated copies of the label. The redline version shows the changes made, and it provides explanations to revisions requested by the Agency that were not adopted. Agency comments and Bayer explanations are also summarized below.

Please, reach out if you need additional clarification or have questions.

EPA Comment	Bayer Reply
Isn't this [obtain a copy of the Overview of Application Requirements] mandatory? (pg. 4)	This is not mandatory, but it is something that we have provided users in the past from as a good stewardship practice.
This implies that rain after 4 hours is not a concern for runoff when applications when rainfall is forecast in the next 48 hours is explicitly restricted. Remove to avoid confusion. (p. 5)	The runoff language specifically indicates that rainfall is only a concern when a rain event that may exceed field capacity is forecasted within 48 hours. In this case, rain within four hours after application may reduce the effectiveness of this product, while runoff would not be an issue so long as it does not exceed field capacity.
Insert the following: "During a temperature inversion, the atmosphere is very stable and vertical air mixing is restricted, which can cause small, suspended droplets to remain in a concentrated cloud. This cloud can move in unpredictable directions due to the light, variable winds common during inversions." (p. 7)	The main points for this temperature inversion section are to indicate to the applicator not to apply into an inversion and to list the primary conditions for the applicator to be alerted to so as to avoid applying into an inversion. We do not find it necessary to include on the label extra information on what an inversion is or how winds may impact it, but we acknowledge that this be part of the training for certified applicators.
Insert "(above 91 degrees F)" in the "Temperature and Humidity" section,	Upon further review, we have struck this section from the label. This section and statements therein, including the 91F temperature suggested insert, is a carryover from older product labels where finer tip nozzles and <10 GPA were permitted for use and was a generally accepted mitigation to further reduce drift in high heat/low humidity areas. There is also no data in this registration or any other to support the statement as an effective mitigation. With the current use gallons limited to 15 GPA or higher and the nozzle approval process, this product is limited for use with the largest droplet size available for ALL applications regardless of high heat and low humidity. We already have limited the production of most if not all fine particles from evaporative loss; moreover, there is no other nozzle that could be used to further reduce fines. All of our approved nozzles are tested and have specific ranges of psi for approved use to maximize coverage while limiting the production of fines.
It must be clear that the only hooded sprayers allowed are those approved on the website and the use of any other hooded sprayer is a violation of the label. (p. 8)	These other types of DRT (besides qualified hooded sprayers) can be used with this product but, while they do offer additional protection against spray drift, they do not currently qualify for mitigation relief.

Change text to: "'may qualify for a reduced buffer distance described below, provided ...'" (delete "for reduced use restrictions"; p. 8)	As per the hooded sprayer qualification protocol, there is the potential for other application requirements to change. This language is consistent with that approach and is aligned with EPA's DRT website
Between Crop Applications: "These uses are covered by the preplant instructions for DT cotton and soybean. Having them as separate instructions as well is misleading." Suggested edit was to delete this section. (p. 11)	These uses are not covered by the preplant instructions for DT cotton and soybean. This "Between Crop Applications" use: (1) Offers growers post-harvest weed control opportunity to have a low-volatility dicamba with greatly improved application requirements to mitigate OTM and protection of endangered species/areas (vs the myriad other dicambas with this label provision). (2) Fall or post-harvest applications tank-mixed with other herbicides can be a very effective tool to manage escaped or newly emerged weeds after harvest equipment, fall tillage, or other production practice has occurred before hard freeze to manage spring weed populations. (3) Allowing additional post-harvest uses also allows retailers and growers to use left-over stock of this low-volatility product in this manner vs other dicambas.

Freundliche Grüße / Best regards,

George Sabbagh, Ph.D.
Head Regulatory Engagements

Regulatory Engagement
Collaborating Across Organizations

Bayer US LLC
801 Pennsylvania Avenue, NW
Suite 900
Washington, DC 20004
Cel: +1 913 231 6291
E-mail: george.sabbagh@bayer.com
Web: http://www.bayercropscience.com

From: Crawford, Lydia <Crawford.Lydia@epa.gov>
Sent: Friday, October 16, 2020 4:47 PM
To: George Sabbagh <george.sabbagh@bayer.com>
Cc: Hathaway, Margaret <Hathaway.Margaret@epa.gov>; Meadows, Sarah <Meadows.Sarah@epa.gov>; Schmid, Emily <Schmid.Emily@epa.gov>; Kenny, Daniel <Kenny.Dan@epa.gov>; Echeverria, Marietta <Echeverria.Marietta@epa.gov>
Subject: Xtendimax label comments

Good evening George,

Please see the attached label comments for 264-RERN. Make requested changes and send back clean and highlighted copies of the label as quickly as you can. If you have any rebuttals, please include them in the body of the email response. Hope you have a pleasant weekend.
Thanks,

Lydia Crawford PhD
Biologist | Herbicide Branch | Registration Division
U.S. Environmental Protection Agency | Office of Pesticide Programs
(703) 347-0622 | Crawford.Lydia@epa.gov

The information contained in this e-mail is for the exclusive use of the intended recipient(s) and may be confidential, proprietary, and/or legally privileged. Inadvertent disclosure of this message does not constitute a waiver of any privilege. If you receive this message in error, please do not directly or indirectly use, print, copy, forward, or disclose any part of this message. Please also delete this e-mail and all copies and notify the sender. Thank you.

RESTRICTED USE PESTICIDE
To be used by certified applicators only; NOT to be used by uncertified persons working under the supervision of a certified applicator, except that uncertified persons may transport containers.

This labeling expires on XX/XX/2025. DO NOT use or distribute this product after XX/XX/2025.

DICAMBA	GROUP	4	HERBICIDE

XtendiMax® With VaporGrip® Technology

ABN: M1768 Herbicide

For weed control in cotton with XtendFlex® Technology and soybean with Roundup Ready 2 Xtend® Technology or XtendFlex® Technology.

XtendiMax® With VaporGrip® Technology is approved by U.S. EPA for use in dicamba-tolerant cotton and dicamba-tolerant soybeans only in the following states, subject to county restrictions as noted: Alabama, Arkansas, Arizona, Colorado, Delaware, Florida (excluding Palm Beach County), Georgia, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maryland, Michigan, Minnesota, Mississippi, Missouri, Nebraska, New Jersey, New Mexico, New York, North Carolina, North Dakota, Oklahoma, Ohio, Pennsylvania, South Carolina, South Dakota, Tennessee (excluding Wilson County), Texas, Virginia, West Virginia, Wisconsin.

Check the registration status of each product in each state before using.

ACTIVE INGREDIENT: Dicamba
Diglycolamine salt of dicamba (3,6-dichloro-*o*-anisic acid)* **42.80%**
OTHER INGREDIENTS: **57.20%**
TOTAL: **100.00%**
*Contains 29.0% 3,6-dichloro-*o*-anisic acid (2.9 pounds acid equivalent per U.S. gallon or 350 grams per liter)

EPA Reg. No. 264-RERN **EPA Est. No.**

CAUTION
KEEP OUT OF REACH OF CHILDREN

For MEDICAL and TRANSPORTATION Emergencies ONLY Call 24 Hours a Day 1-800-334-7577

For PRODUCT USE Information Call 1-866-99BAYER (1-866-992-2937)

For Incidence of Non-performance or Off-Target Movement or for Questions Regarding Buffer Requirements or Sensitive Crop Registries Call 1-844-RRXTEND (1-844-779-8363)

Please refer to [back panel] [booklet] for additional precautionary statements and directions for use. [Note to reviewer: Location of additional precautionary statements and directions for use will vary between those listed, depending on container type/size.]

Net Contents:

FIRST AID	
IF IN EYES:	• Hold eye open and rinse slowly and gently with water for 15 to 20 minutes. • Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. • Call a poison control center or doctor for treatment advice.

IF SWALLOWED:	• Call a poison control center or doctor immediately for treatment advice. • Have person sip a glass of water if able to swallow. • DO NOT induce vomiting unless told to do so by a poison control center or doctor. • DO NOT give anything by mouth to an unconscious person.
IF ON SKIN OR CLOTHING:	• Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15 to 20 minutes. • Call a poison control center or doctor for treatment advice.
In case of emergency, call the toll-free Bayer Emergency Response telephone number: 1-800-334-7577. Have the product container or label with you when calling a poison control center or doctor or when going for treatment.	

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION

- Causes moderate eye irritation.
- Avoid contact with eyes or clothing.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

All mixers, loaders, applicators, and other handlers must wear:

- Long-sleeved shirt and long pants
- Waterproof gloves
- Shoes plus socks

Follow the manufacturer's instructions for cleaning and maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

ENGINEERING CONTROLS

When handlers use closed systems, or enclosed cabs in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240 (d) (4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

IMPORTANT: When reduced PPE is worn because a closed system is being used, handlers must be provided all PPE specified above for "all mixers, loaders, applicators, and other handlers" and have such PPE immediately available for use in an emergency, such as a spill or equipment breakdown.

USER SAFETY RECOMMENDATIONS

User should:

- Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet.
- Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

ENVIRONMENTAL HAZARDS

DO NOT apply directly to water, or to areas where surface water is present, or to intertidal areas below the mean high-water mark. DO NOT contaminate water when disposing of equipment washwaters or rinsate. Apply this product only as directed on the label.

Ground Water Advisory: This chemical is known to leach through soil into ground water under certain conditions as a result of agricultural use. Use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in ground water contamination.

GROUND AND SURFACE WATER PROTECTION

Point source contamination: To prevent point source contamination, DO NOT mix or load this pesticide product within 50 feet of wells (including abandoned wells and drainage wells), sink holes, perennial or intermittent streams and rivers, and natural or impounded lakes and reservoirs. DO NOT apply pesticide product within 50 feet of wells. This setback does not apply to properly capped or plugged abandoned wells and does not apply to impervious pad or properly diked mixing/loading areas as described below.

Mixing, loading, rinsing, or washing operations performed within 50 feet of a well are allowed only when conducted on an impervious pad constructed to withstand the weight of the heaviest load that may be on or move across the pad. The pad must be self-contained to prevent surface water flow over or from the pad. The pad capacity must be maintained at 110% that of the largest pesticide container or application equipment used on the pad and have sufficient capacity to contain all product spills, equipment or container leaks, equipment washwaters, and rainwater that may fall on the pad. The containment capacity does not apply to vehicles delivering pesticide shipments to the mixing/loading site. States may have in effect additional requirements regarding wellhead setbacks and operational containment.

Care must be taken when using this product to prevent: a) back siphoning into wells, b) spills, or c) improper disposal of excess pesticide, spray mixtures, or rinsates. Check valves or anti-siphoning devices must be used on all mixing equipment.

Movement by surface runoff or through soil: DO NOT apply under conditions that favor runoff. DO NOT apply if soil is saturated with water or when rainfall that may exceed soil field capacity is forecasted to occur within 48 hours.

Under some conditions, dicamba has the potential for runoff several days after application. Poorly draining, wet, or erodible soils with readily visible slopes toward adjacent sensitive areas are more prone to produce runoff. When used on erodible soils, best management practices for minimizing runoff should be employed. Consult your local Soil Conservation Service for recommendations in your use area.

Ground water contamination may occur in areas where soils are permeable or coarse and ground water is near the surface. DO NOT apply to impervious substrates such as paved or highly compacted surfaces in areas with high potential for ground water contamination. DO NOT apply to soils classified as sand with less than 3% organic matter and where ground water depth is shallow.

Movement by water erosion of treated soil: DO NOT apply or incorporate this product through any type of irrigation equipment nor by flood or furrow irrigation. Ensure treated areas have received at least one-half inch rainfall (or irrigation) before using tailwater for subsequent irrigation of other fields.

PROTECTING ENDANGERED SPECIES / PESTICIDE USE LIMITATION AREAS

The use of any pesticide in a manner that may kill or otherwise harm an endangered species or adversely modify their habitat is a violation of federal law. Use of this product in a manner inconsistent with its labeling may pose a hazard to endangered or threatened species. **When using this product, you must follow the measures contained in the Endangered Species Protection Bulletin for the area in which you are applying the product.** To obtain Bulletins, no more than six months before using this product, consult https://www.epa.gov/endangered-species/bulletins-live-two-view-bulletins or call 1-844-447-3813. You must use the Bulletin valid for the month in which you will apply the product.

It is a Federal offense to use any pesticide in a manner that results in the death of an endangered species.

PHYSICAL OR CHEMICAL HAZARDS

DO NOT store or heat near oxidizing agents as a hazardous chemical reaction may occur.

DIRECTIONS FOR USE

RESTRICTED USE PESTICIDE

Only for retail sale to and use by Certified Applicators. NOT to be used by uncertified persons working under the supervision of a certified applicator, except that uncertified persons may transport containers.

It is a violation of Federal law to use this product in any manner inconsistent with its labeling. This labeling must be in the user's possession during application. Read the entire label before using this product.

DO NOT apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

For important crop safety information, refer to the "Specific Use Directions" section for each crop.

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. This standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses and of handlers of agricultural pesticides. It contains requirements for training, decontamination, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about Personal Protective Equipment (PPE), notification to workers, and restricted-entry intervals. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

DO NOT enter or allow worker entry into treated areas during the restricted-entry interval **(REI) of 24 hours.**

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water is:

- Coveralls worn over short-sleeved shirt and short pants
- Chemical-resistant footwear plus socks
- Waterproof gloves
- Chemical-resistant headgear for overhead exposure
- Protective eyewear

NON-AGRICULTURAL USE REQUIREMENTS

The requirements in this box apply to uses of this product that are NOT within the scope of the Worker Protection Standard for agricultural pesticides (40 CFR Part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries, or greenhouses.

DO NOT enter or allow people (or pets) to enter the treated area until sprays have dried.

DO NOT apply this product in a way that will contact workers or other persons, either directly or through drift.

PRODUCT INFORMATION

XtendiMax® With VaporGrip® Technology is:

- a water-soluble formulation intended for control and suppression of many annual, biennial, and perennial broadleaf weeds listed in the "Weeds Controlled or Suppressed" section of this label. This product may be used for control of these weeds in cotton with XtendFlex® Technology and soybean with Roundup Ready 2 Xtend® Technology or XtendFlex® Technology.
- a contact, systemic herbicide, with limited soil activity on small seeded broadleaf weeds, including waterhemp, lambsquarters, and Palmer pigweed, depending on rainfall and soil type.
- readily absorbed by plants through shoot and root uptake, translocates throughout the plant's system, and accumulates in areas of active growth. XtendiMax® With VaporGrip® Technology interferes with plant growth hormones (auxins) resulting in death of many broadleaf weeds.

Additional state restrictions and requirements may apply. The user must comply with any additional state requirements and restrictions.

Refer to the specific use directions and restrictions in each crop table. Follow all requirements and restrictions on www.xtendimaxapplicationrequirements.com.

APPLICATION REQUIREMENTS OVERVIEW

Read and follow all applicable restrictions, precautions, and directions on the container label and booklet and at www.xtendimaxapplicationrequirements.com. For product questions or inquiries and/or to report any nonperformance of this product against any particular weed species, call 1-844-RRXTEND (1-844-779-8363). It is recommended that the certified applicator visit www.xtendimaxapplicationrequirements.com to obtain a copy of the Overview of Application Requirements for reference prior to and during application.

REQUIREMENTS	LABEL SECTIONS
Mandatory Training: ☐ Prior to applying, applicator must complete dicamba-specific training. Only certified applicators may apply this product; NOT to be used by uncertified persons working under the supervision of a certified applicator, except that uncertified persons may transport containers.	➢ Training (p. 6)
Record Keeping: ☐ Records must be created within 72 hours of every application. Records must be kept for a period of two years.	➢ Record Keeping (p. 6)
Application: ☐ For EVERY application of XtendiMax® With VaporGrip® Technology, an EPA-approved **Volatility Reduction Adjuvant (VRA)** must be included in the spray solution. An EPA-approved **Drift Reduction Adjuvant (DRA)** must also be included in the spray solution, unless otherwise indicated on www.xtendimaxapplicationrequirements.com. Refer to the website for a list of EPA-approved DRAs and VRAs. ☐ *Rate and Timing*: Apply 22 fluid ounces per acre (0.5 lb. a.e. dicamba) for any single pre-emergent or in-crop application in:	➢ Tank Mix Partners and Compatibility Testing (p. 9) ➢ Specific Use Directions (pp. 12-14)

○ Cotton with XtendFlex® Technology up to and including July 30, and ○ Soybean with Roundup Ready 2 Xtend® Technology or XtendFlex® Technology up to and including June 30. Applications occurring after R1 are prohibited as crop response may occur. ○ For details, see the "Specific Use Directions" section. ☐ *Spray volume:* Apply in a minimum of 15 gallons of spray solution per acre. ☐ *Tank mixing*: Use only approved tank-mix partners found at www.xtendimaxapplicationrequirements.com. ○ Refer to all product labels to determine mix order or perform a mix compatibility test.	➢ Specific Use Directions (pp. 12-14) ➢ Tank Mix Partners and Compatibility Testing (p. 9)
Application Equipment: ☐ *Spray system equipment cleanout*: Ensure entire sprayer system is properly cleaned before and after application. ☐ *Nozzles*: Use only approved nozzles within specified pressures found at www.xtendimaxapplicationrequirements.com. ☐ *Spray boom height*: Maximum boom height is 24 inches above target pest or crop canopy. ☐ *Ground speed*: DO NOT exceed 15 mph.	➢ Equipment Requirements (pp. 7-8)
Environmental Conditions: ☐ *Wind speed*: Apply when wind speed, measured at boom height, is 3-10 mph. ☐ *Inversions*: DO NOT spray during an inversion; only spray between one hour after sunrise and two hours before sunset. ☐ *Rainfall*: DO NOT apply this product if rain that may exceed soil field capacity and result in soil runoff is forecasted in the next 48 hours.	➢ Environmental Requirements (p. 7)
Downwind Requirements: ☐ *Sensitive crops and certain plants downwind*: DO NOT apply if sensitive crops and/or certain plants, as defined below in this label, are planted on an adjacent downwind field or area. ☐ *Downwind buffer*: After determining no adjacent sensitive crops and/or certain plants are downwind, maintain a 240-ft downwind buffer. ☐ *Endangered species*: In counties where endangered species are present, consult Endangered Species Protection Bulletins for ESA restrictions.	➢ Adjacent Sensitive Crops and Certain Plants (p. 8) ➢ Buffer Requirements (p. 8)
Drift Reduction Technology: ☐ See "Optional Use of Drift Reduction Technology" section for details on application requirements and the potential to qualify for reduced use restrictions.	➢ Optional Use of Drift Reduction Technology (pp. 8-9)

USE RESTRICTIONS

- DO NOT USE ANY TANK MIX PRODUCT OR ANY NOZZLE AND PRESSURE COMBINATION WITH XTENDIMAX® WITH VAPORGRIP® TECHNOLOGY THAT IS NOT IDENTIFIED ON THE LIST OF APPROVED PRODUCTS FOUND AT www.xtendimaxapplicationrequirements.com.
- DO NOT TANK MIX AMMONIUM SULFATE (AMS) WITH THIS PRODUCT.
- DO NOT EXCEED 88 FLUID OUNCES (2 POUNDS ACID EQUIVALENT (A.E.) DICAMBA) OF XTENDIMAX® WITH VAPORGRIP® TECHNOLOGY PER ACRE PER YEAR.
- DO NOT EXCEED 88 FLUID OUNCES (2 POUNDS A.E. DICAMBA) PER ACRE PER YEAR FROM ALL DICAMBA APPLICATIONS IF MORE THAN ONE DICAMBA-CONTAINING PRODUCT IS APPLIED TO THE SAME SITE WITHIN THE SAME YEAR.
- DO NOT MAKE APPLICATION OF THIS PRODUCT IF RAIN IS EXPECTED IN THE NEXT 48 HOURS THAT MAY EXCEED SOIL FIELD CAPACITY AND RESULT IN SOIL RUNOFF.
- DO NOT APPLY THROUGH ANY TYPE OF IRRIGATION EQUIPMENT. DO NOT TREAT IRRIGATION DITCHES OR WATER USED FOR CROP IRRIGATION OR DOMESTIC PURPOSES.
- DO NOT APPLY TO CROPS UNDER STRESS DUE TO LACK OF MOISTURE, HAIL DAMAGE, FLOODING, HERBICIDE INJURY, MECHANICAL INJURY, INSECTS, OR WIDELY FLUCTUATING TEMPERATURES AS INJURY MAY RESULT.
- DO NOT APPLY THIS PRODUCT IF SENSITIVE CROPS AND CERTAIN PLANTS ARE PLANTED ON AN ADJACENT DOWNWIND FIELD OR AREA.
- DO NOT APPLY THIS PRODUCT AERIALLY.
- Restricted Entry Interval (REI): 24 hours.

USE PRECAUTIONS

- In case material is released or spilled: dike and contain the spill with inert material (sand, earth, etc.) and transfer liquid and solid diking material to separate containers for disposal. Remove contaminated clothing and wash affected skin areas with soap and water. Wash clothing before re-use. Keep the spill out of all sewers and open bodies of water.

- Rainfast period: Rainfall or irrigation occurring within 4 hours after postemergence applications may reduce the effectiveness of this product.

TRAINING

Prior to using this product, users must complete dicamba-specific training to obtain certification. Once completed, dicamba-specific training is then required every other year for all users of this product. If state-specific training is required by the state where the applicator intends to apply this product, the applicator must complete training from the state or state-authorized provider. Otherwise, the applicator may complete dicamba-specific training provided either by the state/state-authorized provider or by a registrant of a dicamba product approved for in-crop use with dicamba-tolerant crops.

RECORD KEEPING

The following records must be generated as soon as practical but **no later than 72 hours after application**. The certified applicator must keep these records for a period of **two years**. Records must be made available to State Pesticide Control Official(s), USDA, and EPA upon request. See www.xtendimaxapplicationrequirements.com for an example form summarizing record keeping requirements.

Keep records of the following items for each application of XtendiMax® With VaporGrip® Technology:

1. All Items required by 7 CFR Part 110 (RECORDKEEPING ON RESTRICTED USE PESTICIDES BY CERTIFIED APPLICATORS), including:
    a. The brand or product name
    b. The EPA registration number
    c. The total amount applied
    d. The month, day, and year of application
    e. The location of the application
    f. The crop, commodity, stored product, or site of application
    g. The size of treated area
    h. The name of the certified applicator
    i. The certification number of the certified applicator
2. *Training*: Completion date and provider of required training and proof of completion.
3. *Receipts of Purchase*: Receipts or copies for the purchase of this product.
4. *Product Label*: A copy of this product label and any state special local needs label that supplements this label.
5. *Crop Planting Date*: Record of the date at which the crop was planted.
6. *Sensitive Crops and Certain Plants Awareness*:
    a. Document that a sensitive crop registry was consulted. At a minimum, documentation must include the name of the sensitive crop registry and the date it was consulted.
    b. Record of a survey of adjacent areas documenting the sensitive crops and/or certain plants (as defined below in the "Adjacent Sensitive Crops and Certain Plants" section of this label) surrounding the field prior to application. At a minimum, records must include documentation of adjacent sensitive crops and/or certain plants and the date the survey was conducted.
7. *Buffer Requirement*: Record of the buffer distance implemented as directed in the "Spray Drift Management" and "Optional Use of Drift Reduction Technology" sections of this label.
8. *Start and Finish Times of Each Application*: Record of the time at which the application started and finished.
9. *Application Timing*: Record of the type of application (for example: preemergence, postemergence) and the number of days after planting if postemergence.
10. *Air Temperature*: Record of the air temperature in degrees Fahrenheit at the start and completion of each application.
11. *Wind Speed and Direction*: Record of the wind speed and direction (the direction from which the wind is blowing) at boom height at the start and completion of each application.
12. *Nozzle and Pressure*: Record of the spray nozzle manufacturer/brand, type, orifice size, and operating pressure used during each application of this product.
13. *Tank Mix Products*: Record of the brand names and EPA registration numbers (if applicable) for all products that were tank mixed with this product for each application, as well as a record of the volume of each added to the tank prior to application.
14. ***Mandatory Volatility and Drift Reduction Adjuvants***: Receipts or copies for the purchase of an EPA-approved volatility reduction adjuvant, as well as a record of the volume added to the tank prior to application. Receipts or copies for the purchase of an EPA-approved DRA and a record of the volume added to the tank prior to application, unless otherwise indicated on www.xtendimaxapplicationrequirements.com.
15. *Spray System Cleanout*: At a minimum, records must include confirmation that the spray system was clean before using this product and that the post-application cleanout was completed in accordance with the "Proper Spray System Equipment Cleanout" section of this label.

HERBICIDE RESISTANCE MANAGEMENT RECOMMENDATIONS

The dicamba active ingredient in XtendiMax® With VaporGrip® Technology is a Group 4 herbicide. Any weed population may contain or develop plants naturally resistant to XtendiMax® With VaporGrip® Technology and other Group 4 herbicides. The resistant biotypes may dominate the weed population if these herbicides are used repeatedly in the same field. Appropriate resistance management strategies should be followed.

To delay herbicide resistance, take one or more of the following steps:

- Limit cultivation and/or mechanical tillage within 7 days after application, as this may result in reduced efficacy and promote regrowth of treated weeds.

- Rotate the use of XtendiMax® With VaporGrip® Technology within a growing season and among growing seasons with different herbicide groups (other than Group 4) that control the same weeds.
- Use tank mixtures with herbicides from a different herbicide Group if such use is permitted.
- Adopt an integrated weed-management program for herbicide use that includes scouting and uses historical information related to herbicide use and crop rotation and that considers tillage (or other mechanical control methods), cultural (*e.g.*, higher crop seeding rates; precision fertilizer application method and timing to favor the crop and not the weeds), biological (weed-competitive crops or varieties), and other management practices.
- Scout after herbicide application to monitor weed populations for early signs of resistance development. Indicators of possible herbicide resistance include: (1) failure to control a weed species normally controlled by the herbicide at the dose applied, especially if control is achieved on adjacent weeds; (2) a spreading patch of non-controlled plants of a particular weed species; (3) surviving plants mixed with controlled individuals of the same species. If resistance is suspected, prevent weed seed production in the affected area by an alternative herbicide from a different group or by a mechanical method such as hoeing or tillage. Prevent movement of resistant weed seeds to other fields by cleaning harvesting and tillage equipment when moving between fields and by planting clean seed.
- If a weed pest population continues to progress after treatment with this product, switch to another management strategy or herbicide with an effective mode of action, if available, and contact Bayer at 1-844-RRXTEND (1-844-779-8363).
- Contact your local extension specialist or certified crop advisors for additional pesticide resistance-management and/or integrated weed-management recommendations for specific crops and weed biotypes.
- For further information or to report suspected resistance contact Bayer at 1-844-RRXTEND (1-844-779-8363).

Management of Dicamba-Resistant Biotypes

Appropriate testing is critical in order to determine if a weed is resistant to dicamba. Contact your Bayer representative to determine if resistance in any particular weed biotype has been confirmed in your area or visit www.iwilltakeaction.com or www.weedscience.org.

The following good agronomic practices can reduce the spread of confirmed dicamba-resistant biotypes, particularly if pursued as soon as signs of resistance are observed:

- If a naturally occurring resistant biotype is present in your field, this product may be tank mixed or applied sequentially with an appropriately labeled herbicide with a different mode of action to achieve control (read "Tank Mixing" section for more information).
- Cultural and mechanical control practices (*e.g.*, crop rotation or tillage) can also be used as appropriate.
- Scout treated fields after herbicide application and control weed escapes, including resistant biotypes, before they set seed.
- Thoroughly clean equipment, as practical, for all weed seeds before leaving fields known to contain resistant biotypes.

SPRAY DRIFT MANAGEMENT

THE APPLICATOR IS RESPONSIBLE FOR AVOIDING OFF-SITE SPRAY DRIFT TO THE EXTENT CONSISTENT WITH APPLICABLE LAW. The applicator is responsible for compliance with state and local pesticide regulations, including any state or local pesticide drift regulations. DO NOT allow herbicide solution to mist, drip, drift, or splash onto desirable vegetation because severe injury or destruction to desirable broadleaf plants could result.

Applications using larger droplets reduces drift potential but will not prevent drift if the application is made improperly or under unfavorable environmental conditions. The interaction of weather-related factors and equipment must be monitored to maximize performance and on-target spray deposition. The applicator is responsible for considering all these factors when making a spray decision to the extent consistent with applicable law. BE AWARE OF NEARBY NON-TARGET SITES AND CHANGING ENVIRONMENTAL CONDITIONS (see the "Temperature Inversions" section of this label).

Environmental Requirements

Wind Speed

Wind speed must be measured in the field of application at boom height prior to and after application. Only apply when wind speed at boom height is between 3 MPH and 10 MPH during application.

Temperature Inversions

DO NOT apply this product during a temperature inversion as the off-target movement potential is high.

Applications of this product may ONLY occur one hour after sunrise through two hours before sunset. In general, temperature inversions are more likely during nighttime hours.

- Temperature inversions are characterized by increasing temperature with altitude and are common on nights with limited cloud cover and light to no wind.
- The presence of an inversion can be indicated by ground fog or, if fog is not present, by the movement of smoke from a ground source or an aircraft smoke generator. Smoke that layers and moves laterally in a concentrated cloud (under low wind conditions) indicates an inversion, while smoke that moves upward and rapidly dissipates indicates good vertical air mixing.

Equipment Requirements

DO NOT APPLY THIS PRODUCT USING AERIAL SPRAY EQUIPMENT.

Nozzle Type

To produce minimal amounts of fine spray particles, the applicator must use an approved nozzle within a specified pressure range as found at www.xtendimaxapplicationrequirements.com. DO NOT use any other nozzle and pressure combination not specifically listed on this website.

Equipment Ground Speed

DO NOT exceed a ground speed of 15 miles per hour. Select a ground speed that will deliver the desired spray volume while maintaining the desired spray pressure. Slower speeds generally result in better spray coverage and deposition on the target area. Provided the applicator can maintain the required nozzle pressure, it is recommended that tractor speed is reduced to 5 miles per hour at field edges.

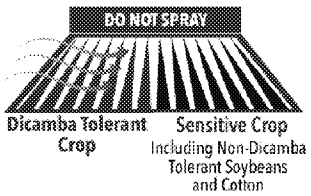
Spray Boom Height

Use the minimum boom height appropriate for spray pattern overlap, according to nozzle selection, or 24 inches above target pest or crop canopy, whichever is smaller.

Adjacent Sensitive Crops and Certain Plants

DO NOT SPRAY this product when wind is blowing toward adjacent sensitive crops and certain plants, as defined immediately below.

It is important for the applicator to be aware that wind direction may vary during the application. If wind direction shifts such that the wind is blowing toward adjacent sensitive crops and/or certain plants, the applicator **must STOP** the application.



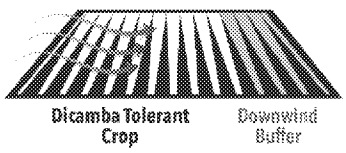
Before making an application, 1) consult a sensitive crop registry (such as FieldWatch or state/federal registry), 2) survey adjacent fields and areas, and 3) confirm the type or variety of plants and crops surrounding the field prior to application. At a minimum, records must include the name of the sensitive crop registry, the date it was consulted, documentation of adjacent plants and crops/areas surrounding the field of application, and the date the survey was conducted.

Dicamba-sensitive crops and/or certain plants include, but are not limited to, non-dicamba-tolerant soybeans and cotton, tomatoes and other fruiting vegetables (EPA crop group 8), fruit trees, cucurbits (EPA crop group 9), grapes, beans, flowers, ornamentals, peas, potatoes, sunflower, tobacco, and other broadleaf plants, including if these plants are in a greenhouse. Severe injury or destruction could occur if any contact between this product and these plants occurs. Sensitive crop registries can provide additional information about sensitive crops and sensitive areas.

If you have questions regarding sensitive crop registries contact Bayer at 1-844-RRXTEND (1-844-779-8363) **prior to application**.

Buffer Requirements

After determining no adjacent sensitive crops and/or certain plants are downwind, the applicator **must always maintain a 240-foot downwind buffer** between the last treated row and the nearest downwind field edge when applying using broadcast open-boom equipment. For reduced downwind buffer distances, refer to "Optional Use of Drift Reduction Technology" section of this label.



The following areas may be included in the buffer distance composition when directly adjacent to the treated field edges:

- Roads, paved or gravel surfaces, mowed and/or managed areas adjacent to field such as rights-of-way
- Planted agricultural fields containing: corn, dicamba-tolerant cotton, dicamba-tolerant soybean, sorghum, proso millet, small grains, or sugarcane. If the applicator intends to include such crops as dicamba-tolerant cotton and/or dicamba-tolerant soybeans in the buffer distance calculation, the applicator must confirm the crops are in fact dicamba-tolerant.
- Agricultural fields that have been prepared for planting
- Areas covered by the footprint of a building, silo, or other man-made structure with walls and/or roof

If you have questions regarding Buffer Requirement, contact Bayer at 1-844-RRXTEND (1-844-779-8363) **prior to application**.

Optional Use of Drift Reduction Technology

This product may be optionally applied using a hooded/shielded broadcast sprayer or other types of drift reduction technology (DRT), such as hooded/shielded in-row or directed layby equipment, for postemergence weed control as well as residual control of susceptible weeds. The applicator must use an approved nozzle within a specified pressure range as found at www.xtendimaxapplicationrequirements.com. Use of drift reduction technology (DRT) in combination with approved nozzles is recommended to further reduce drift potential.

Applications of this product may qualify for reduced use restrictions, such as a reduced downwind buffer distance, provided a **qualified DRT** listed on www.xtendimaxapplicationrequirements.com is used and operated according to the directions and limitations provided at www.xtendimaxapplicationrequirements.com.

Hooded/Shielded Broadcast Sprayer:

For hooded/shielded sprayers, all application nozzles must be contained within the enclosed area. Shielding the boom or individual nozzles can reduce the effects of wind. However, it is the responsibility of the applicator to verify that the shields are preventing drift and not interfering with uniform deposition of the product. Applicators must ensure the sprayer system is off or controlled during turns to further prevent spray drift. Refer to the hooded/shielded sprayer manufacturer use specifications prior to use.

Requirements for Reduced Use Restrictions with Optional Hooded/Shielded Sprayer: ONLY **qualified** hooded/shielded sprayers listed on www.xtendimaxapplicationrequirements.com are eligible for reduced use restrictions when applying this product. Refer to the website for specific application requirements when using a **qualified** hooded/shielded sprayer. While this product may be applied with other (non-qualified) hooded/shielded sprayers, no reduction in use restrictions is associated with their use.

TANK MIX PARTNERS AND COMPATIBILITY TESTING

Tank Mixing

It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions, limitations, and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.

All applications of this product require the inclusion of a volatility reduction adjuvant (VRA), such as a VaporGrip® Xtra Agent product or an approved VRA equivalent, in the tank mix. The inclusion of a **drift reduction adjuvant (DRA) is also required** in the tank mix, unless otherwise indicated on www.xtendimaxapplicationrequirements.com. Only tank mix products that have been tested and found to not adversely affect the offsite movement potential of XtendiMax® With VaporGrip® Technology may be tank mixed with XtendiMax® With VaporGrip® Technology. The applicator must check the website found at www.xtendimaxapplicationrequirements.com for a list of approved tank mix products no more than 7 days before applying XtendiMax® With VaporGrip® Technology.

DO NOT tank mix any product with XtendiMax® With VaporGrip® Technology unless:

1. The intended tank mix product is identified on the list of tested products found at www.xtendimaxapplicationrequirements.com;
2. The intended products are not prohibited on either this label or the label of the tank mix product; and
3. All requirements and restrictions on www.xtendimaxapplicationrequirements.com are followed.

NOTE: DO NOT use PVA (polyvinyl acetate) packets in a tank mix with products that contain boron or release free chlorine. The resultant reaction of PVA and boron or free chlorine is a plastic that is not soluble in water or solvents.

APPLICATION INSTRUCTIONS

APPLY THIS PRODUCT USING PROPERLY MAINTAINED AND CALIBRATED EQUIPMENT CAPABLE OF DELIVERING THE REQUIRED VOLUMES.

DO NOT APPLY THIS PRODUCT USING AERIAL SPAY EQUIPMENT.

XtendiMax® With VaporGrip® Technology can be applied to actively growing weeds as broadcast, band, or spot spray applications using water as a carrier. For best results, treat weeds early when they are relatively small (less than 4 inches). Timely application to small weeds early in the season will improve control and reduce weed competition.

Ground Application (Broadcast)

Water Volume: Use a minimum of 15 gallons of spray solution per broadcast acre for optimal performance. Use 20 gallons per acre or greater when treating dense weed canopy/vegetation.

Ground Application (Hooded In-Row and Directed Layby)

Using a hooded sprayer or other drift reduction technology in combination with approved nozzles may further reduce drift potential. When applying XtendiMax® With VaporGrip® Technology by hooded in-row or layby sprayers, determine the amount of herbicide and water volume needed using the following formula:

$$\frac{\text{band width (inches)}}{\text{row width (inches)}} * \text{broadcast rate per acre} = \text{rate per treated acre}$$

$$\frac{\text{band width (inches)}}{\text{row width(inches)}} * \text{broadcast spray volume per acre} = \text{spray volume per treated acre}$$

SPRAY SYSTEM EQUIPMENT CLEANOUT

You must ensure that the spray system used to apply this product is clean before using this product. Failure to properly clean the entire spray system can result in inadvertent contamination of the spray system. Contamination of the spray system may cause injury to non-dicamba-tolerant soybeans and other sensitive crops.

Inadvertent contamination can also occur in equipment used for bulk product handling and mixing prior to use in the spray system. Care should be taken to reduce contamination not only in the spray system but in any equipment used to transfer or deliver product. For example, bulk handling and mixing equipment containing this product should be segregated when possible to reduce potential for cross-contamination. Consider using block and check valves to avoid backflow during transfer. Piping should be reviewed to ensure there is not potential for product build-up. Dedicated nurse trucks and tender equipment should be used when possible.

Clean equipment **immediately after using** this product, using a **triple rinse** procedure as follows:

1. After spraying, drain the sprayer (including boom and lines) immediately. DO NOT allow the spray solution to remain in the spray boom lines overnight prior to flushing.
2. Flush tank, hoses, boom, and nozzles with clean water. If equipped, open boom ends and flush.
3. Inspect and clean all strainers, screens, and filters.
4. Prepare a cleaning solution with a commercial detergent or sprayer cleaner or ammonia according to the manufacturer's directions.
5. Take care to wash all parts of the tank, including the inside top surface. Start agitation in the sprayer and thoroughly recirculate the cleaning solution for at least 15 minutes. All visible deposits must be removed from the spraying system.
6. Flush hoses, spray lines, and nozzles for at least 1 minute with the cleaning solution.
7. Remove nozzles, screens, and strainers and clean separately in the cleaning solution after completing the above procedures.
8. Drain pump, filter, and lines.
9. Rinse the complete spraying system with clean water.
10. Clean and wash off the outside of the entire sprayer and boom.
11. All rinse water must be disposed of in compliance with local, state, and federal guidelines.

ROTATIONAL CROPS

When counting days from the application of this product, do not count days when the ground is frozen. Moisture is essential for the degradation of this herbicide in soil. If dry weather prevails, use cultivation to allow herbicide contact with moist soil.

No rotational cropping restrictions apply when rotating to soybean with Roundup Ready 2 Xtend® Technology or XtendFlex® Technology or to cotton seed with XtendFlex® Technology (including Bollgard® 3 XtendFlex® Cotton, Bollgard II® XtendFlex® Cotton, or XtendFlex® Cotton). For other crops, the interval between application and planting rotational crop is given below. Planting at intervals less than specified below may result in crop injury.

For application rates of this product of **22 fluid ounces per acre per year:**

- No planting restrictions apply beyond 120 days after application.
- East of the Mississippi River:
  - Wait a minimum of 30 days for 22 fluid ounces applied per acre before planting.
- West of the Mississippi River:
  - Wait a minimum of 45 days for 22 fluid ounces applied per acre before planting.
  - In areas with less than 30 inches of annual rainfall wait a minimum of 100 days before planting (furrow and/or overhead irrigation can be included in rainfall determination).

For application rates of this product of **44 to 88 fluid ounces per acre per year:**

- In areas with less than 30 inches of annual rainfall:
  - Wait a minimum of 180 days before planting crops (furrow and/or overhead irrigation can be included in rainfall determination).
- In areas with 30 inches or more annual rainfall:
  - Wait a minimum of 120 days after application before planting.

WEEDS CONTROLLED OR SUPPRESSED

General Weed List, Including ALS-, Glyphosate-, and Triazine-Resistant Biotypes

ANNUAL WEEDS		
Alkanet	Flixweed	Pusley, Florida
Amaranth, Palmer, Powell, Spiny	Fumitory	Radish, Wild
Aster, Slender	Goosefoot, Nettleleaf	Ragweed, Common, Giant (Buffaloweed), Lance-Leaf
Bedstraw, Catchweed	Hempnettle	Rocket, London, Yellow
Beggarweed, Florida	Henbit	Rubberweed, Bitter (Bitterweed)
Broomweed, Common	Jacobs-Ladder	Salsify
Buckwheat, Tartary, Wild	Jimsonweed	Senna, Coffee
Buffalobur	Knawel (German Moss)	Sesbania, Hemp
Burclover, California	Knotweed, Prostrate	Shepherdpurse
Burcucumber	Kochia	Sicklepod
Buttercup, Corn, Creeping, Roughseed, Western Field	Ladysthumb	Sida, Prickly (Teaweed)
Carpetweed	Lambsquarters Common	Smartweed, Green, Pennsylvania
Catchfly, Nightflowering	Lettuce, Miners, Prickly	Sneezeweed, Bitter
Chamomile, Corn	Mallow, Common, Venice	Sowthistle, Annual, Spiny
Chevil, Bur	Marestail (Horseweed)	Spanish Needles
Chickweed, Common	Mayweed	Spikeweed, Common
Clovers	Morningglory, Ivyleaf, Tall	Spurge, Prostrate, Leafy
Cockle, Corn, Cow, White	Mustard, Black, Blue, Tansy, Treacle, Tumble, Wild, Yellowtops	Spurry, Corn
Cocklebur, Common	Nightshade, Black, Cutleaf	Starbur, Bristly
Copperleaf, Hophornbeam	Pennycress, Field (Fanweed, Frenchweed, Stinkweed)	Starwort, Little
Cornflower (Bachelor Button)	Pepperweed, Virginia (Peppergrass)	Sumpweed, Rough
Croton, Tropic, Woolly	Pigweed, Prostrate, Redroot (Carelessweed), Rough, Smooth, Tumble	Sunflower, Common (Wild), Volunteer
Daisy, English	Pineappleweed	Thistle, Russian
Dragonhead, American	Poorjoe	Velvetleaf
Eveningprimrose, Cutleaf	Poppy, Red-horned	Waterhemp, Common, Tall
Falseflax, Smallseed	Puncturevine	Waterprimrose, Winged
Fleabane, Annual	Purslane, Common	Wormwood

BIENNIAL WEEDS		
Burdock, Common	Gromwell	Starthistle, Yellow
Carrot, Wild (Queen Anne's Lace)	Knapweed, Diffuse, Spotted	Sweetclover
Cockle, White	Mallow, Dwarf	Teasel
Eveningprimrose, Common	Plantain, Bracted	Thistle, Bull, Milk, Musk, Plumeless
Geranium, Carolina	Ragwort, Tansy	

PERENNIAL WEEDS		
Alfalfa	Garlic, Wild	Smartweed, Swamp
Artichoke, Jerusalem	Goldenrod, Canada, Missouri	Snakeweed, Broom
Aster, Spiny, Whiteheath	Goldenweed, Common	Sorrel, Red (Sheep Sorrel)
Bedstraw, Smooth	Hawkweed	Sowthistle, Perennial
Bindweed, Field, Hedge	Henbane, Black	Spurge, Leafy
Blueweed, Texas	Horsenettle, Carolina	Sundrops
Bursage, Woollyleaf (Bur Ragweed, Povertyweed)	Ironweed	Thistle, Canada, Scotch
Buttercup, Tall	Knapweed, Black, Diffuse, Russian, Spotted	Toadflex, Dalmatian
Campion, Bladder	Milkweed, Climbing, Common, Honeyvine, Western Whorled	Tropical Soda Apple
Chickweed, Field, Mouseear	Nettle, Stinging	Trumpetcreeper (Buckvine)
Chicory	Nightshade, Silverleaf (White Horsenettle)	Vetch
Clover, Hop	Onion, Wild	Waterhemlock, Spotted
Dandelion, Common	Plantain, Broadleaf, Buckhorn	Waterprimrose, Creeping
Dock Broadleaf (Bitterdock), Curly	Pokeweed	Woodsorrel, Creeping, Yellow
Dogbane, Hemp	Ragweed, Western	Wormwood, Absinth, Louisiana
Dogfennel (Cypressweed)	Redvine	Yankeeweed
Fern, Bracken	Sericia Lespedeza	Yarrow, Common

SPECIFIC USE DIRECTIONS

BETWEEN CROP APPLICATIONS Postharvest, fallow, crop stubble, set-aside for broadleaf weed control only	
Application Rates	• Apply 22 fluid ounces of XtendiMax® With VaporGrip® Technology per acre.
Maximum Rates	• Per treated acre per year: 88 fluid ounces (2.0 lb. a.e. dicamba per acre).
Application Timing	• XtendiMax® With VaporGrip® Technology can be applied either postharvest in the fall, spring, or summer during the fallow period or to crop stubble/set-aside acres. • For best performance, apply XtendiMax® With VaporGrip® Technology when annual weeds are less than 4 inches tall, when biennial weeds are in the rosette stage, and to perennial weed regrowth in late summer or fall following a mowing or tillage treatment. • The most effective control of upright perennial broadleaf weeds such as Canada thistle and Jerusalem artichoke occurs if XtendiMax® With VaporGrip® Technology is applied when the majority of weeds have at least 4 – 6 inches of regrowth or for weeds such as field bindweed and hedge bindweed that are in or beyond the full bloom stage.
Application Method	• Apply XtendiMax® With VaporGrip® Technology as a broadcast or spot treatment to emerged and actively growing weeds after crop harvest (postharvest) and before a killing frost or in the fallow cropland or crop stubble the following spring or summer.
Livestock Grazing or Feeding	• Permitted.
Use Precautions	• Avoid disturbing treated areas following application. • Treatments may not kill weeds that develop from seed or underground plant parts, such as rhizomes or bulblets, after the effective period for XtendiMax® With VaporGrip® Technology. For seedling control, a follow-up program or other cultural practices could be instituted. • Refer to the "Rotational Crops" section of this label for the recommended interval between application and planting to prevent crop injury.

CROPS WITH XTEND® TECHNOLOGY

Cotton with XtendFlex® Technology (including Bollgard II® XtendFlex® COTTON, Bollgard® 3 XtendFlex® COTTON, or XtendFlex® COTTON) and soybean with Roundup Ready 2 Xtend® Technology or XtendFlex® Technology CONTAIN A PATENTED GENE THAT PROVIDES TOLERANCE TO DICAMBA, THE ACTIVE INGREDIENT IN THIS PRODUCT. THIS PRODUCT WILL CAUSE SEVERE CROP INJURY OR DESTRUCTION AND YIELD LOSS IF APPLIED TO COTTON AND SOYBEAN THAT ARE NOT DICAMBA TOLERANT, INCLUDING COTTON AND SOYBEAN WITH A TRAIT ENGINEERED TO CONFER TOLERANCE TO AUXIN HERBICIDES OTHER THAN DICAMBA. FOLLOW THE REQUIREMENTS SET FORTH HEREIN TO PREVENT SEVERE CROP INJURY OR DESTRUCTION AND YIELD LOSS. CONTACT WITH FOLIAGE, GREEN STEMS, OR FRUIT OF CROPS, OR ANY DESIRABLE PLANTS THAT DO NOT CONTAIN A DICAMBA TOLERANCE GENE OR ARE NOT NATURALLY TOLERANT TO DICAMBA, COULD RESULT IN SEVERE PLANT INJURY OR DESTRUCTION.

XtendiMax® With VaporGrip® Technology is approved by U.S. EPA for use in cotton with XtendFlex® Technology and in soybean with Roundup Ready 2 Xtend® Technology or XtendFlex® Technology only in the following states, subject to county restriction as noted:

Alabama, Arkansas, Arizona, Colorado, Delaware, Florida (excluding Palm Beach County), Georgia, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maryland, Michigan, Minnesota, Mississippi, Missouri, Nebraska, New Jersey, New Mexico, New York, North Carolina, North Dakota, Oklahoma, Ohio, Pennsylvania, South Carolina, South Dakota, Tennessee (excluding Wilson County), Texas, Virginia, West Virginia, Wisconsin.

Information on cotton with XtendFlex® Technology and on soybean with Roundup Ready 2 Xtend® Technology or XtendFlex® Technology can be obtained from your seed supplier or Bayer representative. Cotton with XtendFlex® Technology and soybean with Roundup Ready 2 Xtend® Technology or XtendFlex® Technology must be purchased from an authorized licensed seed supplier.

Cotton with XtendFlex® Technology, soybean with Roundup Ready 2 Xtend® Technology or XtendFlex® Technology, and methods of controlling weeds and applying dicamba in cotton with XtendFlex® Technology and in soybean with Roundup Ready 2 Xtend® Technology or XtendFlex® Technology are protected under U.S. patent law. No license to use cotton with XtendFlex® Technology or soybean with Roundup Ready 2 Xtend® Technology or XtendFlex® Technology is granted or implied with the purchase of this herbicide product. Cotton with XtendFlex® Technology and soybean with Roundup Ready 2 Xtend® Technology or XtendFlex® Technology are owned by Bayer and a license must be obtained from Bayer before using it. Contact your Authorized Bayer Retailer for information on obtaining a license to use cotton with XtendFlex® Technology and soybean with Roundup Ready 2 Xtend® Technology or XtendFlex® Technology.

COTTON WITH XTENDFLEX® TECHNOLOGY	
Application Rate	• **Burndown/Early Preplant, Preplant, At-Planting, Preemergence:** Apply 22 fluid ounces (0.5 lb. acid equivalent (a.e.) dicamba) per acre for a single burndown/early preplant, preplant, at-planting, or preemergence application. • **Postemergence (in-crop):** For any single, in-crop application, apply 22 fluid ounces (0.5 lb. a.e. dicamba) per acre.
Maximum Rates	• *Total of all Burndown/Early Preplant, Preplant, At-Planting, and Preemergence applications*: 44 fluid ounces per acre (1.0 lb. a.e. dicamba per acre) • *Total of all in-crop applications*: 44 fluid ounces per acre (1.0 lb. a.e. dicamba per acre) • *Combined total per year for all applications*: 88 fluid ounces per acre (2.0 lb. a.e. dicamba per acre)
Application Timing	• **Burndown/Early Preplant, Preplant, At-Planting, Preemergence:** This product may be applied before, during, or immediately after planting. • **Postemergence (in-crop):** This product may be applied in-crop up to and including July 30.
Number of Applications	• Sequential applications of this product may be necessary to control new flushes of weeds or on tough-to-control weeds. Allow at least 7 days between applications. • A maximum of **two** burndown/early preplant, preplant, at-planting, and preemergence and **two** in-crop applications may be made.
Spray Volume	• Apply this product in a minimum of 15 gallons of spray solution per acre as a broadcast application. • Use 20 gallons per acre or greater when treating dense weed canopy/vegetation.
Livestock Grazing or Feeding	• Permitted.
Use Precautions	• Refer to the "Weeds Controlled or Suppressed" section of this label for specific weeds controlled. • For best performance, control weeds early when they are less than 4 inches. • Postemergence applications of this product mixed with adjuvants may cause a leaf response to cotton with XtendFlex® Technology. The symptoms usually appear as necrotic spots on fully expanded leaves. EC-based products that are tank mixed with products containing dicamba may increase the severity of the leaf damage. • For postemergence applications with a hooded in-row sprayer, cotton must be a minimum of 15 inches tall at the time of application. • For postemergence applications with a directed layby sprayer, the release point for the herbicide must not be more than 10 inches from the soil and cotton must be at least 20 inches in height. Spray tip must be angled downward to the soil making sure no spray droplets remain in the air.
Use Restrictions	• DO NOT apply less than 22 fluid ounces (0.5 lb. a.e. dicamba) per acre. • DO NOT exceed two pre-emergent applications. • DO NOT exceed two post-emergent applications. • DO NOT exceed 88 fluid ounces per acre (2.0 lb. a.e. dicamba per acre) per year.

SOYBEAN WITH ROUNDUP READY 2 XTEND® TECHNOLOGY OR XTENDFLEX® TECHNOLOGY	
Application Rate	• **Burndown/Early Preplant, Preplant, At-Planting, Preemergence:** Apply 22 fluid ounces (0.5 lb. acid equivalent (a.e.) dicamba) per acre for a single burndown/early preplant, preplant, at-planting, or preemergence application. • **Postemergence (in-crop):** For any single, in-crop application, apply 22 fluid ounces (0.5 lb. a.e. dicamba) per acre.
Maximum Rates	• *Total of all Burndown/Early Preplant, Preplant, At-Planting, and Preemergence applications*: 44 fluid ounces per acre (1.0 lb. a.e. dicamba per acre) • *Total of all in-crop applications*: 44 fluid ounces per acre (1.0 lb. a.e. dicamba per acre) • *Combined total per year for all applications*: 88 fluid ounces per acre (2.0 lb. a.e. dicamba per acre)

Application Timing	• **Burndown/Early Preplant, Preplant, At-Planting, Preemergence:** This product may be applied before, during, or immediately after planting. • **Postemergence (in-crop):** This product may only be applied in-crop up to and including June 30. Applications occurring after R1 are prohibited as crop response may occur.
Number of Applications	• A second application may be necessary to control new flushes of weeds. Allow at least 7 days between applications. For best results, apply after some weed re-growth has occurred. • A maximum of **two** burndown/early preplant, preplant, at-planting, and preemergence and **two** in-crop applications may be made.
Spray Volume	• Apply this product in a minimum of 15 gallons of spray solution per acre as a broadcast application. • Use 20 gallons per acre or greater when treating dense weed canopy/vegetation.
Livestock Grazing or Feeding	• Permitted.
Use Precautions	• Refer to the "Weeds Controlled or Suppressed" section of this label for specific weeds controlled. • For best performance, control weeds early when they are less than 4 inches. • Postemergence application under stressful environments may cause temporary loss of turgor, a response commonly described as leaf droop in soybean with Roundup Ready 2 Xtend® Technology or XtendFlex® Technology. Typically, affected plants recover in 1-3 days depending on the level of droop and environmental conditions. • For postemergence applications with a hooded in-row sprayer, soybeans must be a minimum of 15 inches tall at the time of application. • For postemergence applications with a directed layby sprayer, the release point for the herbicide must not be more than 10 inches from the soil and soybeans must be at least 20 inches in height. Spray tip must be angled downward to the soil making sure no spray droplets remain in the air
Use Restrictions	• DO NOT apply less than 22 fluid ounces (0.5 lb. a.e. dicamba) per acre. • DO NOT exceed two pre-emergent applications. • DO NOT exceed two post-emergent applications. • DO NOT exceed 88 fluid ounces per acre (2.0 lb. a.e. dicamba per acre) per year.

STORAGE AND DISPOSAL

Proper pesticide storage and disposal are essential to protect against exposure to people and the environment due to leaks and spills, excess product or waste, and vandalism. Do not allow this product to contaminate water, foodstuffs, feed or seed by storage or disposal.

Pesticide storage
Store pesticides away from food, pet food, feed, seed, fertilizers, and veterinary supplies. Keep container closed to prevent spills and contamination.

Pesticide disposal
To avoid wastes, use all material in this container, including rinsate, by application according to label directions. If wastes cannot be avoided, offer remaining product to a waste disposal facility or pesticide disposal program. Such programs are often run by state or local governments or by industry. All disposal must be in accordance with applicable federal, state, and local regulations and procedures.

Container handling and disposal
[*Insert appropriate Container Handling and Disposal Statement and Refilling Limitation from the following options*]

[*CONTAINER HANDLING AND DISPOSAL STATEMENT AND REFILLING LIMITATION FOR NONREFILLABLE RIGID CONTAINERS OF LESS THAN 1-GALLON CAPACITY*]
Nonrefillable container. Do not reuse or refill this container.

[*Alternative container statement:* Nonrefillable container. Do not reuse this container to hold materials other than pesticides or dilute pesticides (rinsate). After emptying and cleaning, it may be allowable to temporarily hold rinsate or other pesticide-related materials in this container. Contact your state regulatory agency to determine allowable practices in your state.]

Triple rinse this container promptly after emptying.

Triple rinse as follows: Empty the remaining contents into application equipment or mix-tank and continue to drain for 10 seconds after the flow begins to drip. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or mix-tank, or store rinsate for later use or disposal. Continue to drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times.

Once properly rinsed, some plastic [*Optional text:* agricultural] pesticide containers can be taken to a container collection site or picked up for recycling. [*Alternative container disposal statement:* Then offer the container for recycling, if available.]

[*Optional container disposal statement:* To find the nearest collection site, contact your chemical dealer or Bayer at 1-866-99BAYER (1-866-992-2937).]

If recycling is not available, dispose of in accordance with federal, state and local regulations and procedures, which may include puncturing the properly rinsed container and disposing in a sanitary landfill.

[*CONTAINER HANDLING AND DISPOSAL STATEMENT AND REFILLING LIMITATION FOR NONREFILLABLE RIGID PLASTIC 2.5-GALLON CONTAINER AND OTHER NONREFILLABLE CONTAINERS OF GREATER THAN 1-GALLON BUT EQUAL TO OR LESS THAN 5-GALLON CAPACITY*]
Nonrefillable container. Do not reuse this container to hold materials other than pesticides or dilute pesticides (rinsate). After emptying and cleaning, it may be allowable to temporarily hold rinsate or other pesticide-related materials in this container. Contact your state regulatory agency to determine allowable practices in your state.

[*Alternative container statement:* Nonrefillable container. Do not reuse or refill this container.]

Triple rinse or pressure rinse (or equivalent) this container promptly after emptying.

Triple rinse as follows: Empty the remaining contents into application equipment or mix-tank and continue to drain for 10 seconds after the flow begins to drip. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or mix-tank, or store rinsate for later use or disposal. Continue to drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times.

Pressure rinse as follows: Empty the remaining contents into application equipment or mix-tank and continue to drain for 10 seconds after the flow begins to drip. Place container so that it can drain directly into application equipment or mix-tank while rinsing, or collect rinsate for later use or disposal. Insert pressure rinsing nozzle into the side of the container and rinse at about 40 PSI for at least 30 seconds. Continue to drain for 10 seconds after the flow begins to drip.

Once properly rinsed, some plastic [*Optional text:* agricultural] pesticide containers can be taken to a container collection site or picked up for recycling. [*Alternative container disposal statement:* Then offer the container for recycling, if available.]

[*Optional container disposal statement:* To find the nearest collection site, contact your chemical dealer or Bayer at 1-866-99BAYER (1-866-992-2937).]

If recycling is not available, dispose of in accordance with federal, state and local regulations and procedures, which may include puncturing the properly rinsed container and disposing in a sanitary landfill.

[*CONTAINER HANDLING AND DISPOSAL STATEMENT AND REFILLING LIMITATION FOR NONREFILLABLE RIGID PLASTIC 30-GALLON CONTAINER AND OTHER NONREFILLABLE CONTAINERS OF GREATER THAN 5-GALLON CAPACITY*]
Nonrefillable container. Do not reuse or refill this container.

[*Alternative container statement:* Nonrefillable container. Do not reuse this container to hold materials other than pesticides or dilute pesticides (rinsate). After emptying and cleaning, it may be allowable to temporarily hold rinsate or other pesticide-related materials in this container. Contact your state regulatory agency to determine allowable practices in your state.]

Triple rinse or pressure rinse (or equivalent) this container promptly after emptying.

[*Optional label text:* For containers not equipped with pumping systems,] Triple rinse as follows: Empty the remaining contents into application equipment or mix-tank. Fill the container ¼ full with water. Replace and tighten closures. Tip the container on its side and roll it back and forth for 30 seconds, ensuring at least one complete revolution. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or mix-tank, or store rinsate for later use or disposal. Repeat this procedure two more times.

[*Alternative or additional triple rinsing instructions for large containers equipped with pumping systems:* [*Optional label text:* For large containers equipped with pumping systems,] Triple rinse as follows: Empty the remaining contents into application equipment or mix-tank. Fill the container about 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times.]

Pressure rinse as follows: Empty the remaining contents into application equipment or mix-tank and continue to drain for 10 seconds after the flow begins to drip. Place container so that it can drain directly into application equipment or mix-tank while rinsing, or collect rinsate for later use or disposal. Insert pressure rinsing nozzle into the side of the container and rinse at about 40 PSI for at least 30 seconds. Continue to drain for 10 seconds after the flow begins to drip.

Once properly rinsed, some plastic [*Optional text:* agricultural] pesticide containers can be taken to a container collection site or picked up for recycling. [*Alternative container disposal statement:* Then offer the container for recycling, if available.]

[*Optional container disposal statement:* Some container manufacturers offer container recycling. See additional information regarding manufacturer recycling programs attached to this container, if available. If no recycling information is available on this container, contact your chemical dealer or Bayer at 1-866-99BAYER (1-866-992-2937) to find the nearest recycling location.]

[*Optional container disposal statement:* To find the nearest collection site, contact your chemical dealer or Bayer at 1-866-99BAYER (1-866-992-2937).]

If recycling is not available, dispose of in accordance with federal, state and local regulations and procedures, which may include puncturing the properly rinsed container and disposing in a sanitary landfill.

[*Optional container disposal statement:* Return Properly Rinsed Container to Bayer for Recycling – Call 1-866-99BAYER (1-866-992-2937).]

[*Optional additional container disposal statement:* IBC EMPTY? – FREE CALL – 1-888-SCHUETZ (1-888-724-8389) www.schuetz.net/ticket; Schuetz ticket service]

[*Optional additional container disposal statement:* FREE IBC PICKUP] [For continental USA and Canada only.]

[*Optional additional container disposal statement:* RETURNnet SYSTEM – To return empty IBC's Email or Call – www.returnnetsystem.com – 1-888-758-SHIP (1-888-758-7447) – United States and Canada – IBCNA – Clarkston, Michigan – USA]

[*CONTAINER HANDLING AND DISPOSAL STATEMENT AND REFILLING LIMITATION FOR ALL REFILLABLE CONTAINERS, EXCEPT TRANSPORT VEHICLES*]
Refillable container. Refill this container with pesticide only. Do not reuse this container for any other purpose.

Cleaning this container before refilling is the responsibility of the refiller. Cleaning this container before final disposal is the responsibility of the person disposing of the container.

To clean this container before final disposal, empty the remaining contents from the container into application equipment or mix-tank. Fill the container about 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times.

[*Optional container disposal statement:* Then offer the container for recycling, if available.]

[*Optional container disposal statement:* Some container manufacturers offer container recycling. See additional information regarding manufacturer recycling programs attached to this container, if available. If no recycling information is available on this container, contact your chemical dealer or Bayer at 1-866-99BAYER (1-866-992-2937) to find the nearest recycling location.]

[*Optional additional container disposal statement:* IBC EMPTY? – FREE CALL – 1-888-SCHUETZ (1-888-724-8389) www.schuetz.net/ticket; Schuetz ticket service]

[*Optional additional container disposal statement:* FREE IBC PICKUP] [For continental USA and Canada only.]

[*Optional additional container disposal statement:* RETURNnet SYSTEM – To return empty IBC's Email or Call – www.returnnetsystem.com – 1-888-758-SHIP (1-888-758-7447) – United States and Canada – IBCNA – Clarkston, Michigan – USA]

[*Optional container disposal statement:* To obtain information about recycling refillable containers, contact Bayer at 1-866-99BAYER (1-866-992-2937).]

[*Optional container disposal statement:* Return Properly Rinsed Container to Bayer for Recycling – Call 1-866-99BAYER (1-866-992-2937).]

[*Optional additional container label statements for the CUBE refillable packaging system only:*
CUBE Bayer Refillable Delivery System
FEATURES INCLUDE:
- Automatic Venting
- Heavy duty one-way 2-inch camloc ball valve with protective shield door
- Complete coated steel protective enclosure
- Durable 4-way plastic pallet
- Lift door to access one-way valve]

CONDITIONS OF SALE AND LIMITATIONS OF WARRANTY AND LIABILITY

Read the entire Directions for Use, Conditions, Disclaimer of Warranties, and Limitations of Liability before buying or using this product. If terms are not acceptable, return the unopened product container at once.

By using this product, user or buyer accepts the following Conditions, Disclaimer of Warranties, and Limitations of Liability.

CONDITIONS: The directions for use of this product are believed to be adequate and must be followed carefully. However, it is impossible to eliminate all risks associated with the use of this product. Crop injury, ineffectiveness, or other unintended consequences may result because of such factors as weather conditions, presence of other materials, or the manner of use or application inconsistent

with this label (including conditions noted on the label , such as unfavorable soil conditions, unfavorable climate conditions, etc.), all of which are beyond the control of Bayer CropScience LP ("Bayer") or the seller. To the extent consistent with applicable law, all such risks shall be assumed by the user or buyer. Buyer and all users shall promptly notify Bayer of any claims whether based in contract, negligence, strict liability, other tort or otherwise

DISCLAIMER OF WARRANTIES: Subject to risks as set forth in the Conditions above, Bayer warrants that this product is reasonably fit for the purposes stated on the label when used for the purposes stated on the label when used in accordance with directions. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, BAYER MAKES NO OTHER WARRANTIES, EXPRESS OR IMPLIED, OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE OR OTHERWISE. BAYER MAKES NO RECOMMENDATION OR WARRANTY HEREIN REGARDING THE USE OF ANY PRODUCTS THAT MAY APPEAR ON THE WEBSITE REFERENCED IN THE TANK MIXING INSTRUCTIONS HEREIN, REGARDLESS OF WHETHER SUCH PRODUCT IS USED ALONE OR IN A TANK MIX WITH XtendiMax® With VaporGrip® Technology. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, BAYER DISCLAIMS ANY LIABILITY WHATSOEVER FOR SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, FOR IN-CROP (OVER-THE-TOP) USES ON CROPS WITH XTEND® TECHNOLOGY, CROP SAFETY AND WEED CONTROL PERFORMANCE ARE NOT WARRANTED BY BAYER WHEN THIS PRODUCT IS USED IN CONJUNCTION WITH "BROWN BAG" OR "BIN RUN" SEED SAVED FROM PREVIOUS YEAR'S PRODUCTION AND REPLANTED. FURTHER, TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, BAYER DOES NOT WARRANT THE WEED CONTROL PERFORMANCE OF DICAMBA-RESISTANT WEED BIOTYPES.

LIMITATIONS OF LIABILITY: To the extent consistent with applicable law, the exclusive remedy of the user or buyer for any and all losses, injuries, or damages resulting from the use or handling of this product, whether in contract, warranty, tort, negligence, strict liability or otherwise, shall not exceed the purchase price paid, or at Bayer's election, the replacement of product.

These Conditions of Sales, Disclaimer of Warranties and Limitations of Liability cannot be varied by any written or verbal statements or agreements. No employee or sales agent of Bayer or seller is authorized to vary or exceed the terms of the Disclaimer of Warranties or Limitations of Liability in any manner.

Bollgard II®, Bollgard®, Degree Xtra®, Field Master®, Harness®, Roundup Ready®, Roundup Ready 2 Xtend®, Roundup PowerMAX®, RT 3®, Roundup WeatherMAX®, XtendiMax®, XtendFlex®, and VaporGrip® are registered trademarks of Bayer Technology LLC. All other trademarks are the property of their respective owners.

PRODUCED FOR

Bayer CropScience

Bayer CropScience LP
800 N. Lindbergh Blvd.
St. Louis, MO 63167
1-866-99BAYER (1-866-992-2937)

XTENDIMAX® WITH VAPORGRIP® TECHNOLOGY (PENDING) 10/20/2020

RESTRICTED USE PESTICIDE
To be used by certified applicators only; NOT to be used by uncertified persons working under the supervision of a certified applicator, except that uncertified persons may transport containers. ~~Only for retail sale to and use by Certified Applicators~~

Formatted Table

This labeling expires on XX/XX/2025. DO NOT use or distribute this product after XX/XX/2025.

Formatted Table

DICAMBA	GROUP 4	HERBICIDE

XtendiMax® With VaporGrip® Technology

ABN: M1768 Herbicide

For weed control in cotton with XtendFlex® Technology and soybean with Roundup Ready 2 Xtend® Technology or XtendFlex® Technology.

XtendiMax® With VaporGrip® Technology is approved by U.S. EPA for use in ~~these~~ dicamba-tolerant ~~crops~~ cotton and dicamba-tolerant soybeans only in the following states, subject to county restrictions as noted: Alabama, Arkansas, Arizona, Colorado, Delaware, Florida (excluding Palm Beach County), Georgia, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maryland, Michigan, Minnesota, Mississippi, Missouri, Nebraska, New Jersey, New Mexico, New York, North Carolina, North Dakota, Oklahoma, Ohio, Pennsylvania, South Carolina, South Dakota, Tennessee (excluding Wilson County), Texas, Virginia, West Virginia, Wisconsin.

Check the registration status of each product in each state before using.

ACTIVE INGREDIENT: Dicamba
Diglycolamine salt of dicamba (3,6-dichloro-*o*-anisic acid)* **42.80%**
OTHER INGREDIENTS: **57.20%**
TOTAL: **100.00%**
*Contains 29.0% 3,6-dichloro-*o*-anisic acid (2.9 pounds acid equivalent per U.S. gallon or 350 grams per liter)

EPA Reg. No. 264-RERN **EPA Est. No.**

CAUTION

KEEP OUT OF REACH OF CHILDREN

For MEDICAL and TRANSPORTATION Emergencies ONLY Call 24 Hours a Day 1-800-334-7577

For PRODUCT USE Information Call 1-866-99BAYER (1-866-992-2937)

For Incidence of Non-performance or Off-Target Movement or for Questions Regarding Buffer Requirements or Sensitive Crop Registries Call 1-844-RRXTEND (1-844-779-8363)

Please refer to [back panel] [booklet] for additional precautionary statements and directions for use. [Note to reviewer: Location of additional precautionary statements and directions for use will vary between those listed, depending on container type/size.]

Net Contents:

FIRST AID	
IF IN EYES:	• Hold eye open and rinse slowly and gently with water for 15 to 20 minutes. • Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. • Call a poison control center or doctor for treatment advice.

IF SWALLOWED:	• Call a poison control center or doctor immediately for treatment advice. • Have person sip a glass of water if able to swallow. • DO NOT induce vomiting unless told to do so by a poison control center or doctor. • DO NOT give anything by mouth to an unconscious person.
IF ON SKIN OR CLOTHING:	• Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15 to 20 minutes. • Call a poison control center or doctor for treatment advice.
In case of emergency, call the toll-free Bayer Emergency Response telephone number: 1-800-334-7577. Have the product container or label with you when calling a poison control center or doctor or when going for treatment.	

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION

- Causes moderate eye irritation.
- Avoid contact with eyes or clothing.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

All mixers, loaders, applicators, and other handlers must wear:

- Long-sleeved shirt and long pants
- Waterproof gloves
- Shoes plus socks

Follow the manufacturer's instructions for cleaning and maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

ENGINEERING CONTROLS

When handlers use closed systems, or enclosed cabs in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240 (d) (4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

IMPORTANT: When reduced PPE is worn because a closed system is being used, handlers must be provided all PPE specified above for "all mixers, loaders, applicators, and other handlers" and have such PPE immediately available for use in an emergency, such as a spill or equipment breakdown.

USER SAFETY RECOMMENDATIONS

User should:

- Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet.
- Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

ENVIRONMENTAL HAZARDS

DO NOT apply directly to water, or to areas where surface water is present, or to intertidal areas below the mean high-water mark. DO NOT contaminate water when disposing of equipment washwaters or rinsate. Apply this product only as directed on the label.

Ground Water Advisory: This chemical is known to leach through soil into ground water under certain conditions as a result of agricultural use. Use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in ground water contamination.

GROUND AND SURFACE WATER PROTECTION

Point source contamination: To prevent point source contamination, DO NOT mix or load this pesticide product within 50 feet of wells (including abandoned wells and drainage wells), sink holes, perennial or intermittent streams and rivers, and natural or impounded lakes and reservoirs. DO NOT apply pesticide product within 50 feet of wells. This setback does not apply to properly capped or plugged abandoned wells and does not apply to impervious pad or properly diked mixing/loading areas as described below.

Mixing, loading, rinsing, or washing operations performed within 50 feet of a well are allowed only when conducted on an impervious pad constructed to withstand the weight of the heaviest load that may be on or move across the pad. The pad must be self-contained to prevent surface water flow over or from the pad. The pad capacity must be maintained at 110% that of the largest pesticide container or application equipment used on the pad and have sufficient capacity to contain all product spills, equipment or container leaks, equipment washwaters, and rainwater that may fall on the pad. The containment capacity does not apply to vehicles delivering pesticide shipments to the mixing/loading site. States may have in effect additional requirements regarding wellhead setbacks and operational containment.

Care must be taken when using this product to prevent: a) back siphoning into wells, b) spills, or c) improper disposal of excess pesticide, spray mixtures, or rinsates. Check valves or anti-siphoning devices must be used on all mixing equipment.

Movement by surface runoff or through soil: DO NOT apply under conditions that favor runoff. DO NOT apply if soil is saturated with water or when rainfall that may exceed soil field capacity is forecasted to occur within 48 hours.

Formatted: Font: 9 pt

Under some conditions, dicamba has the potential for runoff several days after application. Poorly draining, wet, or erodible soils with readily visible slopes toward adjacent sensitive areas are more prone to produce runoff. When used on erodible soils, best management practices for minimizing runoff should be employed. Consult your local Soil Conservation Service for recommendations in your use area.

Ground water contamination may occur in areas where soils are permeable or coarse and ground water is near the surface. DO NOT apply to impervious substrates such as paved or highly compacted surfaces in areas with high potential for ground water contamination. DO NOT apply to soils classified as sand with less than 3% organic matter and where ground water depth is shallow.

Movement by water erosion of treated soil: DO NOT apply or incorporate this product through any type of irrigation equipment nor by flood or furrow irrigation. Ensure treated areas have received at least one-half inch rainfall (or irrigation) before using tailwater for subsequent irrigation of other fields.

PROTECTING ENDANGERED SPECIES / PESTICIDE USE LIMITATION AREAS

The use of any pesticide in a manner that may kill or otherwise harm an endangered species or adversely modify their habitat is a violation of federal law. Use of this product in a manner inconsistent with its labeling may pose a hazard to endangered or threatened species. **When using this product, you must follow the measures contained in the Endangered Species Protection Bulletin for the area in which you are applying the product.** To obtain Bulletins, no more than six months before using this product, consult https://www.epa.gov/endangered-species/bulletins-live-two-view-bulletins or call 1-844-447-3813. You must use the Bulletin valid for the month in which you will apply the product.

Formatted: Font: Bold

It is a Federal offense to use any pesticide in a manner that results in the death of an endangered species.

PHYSICAL OR CHEMICAL HAZARDS

DO NOT store or heat near oxidizing agents as a hazardous chemical reaction may occur.

DIRECTIONS FOR USE

RESTRICTED USE PESTICIDE

Only for retail sale to and use by Certified Applicators. NOT to be used by uncertified persons working under the supervision of a certified applicator, except that uncertified persons may transport containers.

It is a violation of Federal law to use this product in any manner inconsistent with its labeling. This labeling must be in the user's possession during application. Read the entire label before using this product.

DO NOT apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

For important crop safety information, refer to the "Specific Use Directions" section ~~under the specific~~for each crop.

AGRICULTURAL USE REQUIREMENTS
Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. This standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses and of handlers of agricultural pesticides. It contains requirements for training, decontamination, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about Personal Protective Equipment (PPE), notification to workers, and restricted-entry intervals. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

DO NOT enter or allow worker entry into treated areas during the restricted-entry interval **(REI) of 24 hours.**

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water is:

- Coveralls worn over short-sleeved shirt and short pants
- Chemical-resistant footwear plus socks
- Waterproof gloves
- Chemical-resistant headgear for overhead exposure
- Protective eyewear

NON-AGRICULTURAL USE REQUIREMENTS

The requirements in this box apply to uses of this product that are NOT within the scope of the Worker Protection Standard for agricultural pesticides (40 CFR Part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries, or greenhouses.

DO NOT enter or allow people (or pets) to enter the treated area until sprays have dried.

DO NOT apply this product in a way that will contact workers or other persons, either directly or through drift.

Formatted Table

PRODUCT INFORMATION

XtendiMax® With VaporGrip® Technology is:

- a water-soluble formulation intended for control and suppression of many annual, biennial, and perennial broadleaf weeds listed in the "Weeds Controlled or Suppressed" section of this label. This product may be used for control of these weeds in cotton with XtendFlex® Technology and soybean with Roundup Ready 2 Xtend® Technology or XtendFlex® Technology.
- a contact, systemic herbicide, with limited soil activity on small seeded broadleaf weeds, including waterhemp, lambsquarters, and Palmer pigweed, depending on rainfall and soil type.
- readily absorbed by plants through shoot and root uptake, translocates throughout the plant's system, and accumulates in areas of active growth. XtendiMax® With VaporGrip® Technology interferes with plant growth hormones (auxins) resulting in death of many broadleaf weeds.

Additional state restrictions and requirements may apply. The ~~applicator~~ user must comply with any additional state requirements and restrictions.

Refer to the specific use directions and restrictions in each ~~c~~Crop~~, Crop Group, or Crop Subgroup~~ table. Follow all requirements and restrictions on www.xtendimaxapplicationrequirements.com.

APPLICATION REQUIREMENTS OVERVIEW

Read and follow all applicable restrictions, precautions, and directions on the container label and booklet and at www.xtendimaxapplicationrequirements.com. For product questions or inquiries and/or to report any nonperformance of this product against any particular weed species, call 1-844-RRXTEND (1-844-779-8363). It is recommended that the certified applicator visit www.xtendimaxapplicationrequirements.com to obtain a copy of the ~~Summary Overview~~ of Application Requirements for reference prior to and during application.

Commented [SC1]: This is not mandatory, but it is something that we have provided users in the past from as a good stewardship practice.

REQUIREMENTS	LABEL SECTIONS
Mandatory Training: ☐ Prior to applying, applicator must complete dicamba ~~or auxin~~-specific training. Only certified applicators may apply this product; NOT to be used by uncertified persons working under the supervision of a certified applicator, except that uncertified persons may transport containers.~~-~~	➢ Training (p. ~~5~~6)
Record Keeping: ☐ Records must be created within 72 hours of every application. ~~Certified applicators~~Records must be keept ~~records~~ for a period of two years.	➢ Record Keeping (p. 6)
Application: ☐ For EVERY application of XtendiMax® With VaporGrip® Technology, ~~both~~ an EPA-approved ~~**Drift Reduction Adjuvant (DRA) and**~~ **Volatility Reduction Adjuvant (VRA)** must be included in the spray solution. An EPA-approved **Drift Reduction Adjuvant (DRA)** must also be included in the spray solution, unless otherwise indicated on www.xtendimaxapplicationrequirements.com. Refer to ~~www.xtendimaxapplicationrequirements.com the website~~ for a list of EPA-approved DRAs and VRAs.	➢ Tank Mix Partners and Compatibility Testing (p. 9) ➢ Specific Use Directions (pp. 12-14)

☐ *Rate and Timing*: Apply 22 fluid ounces per acre (0.5 lb. a.e. dicamba) for any single pre-emergent or in-crop application in: ○ Cotton with XtendFlex® Technology up to and including July 30, and ○ Soybean with Roundup Ready 2 Xtend® Technology or XtendFlex® Technology up to and including June 30 ~~or R1 growth stage, whichever comes first~~. Applications occurring after R1 are prohibited as crop response may occur. ○ For details ~~and other crop uses~~, see the "Specific Use Directions" section. ☐ *Spray volume:* Apply in a minimum of 15 gallons of spray solution per acre. ☐ *Tank mixing*: Use only approved tank-mix partners found at www.xtendimaxapplicationrequirements.com. ○ Refer to all product labels to determine mix order or perform a mix compatibility test.	➢ Specific Use Directions (pp. 12-14) ➢ Tank Mix Partners and Compatibility Testing (p. 9)
Application Equipment: ☐ *Spray system equipment cleanout*: Ensure entire sprayer system is properly cleaned before and after application. ☐ *Nozzles*: Use only approved nozzles within specified pressures found at www.xtendimaxapplicationrequirements.com. ☐ *Spray boom height*: Maximum boom height is 24 inches above target pest or crop canopy. ☐ *Ground speed*: DO NOT exceed 15 mph.	➢ Equipment Requirements (pp. 7-8)
Environmental Conditions: ☐ *Wind speed*: Apply when wind speed, measured at boom height, is 3-10 mph ~~when using broadcast open-boom equipment~~. ☐ *Inversions*: DO NOT spray during an inversion; only spray between one hour after sunrise and two hours before sunset ~~when using broadcast open-boom equipment~~. ~~☐ *Temperature/humidity*: When making applications in hot and dry conditions, use larger droplets to reduce effects of evaporation.~~ ☐ *Rainfall*: DO NOT apply this product if rain that may exceed soil field capacity and result in soil runoff is forecasted in the next 48 hours.	➢ Environmental Requirements (p. 7)
Downwind Requirements: ☐ *Sensitive crops and certain plants downwind*: DO NOT apply if sensitive crops and/or certain plants, as defined below in this label, are planted on an adjacent downwind field or area ~~when using broadcast open-boom equipment~~. ☐ *Downwind buffer*: After determining no adjacent sensitive crops and/or certain plants are downwind, maintain a 240-ft downwind buffer ~~when applying with broadcast open-boom equipment~~. ☐ *Endangered species*: In counties where endangered species are present, consult Endangered Species Protection Bulletins for ESA restrictions.	➢ Adjacent Sensitive Crops and Certain Plants (p. 8) ➢ Buffer Requirements (p. 8)
Drift Reduction Technology: ☐ See "Optional Use of Drift Reduction Technology" section for details on application requirements and the potential to qualify for reduced use restrictions.	➢ Optional Use of Drift Reduction Technology (pp. 8-9)

Formatted: Font: Bold

Formatted: Font: Not Italic

USE RESTRICTIONS

- DO NOT USE ANY TANK MIX PRODUCT OR ANY NOZZLE AND PRESSURE COMBINATION WITH XTENDIMAX® WITH VAPORGRIP® TECHNOLOGY THAT IS NOT IDENTIFIED ON THE LIST OF APPROVED PRODUCTS FOUND AT www.xtendimaxapplicationrequirements.com.
- DO NOT TANK MIX AMMONIUM SULFATE (AMS) WITH THIS PRODUCT.
- DO NOT EXCEED 88 FLUID OUNCES (2 POUNDS ACID EQUIVALENT (A.E.) DICAMBA) OF XTENDIMAX® WITH VAPORGRIP® TECHNOLOGY PER ACRE PER YEAR.
- DO NOT EXCEED 88 FLUID OUNCES (2 POUNDS A.E. DICAMBA) PER ACRE PER YEAR FROM ALL DICAMBA APPLICATIONS IF MORE THAN ONE DICAMBA-CONTAINING PRODUCT IS APPLIED TO THE SAME SITE WITHIN THE SAME YEAR.
- DO NOT MAKE APPLICATION OF THIS PRODUCT IF RAIN IS EXPECTED IN THE NEXT 48 HOURS THAT MAY EXCEED SOIL FIELD CAPACITY AND RESULT IN SOIL RUNOFF.
- DO NOT APPLY THROUGH ANY TYPE OF IRRIGATION EQUIPMENT. DO NOT TREAT IRRIGATION DITCHES OR WATER USED FOR CROP IRRIGATION OR DOMESTIC PURPOSES.
- DO NOT APPLY TO CROPS UNDER STRESS DUE TO LACK OF MOISTURE, HAIL DAMAGE, FLOODING, HERBICIDE INJURY, MECHANICAL INJURY, INSECTS, OR WIDELY FLUCTUATING TEMPERATURES AS INJURY MAY RESULT.
- DO NOT APPLY THIS PRODUCT IF SENSITIVE CROPS AND CERTAIN PLANTS ARE PLANTED ON AN ADJACENT DOWNWIND FIELD OR AREA.
- DO NOT APPLY THIS PRODUCT AERIALLY.
- Restricted Entry Interval (REI): 24 hours.

USE PRECAUTIONS

- In case material is released or spilled: dike and contain the spill with inert material (sand, earth, etc.) and transfer liquid and solid diking material to separate containers for disposal. Remove contaminated clothing and wash affected skin areas with soap and water. Wash clothing before re-use. Keep the spill out of all sewers and open bodies of water.
- Rainfast period: Rainfall or irrigation occurring within 4 hours after postemergence applications may reduce the effectiveness of this product.

Commented [SC2]: The runoff language specifically indicates that rainfall is only a concern when a rain event that may exceed field capacity is forecasted within 48 hours. In this case, rain within four hours after application may reduce the effectiveness of this product, while runoff would not be an issue so long as it does not exceed field capacity.

TRAINING

Prior to ~~applying~~ using this product, users must complete dicamba~~- or auxin~~-specific training ~~must be completed to~~to obtain certification. Once completed, dicamba~~- or auxin~~-specific training is then required every other year for all ~~applicators~~ users of this product. If state-specific training is required by the state where the applicator intends to apply this product, the applicator must complete training from the state or state-authorized provider. Otherwise, the applicator may complete dicamba~~- or auxin~~-specific training provided either by the state/state-authorized provider or by a registrant of a dicamba product approved for in-crop use with dicamba-tolerant crops.

Formatted: Font: 11 pt

RECORD KEEPING

The following records must be generated as soon as practical but **no later than 72 hours after application**. The certified applicator must keep these records for a period of **two years**. Records must be made available to State Pesticide Control Official(s), USDA, and EPA upon request. See www.xtendimaxapplicationrequirements.com for an example form summarizing record keeping requirements.

Keep records of the following items for each application of XtendiMax® With VaporGrip® Technology:

1. All Items required by 7 CFR Part 110 (RECORDKEEPING ON RESTRICTED USE PESTICIDES BY CERTIFIED APPLICATORS), including:
    a. The brand or product name
    b. The EPA registration number
    c. The total amount applied
    d. The month, day, and year of application
    e. The location of the application
    f. The crop, commodity, stored product, or site of application
    g. The size of treated area
    h. The name of the certified applicator
    i. The certification number of the certified applicator
2. *Training*: Completion date and provider of required training and proof of completion.
3. *Receipts of Purchase*: Receipts or copies for the purchase of this product.
4. *Product Label*: A copy of this product label and any state special local needs label that supplements this label.
5. *Crop Planting Date*: Record of the date at which the crop was planted.
6. *Sensitive Crops and Certain Plants Awareness*:
    a. Document that a sensitive crop registry was consulted. At a minimum, documentation must include the name of the sensitive crop registry and the date it was consulted.
    b. Record of a survey of adjacent areas documenting the sensitive crops and/or certain plants (as defined below in ~~this~~ the "Adjacent Sensitive Crops and Certain Plants" section of this label) surrounding the field prior to application. At a minimum, records must include documentation of adjacent sensitive crops and/or certain plants and the date the survey was conducted.
7. *Buffer Requirement*: Record of the buffer distance implemented ~~calculation and any areas included within the buffer distance calculations~~ as ~~allowed~~ directed in the "Spray Drift Management" and "Optional Use of Drift Reduction Technology" sections of this label.
8. *Start and Finish Times of Each Application*: Record of the time at which the application started and finished.
9. *Application Timing*: Record of the type of application (for example: preemergence, postemergence) and the number of days after planting if postemergence.
10. *Air Temperature*: Record of the air temperature in degrees Fahrenheit at the start and completion of each application.
11. *Wind Speed and Direction*: Record of the wind speed and direction (the direction from which the wind is blowing) at boom height at the start and completion of each application.
12. *Nozzle and Pressure*: Record of the spray nozzle manufacturer/brand, type, orifice size, and operating pressure used during each application of this product.
13. *Tank Mix Products*: Record of the brand names and EPA registration numbers (if applicable) for all products that were tank mixed with this product for each application, as well as a record of the volume of each added to the tank prior to application.
14. ***Mandatory ~~Drift and~~ Volatility and Drift Reduction Adjuvants***: Receipts or copies for the purchase of ~~both~~ an EPA-approved ~~DRA and VRA~~volatility reduction adjuvant, as well as a record of the volume ~~of each~~ added to the tank prior to application. Receipts or copies for the purchase of an EPA-approved DRA and a record of the volume added to the tank prior to application, unless otherwise indicated on www.xtendimaxapplicationrequirements.com.
15. *Spray System Cleanout*: At a minimum, records must include confirmation that the spray system was clean before using this product and that the post-application cleanout was completed in accordance with the "Proper Spray System Equipment Cleanout" section of this label.

Formatted: Font: Bold

Formatted: Font: Bold

HERBICIDE RESISTANCE MANAGEMENT RECOMMENDATIONS

The dicamba active ingredient in XtendiMax® With VaporGrip® Technology is a Group 4 herbicide. Any weed population may contain or develop plants naturally resistant to XtendiMax® With VaporGrip® Technology and other Group 4 herbicides. The resistant biotypes may

dominate the weed population if these herbicides are used repeatedly in the same field. Appropriate resistance management strategies should be followed.

To delay herbicide resistance, take one or more of the following steps:

- Limit cultivation and/or mechanical tillage within 7 days after application, as this may result in reduced efficacy and promote regrowth of treated weeds.
- Rotate the use of XtendiMax® With VaporGrip® Technology ~~or other Group 4 herbicides~~ within a growing season ~~sequence or~~and among growing seasons with different herbicide groups (other than Group 4) that control the same weeds ~~in a field~~.
- Use tank mixtures with herbicides from a different herbicide Group if such use is permitted.
- Adopt an integrated weed-management program for herbicide use that includes scouting and uses historical information related to herbicide use and crop rotation and that considers tillage (or other mechanical control methods), cultural (*e.g.*, higher crop seeding rates; precision fertilizer application method and timing to favor the crop and not the weeds), biological (weed-competitive crops or varieties), and other management practices.
- Scout after herbicide application to monitor weed populations for early signs of resistance development. Indicators of possible herbicide resistance include: (1) failure to control a weed species normally controlled by the herbicide at the dose applied, especially if control is achieved on adjacent weeds; (2) a spreading patch of non-controlled plants of a particular weed species; (3) surviving plants mixed with controlled individuals of the same species. If resistance is suspected, prevent weed seed production in the affected area by an alternative herbicide from a different group or by a mechanical method such as hoeing or tillage. Prevent movement of resistant weed seeds to other fields by cleaning harvesting and tillage equipment when moving between fields and by planting clean seed.
- If a weed pest population continues to progress after treatment with this product, switch to another management strategy or herbicide with an effective mode of action, if available, and contact Bayer at 1-844-RRXTEND (1-844-779-8363).
- Contact your local extension specialist or certified crop advisors for additional pesticide resistance-management and/or integrated weed-management recommendations for specific crops and weed biotypes.
- For further information or to report suspected resistance contact Bayer at 1-844-RRXTEND (1-844-779-8363).

Management of Dicamba-Resistant Biotypes

Appropriate testing is critical in order to determine if a weed is resistant to dicamba. Contact your Bayer representative to determine if resistance in any particular weed biotype has been confirmed in your area or visit www.iwilltakeaction.com or www.weedscience.org.

~~Bayer is not responsible for any losses that result from the failure of this product to control dicamba-resistant weed biotypes.~~

The following good agronomic practices can reduce the spread of confirmed dicamba-resistant biotypes, particularly if pursued as soon as signs of resistance are observed:

- If a naturally occurring resistant biotype is present in your field, this product may be tank mixed or applied sequentially with an appropriately labeled herbicide with a different mode of action to achieve control (read "Tank Mixing" section for more information).
- Cultural and mechanical control practices (*e.g.*, crop rotation or tillage) can also be used as appropriate.
- Scout treated fields after herbicide application and control weed escapes, including resistant biotypes, before they set seed.
- Thoroughly clean equipment, as practical, for all weed seeds before leaving fields known to contain resistant biotypes.

SPRAY DRIFT MANAGEMENT

THE APPLICATOR IS RESPONSIBLE FOR AVOIDING OFF-SITE SPRAY DRIFT TO THE EXTENT CONSISTENT WITH APPLICABLE LAW. The applicator is responsible for compliance with state and local pesticide regulations, including any state or local pesticide drift regulations. DO NOT allow herbicide solution to mist, drip, drift, or splash onto desirable vegetation because severe injury or destruction to desirable broadleaf plants could result.

Applications using larger droplets reduces drift potential but will not prevent drift if the application is made improperly or under unfavorable environmental conditions. The interaction of weather-related factors and equipment must be monitored to maximize performance and on-target spray deposition. The applicator is responsible for considering all these factors when making a spray decision to the extent consistent with applicable law. BE AWARE OF NEARBY NON-TARGET SITES AND CHANGING ENVIRONMENTAL CONDITIONS (see the "Temperature Inversions" section of this label).

Environmental Requirements

Wind Speed

Wind speed must be measured in the field of application at boom height prior to and after application.

Only apply when wind speed at boom height is between 3 MPH and 10 MPH during application.

Temperature Inversions

DO NOT apply this product during a temperature inversion as the off-target movement potential is high.

Applications of this product may ONLY occur one hour after sunrise through two hours before sunset. In general, temperature inversions are more likely during nighttime hours.

- Temperature inversions are characterized by increasing temperature with altitude and are common on nights with limited cloud cover and light to no wind.

Commented [SC3]: The main points for this temperature inversion section are to indicate to the applicator not to apply into an inversion and to list the primary conditions for the applicator to be alerted to so as to avoid applying into an inversion. We do not find it necessary to include on the label extra information on what an inversion is or how winds may impact it, but we acknowledge that this be part of the training for certified applicators.

- The presence of an inversion can be indicated by ground fog or, if fog is not present, by the movement of smoke from a ground source or an aircraft smoke generator. Smoke that layers and moves laterally in a concentrated cloud (under low wind conditions) indicates an inversion, while smoke that moves upward and rapidly dissipates indicates good vertical air mixing.

~~**Temperature and Humidity**~~
~~When making applications in hot and dry conditions, use larger droplets to reduce effects of evaporation (for example: increase orifice size and/or increase spray volume as directed on www.xtendimaxapplicationrequirements.com).~~

Commented [SC4]: This statement, including the 91F temperature, is a carryover from older product labels where finer tip nozzles and <10 GPA were permitted for use and was a generally accepted mitigation to further reduce drift in high heat/low humidity areas. There is also no data in this registration or any other to support the statement as an effective mitigation. With the current use gallons limited to 15 GPA or higher and the nozzle approval process, this product is limited for use with the largest droplet size available for ALL applications regardless of high heat and low humidity. We already have limited the production of most if not all fine particles from evaporative loss; moreover, there is no other nozzle that could be used to further reduce fines. All of our approved nozzles are tested and have specific ranges of psi for approved use to maximize coverage while limiting the production of fines.

Equipment Requirements

DO NOT APPLY THIS PRODUCT USING AERIAL SPRAY EQUIPMENT.

Formatted: Font: 9 pt

Formatted: Font: 9 pt, Not Bold

Nozzle Type

To produce minimal amounts of fine spray particles, the applicator must use an approved nozzle within a specified pressure range as found at www.xtendimaxapplicationrequirements.com. DO NOT use any other nozzle and pressure combination not specifically listed on this website.

Equipment Ground Speed

DO NOT exceed a ground speed of 15 miles per hour. Select a ground speed that will deliver the desired spray volume while maintaining the desired spray pressure. Slower speeds generally result in better spray coverage and deposition on the target area. Provided the applicator can maintain the required nozzle pressure, it is recommended that tractor speed is reduced to 5 miles per hour at field edges.

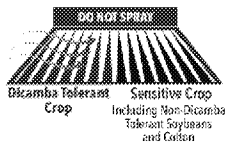
Spray Boom Height

Use the minimum boom height appropriate for spray pattern overlap, according to nozzle selection, or ~~Maximum boom height is~~ 24 inches above target pest or crop canopy, whichever is smaller.

Adjacent Sensitive Crops and Certain Plants

DO NOT SPRAY this product when wind is blowing toward adjacent sensitive crops and certain plants, as defined immediately below.

It is important for the applicator to be aware that wind direction may vary during the application. If wind direction shifts such that the wind is blowing toward adjacent sensitive crops and/or certain plants, the applicator **must STOP** the application.



Before making an application, 1) consult a sensitive crop registry (such as FieldWatch or state/federal registry), 2) survey adjacent fields and areas, and 3) confirm the type or variety of plants and crops surrounding the field prior to application. At a minimum, records must include the name of the sensitive crop registry, the date it was consulted, documentation of adjacent plants and crops/areas surrounding the field of application, and the date the survey was conducted.

Dicamba-sensitive crops and/or certain plants include, but are not limited to, non-dicamba-tolerant soybeans and cotton, tomatoes and other fruiting vegetables (EPA crop group 8), fruit trees, cucurbits (EPA crop group 9), grapes, beans, flowers, ornamentals, peas, potatoes, sunflower, tobacco, and other broadleaf plants, including if these plants are in a greenhouse. Severe injury or destruction could occur if any contact between this product and these plants occurs. Sensitive crop registries can provide additional information about sensitive crops and sensitive areas.

If you have questions regarding sensitive crop registries contact Bayer at 1-844-RRXTEND (1-844-779-8363) **prior to application**.

Buffer Requirements

After determining no adjacent sensitive crops and/or certain plants are downwind, the applicator **must always maintain a 240-foot downwind buffer** between the last treated row and the nearest downwind field edge when applying using broadcast open-boom equipment. For reduced downwind buffer distances, refer to "Optional Use of Drift Reduction Technology" section of this label.

Formatted: Font: Bold

The following areas may be included in the buffer distance ~~calculation composition~~ when directly adjacent to the treated field edges:

- Roads, paved or gravel surfaces, mowed and/or managed areas adjacent to field such as rights-of-way

- Planted agricultural fields containing: corn, dicamba-tolerant cotton, dicamba-tolerant soybean, sorghum, proso millet, small grains, or sugarcane. If the applicator intends to include such crops as dicamba-tolerant cotton and/or dicamba-tolerant soybeans in the buffer distance calculation, the applicator must confirm the crops are in fact dicamba-tolerant.
- Agricultural fields that have been prepared for planting
- Areas covered by the footprint of a building, silo, or other man-made structure with walls and/or roof

If you have questions regarding Buffer Requirement, contact Bayer at 1-844-RRXTEND (1-844-779-8363) **prior to application**.

Optional Use of Drift Reduction Technology

This product may be optionally applied using a hooded/shielded broadcast sprayer or other types of drift reduction technology (DRT), such as, hooded/shielded in-row, or directed layby equipment, for postemergence weed control as well as residual control of susceptible weeds. The applicator must use an approved nozzle within a specified pressure range as found at www.xtendimaxapplicationrequirements.com. Using Use of a hooded sprayer or other drift reduction technology (DRT) in combination with approved nozzles is recommended to further reduce drift potential.
Applications of this product may qualify for reduced use restrictions, such as a reduced downwind buffer distance, provided a **qualified DRT** listed on www.xtendimaxapplicationrequirements.com is used and operated according to the directions and limitations provided at www.xtendimaxapplicationrequirements.com.

Commented [SC5]: These other types of DRT (besides qualified hooded sprayers) can be used with this product but, while they do offer additional protection against spray drift, do not currently qualify for mitigation relief.

Commented [SC6]: As per the hooded sprayer qualification protocol, there is the potential for other application requirements to change. This language is consistent with that approach and is aligned with EPA's DRT website

Hooded/Shielded Broadcast Sprayer:

For hooded/shielded sprayers, all application nozzles must be contained within the enclosed area. Shielding the boom or individual nozzles can reduce the effects of wind. However, it is the responsibility of the applicator to verify that the shields are preventing drift and not interfering with uniform deposition of the product. Applicators must ensure the sprayer system is off or controlled during turns to further prevent spray drift. Refer to the hooded/shielded sprayer manufacturer use specifications prior to use.

Requirements for Reduced Use Restrictions with Optional Hooded/Shielded Sprayer: ONLY ~~if using a~~ **qualified** hooded/shielded sprayers listed on www.xtendimaxapplicationrequirements.com ,are eligible for reduced use restrictions when applying this product. Refer to the website for specific application requirements when using a **qualified** hooded/shielded sprayer. While this product may be applied with other (non-qualified) hooded/shielded sprayers, no reduction in use restrictions is associated with their use. ~~the following apply:~~

- ~~*Reduced Buffer Distance*: The applicator must always maintain a [minimum 30-foot] downwind buffer between the last treated row and the nearest downwind field edge.~~
- ~~*Adjacent Sensitive Crops and Certain Plants*: The applicator must utilize the [minimum 30-foot] downwind buffer between the last treated row and the nearest downwind field edge.~~

Formatted: Font: Italic
Formatted: Font: Italic
Formatted: Font: Bold
Formatted: Font: 11 pt

TANK MIX PARTNERS AND COMPATIBILITY TESTING

Tank Mixing

It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions, limitations, and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.

All applications of this product require the inclusion of ~~both a drift reduction adjuvant (DRA) and~~ a volatility reduction adjuvant (VRA), such as a VaporGrip® Xtra Agent product or an approved VRA equivalent, in the tank mix. The inclusion of a **drift reduction adjuvant (DRA) is also required** in the tank mix, unless otherwise indicated on www.xtendimaxapplicationrequirements.com. Only tank mix products that have been tested and found to not adversely affect the offsite movement potential of XtendiMax® With VaporGrip® Technology may be tank mixed with XtendiMax® With VaporGrip® Technology. The applicator must check the website found at www.xtendimaxapplicationrequirements.com for a list of approved tank mix products no more than 7 days before applying XtendiMax® With VaporGrip® Technology.

Formatted: Font: Bold
Formatted: Font: Bold
Formatted: Font: Bold

DO NOT tank mix any product with XtendiMax® With VaporGrip® Technology unless:

1. The intended tank mix product is identified on the list of tested products found at www.xtendimaxapplicationrequirements.com;
2. The intended products are not prohibited on either this label or the label of the tank mix product; and
3. All requirements and restrictions on www.xtendimaxapplicationrequirements.com are followed.

Formatted: Font: Not Bold
Formatted: Superscript
Formatted: Superscript
Formatted: List Paragraph, Numbered + Level: 1 + Numbering Style: 1, 2, 3, … + Start at: 1 + Alignment: Left + Aligned at: 0.25" + Indent at: 0.5"
Formatted: Font: (Asian) Times New Roman
Formatted: Font: Not Bold

~~Compatibility~~

~~XtendiMax® With VaporGrip® Technology is physically and biologically compatible with many registered pesticides, fertilizers, micronutrients, and spray adjuvants. However, as many components, may be present in a tank mix combination, there is potential for adverse chemical reactions. It is impossible to determine physical, biological, and plant compatibility for all scenarios that may be encountered; therefore, it is recommended that users determine the chemical, physical, biological, and plant compatibility of such mixes prior to application on a broad commercial scale.~~

NOTE: DO NOT use PVA (polyvinyl acetate) packets in a tank mix with products that contain boron or release free chlorine. The resultant reaction of PVA and boron or free chlorine is a plastic that is not soluble in water or solvents.

Formatted: Don't adjust right indent when grid is defined, Don't keep with next, Don't adjust space between Latin and Asian text, Don't adjust space between Asian text and numbers
Formatted: Font: 11 pt
Formatted: Don't adjust right indent when grid is defined, Don't keep with next, Don't adjust space between Latin and Asian text, Don't adjust space between Asian text and numbers

APPLICATION INSTRUCTIONS

APPLY THIS PRODUCT USING PROPERLY MAINTAINED AND CALIBRATED EQUIPMENT CAPABLE OF DELIVERING THE REQUIRED VOLUMES.

DO NOT APPLY THIS PRODUCT USING AERIAL SPRAY EQUIPMENT.

XtendiMax® With VaporGrip® Technology can be applied to actively growing weeds as broadcast, band, or spot spray applications using water as a carrier. For best results, treat weeds early when they are relatively small (less than 4 inches). Timely application to small weeds early in the season will improve control and reduce weed competition.

Formatted: Don't adjust right indent when grid is defined, Don't keep with next, Don't adjust space between Latin and Asian text, Don't adjust space between Asian text and numbers

Ground Application (Broadcast)
Water Volume: Use a minimum of 15 gallons of spray solution per broadcast acre for optimal performance. Use 20 gallons per acre or greater when treating dense weed canopy/vegetation.

Ground Application (Hooded In-Row and Directed Layby)
Using a hooded sprayer or other drift reduction technology in combination with approved nozzles may further reduce drift potential.
When applying XtendiMax® With VaporGrip® Technology by hooded in-row or layby sprayers, determine the amount of herbicide and water volume needed using the following formula:

$$\frac{\text{band width (inches)}}{\text{row width (inches)}} * \text{broadcast rate per acre} = \text{rate per treated acre}$$

$$\frac{\text{band width (inches)}}{\text{row width(inches)}} * \text{broadcast spray volume per acre} = \text{spray volume per treated acre}$$

SPRAY SYSTEM EQUIPMENT CLEANOUT

You must ensure that the spray system used to apply this product is clean before using this product. Failure to properly clean the entire spray system can result in inadvertent contamination of the spray system. Contamination of the spray system may cause injury to non-dicamba-tolerant soybeans and other sensitive crops.
Inadvertent contamination can also occur in equipment used for bulk product handling and mixing prior to use in the spray system. Care should be taken to reduce contamination not only in the spray system but in any equipment used to transfer or deliver product. For example, bulk handling and mixing equipment containing this product should be segregated when possible to reduce potential for cross-contamination. Consider using block and check valves to avoid backflow during transfer. Piping should be reviewed to ensure there is not potential for product build-up. Dedicated nurse trucks and tender equipment should be used when possible.

Clean equipment **immediately after using** this product, using a **triple rinse** procedure as follows:

1. After spraying, drain the sprayer (including boom and lines) immediately. DO NOT allow the spray solution to remain in the spray boom lines overnight prior to flushing.
2. Flush tank, hoses, boom, and nozzles with clean water. If equipped, open boom ends and flush.
3. Inspect and clean all strainers, screens, and filters.
4. Prepare a cleaning solution with a commercial detergent or sprayer cleaner or ammonia according to the manufacturer's directions.
5. Take care to wash all parts of the tank, including the inside top surface. Start agitation in the sprayer and thoroughly recirculate the cleaning solution for at least 15 minutes. All visible deposits must be removed from the spraying system.
6. Flush hoses, spray lines, and nozzles for at least 1 minute with the cleaning solution.
7. Remove nozzles, screens, and strainers and clean separately in the cleaning solution after completing the above procedures.
8. Drain pump, filter, and lines.
9. Rinse the complete spraying system with clean water.
10. Clean and wash off the outside of the entire sprayer and boom.
11. All rinse water must be disposed of in compliance with local, state, and federal guidelines.

ROTATIONAL CROPS

When counting days from the application of this product, do not count days when the ground is frozen. Moisture is essential for the degradation of this herbicide in soil. If dry weather prevails, use cultivation to allow herbicide contact with moist soil.

No rotational cropping restrictions apply when rotating to soybean with Roundup Ready 2 Xtend® Technology or XtendFlex® Technology or to cotton seed with XtendFlex® Technology (including Bollgard® 3 XtendFlex® Cotton, Bollgard II® XtendFlex® Cotton, or XtendFlex® Cotton). For other crops, the interval between application and planting rotational crop is given below. Planting at intervals less than specified below may result in crop injury.

For application rates of this product of **22 fluid ounces per acre per ~~season~~year**:

- No planting restrictions apply beyond 120 days after application.
- East of the Mississippi River:
  - Wait a minimum of 30 days for 22 fluid ounces applied per acre before planting.

- West of the Mississippi River:
  - Wait a minimum of 45 days for 22 fluid ounces applied per acre before planting.
  - In areas with less than 30 inches of annual rainfall wait a minimum of 100 days before planting (furrow and/or overhead irrigation can be included in rainfall determination).

For application rates of this product of **44 to 88 fluid ounces per acre per ~~season~~year**:

- In areas with less than 30 inches of annual rainfall:
  - Wait a minimum of 180 days before planting crops (furrow and/or overhead irrigation can be included in rainfall determination).
- In areas with 30 inches or more annual rainfall:
  - Wait a minimum of 120 days after application before planting.

WEEDS CONTROLLED OR SUPPRESSED

General Weed List, Including ALS-, Glyphosate-, and Triazine-Resistant Biotypes

ANNUAL WEEDS		
Alkanet	Flixweed	Pusley, Florida
Amaranth, Palmer, Powell, Spiny	Fumitory	Radish, Wild
Aster, Slender	Goosefoot, Nettleleaf	Ragweed, Common, Giant (Buffaloweed), Lance-Leaf
Bedstraw, Catchweed	Hempnettle	Rocket, London, Yellow
Beggarweed, Florida	Henbit	Rubberweed, Bitter (Bitterweed)
Broomweed, Common	Jacobs-Ladder	Salsify
Buckwheat, Tartary, Wild	Jimsonweed	Senna, Coffee
Buffalobur	Knawel (German Moss)	Sesbania, Hemp
Burclover, California	Knotweed, Prostrate	Shepherdpurse
Burcucumber	Kochia	Sicklepod
Buttercup, Corn, Creeping, Roughseed, Western Field	Ladysthumb	Sida, Prickly (Teaweed)
Carpetweed	Lambsquarters Common	Smartweed, Green, Pennsylvania
Catchfly, Nightflowering	Lettuce, Miners, Prickly	Sneezeweed, Bitter
Chamomile, Corn	Mallow, Common, Venice	Sowthistle, Annual, Spiny
Chevil, Bur	Marestail (Horseweed)	Spanish Needles
Chickweed, Common	Mayweed	Spikeweed, Common
Clovers	Morningglory, Ivyleaf, Tall	Spurge, Prostrate, Leafy
Cockle, Corn, Cow, White	Mustard, Black, Blue, Tansy, Treacle, Tumble, Wild, Yellowtops	Spurry, Corn
Cocklebur, Common	Nightshade, Black, Cutleaf	Starbur, Bristly
Copperleaf, Hophornbeam	Pennycress, Field (Fanweed, Frenchweed, Stinkweed)	Starwort, Little
Cornflower (Bachelor Button)	Pepperweed, Virginia (Peppergrass)	Sumpweed, Rough
Croton, Tropic, Woolly	Pigweed, Prostrate, Redroot (Carelessweed), Rough, Smooth, Tumble	Sunflower, Common (Wild), Volunteer
Daisy, English	Pineappleweed	Thistle, Russian
Dragonhead, American	Poorjoe	Velvetleaf
Eveningprimrose, Cutleaf	Poppy, Red-horned	Waterhemp, Common, Tall
Falseflax, Smallseed	Puncturevine	Waterprimrose, Winged
Fleabane, Annual	Purslane, Common	Wormwood

BIENNIAL WEEDS		
Burdock, Common	Gromwell	Starthistle, Yellow
Carrot, Wild (Queen Anne's Lace)	Knapweed, Diffuse, Spotted	Sweetclover
Cockle, White	Mallow, Dwarf	Teasel
Eveningprimrose, Common	Plantain, Bracted	Thistle, Bull, Milk, Musk, Plumeless
Geranium, Carolina	Ragwort, Tansy	

PERENNIAL WEEDS		
Alfalfa	Garlic, Wild	Smartweed, Swamp
Artichoke, Jerusalem	Goldenrod, Canada, Missouri	Snakeweed, Broom
Aster, Spiny, Whiteheath	Goldenweed, Common	Sorrel, Red (Sheep Sorrel)
Bedstraw, Smooth	Hawkweed	Sowthistle, Perennial
Bindweed, Field, Hedge	Henbane, Black	Spurge, Leafy
Blueweed, Texas	Horsenettle, Carolina	Sundrops
Bursage, Woollyleaf (Bur Ragweed, Povertyweed)	Ironweed	Thistle, Canada, Scotch
Buttercup, Tall	Knapweed, Black, Diffuse, Russian, Spotted	Toadflex, Dalmatian
Campion, Bladder	Milkweed, Climbing, Common, Honeyvine, Western Whorled	Tropical Soda Apple
Chickweed, Field, Mouseear	Nettle, Stinging	Trumpetcreeper (Buckvine)
Chicory	Nightshade, Silverleaf (White Horsenettle)	Vetch
Clover, Hop	Onion, Wild	Waterhemlock, Spotted
Dandelion, Common	Plantain, Broadleaf, Buckhorn	Waterprimrose, Creeping
Dock Broadleaf (Bitterdock), Curly	Pokeweed	Woodsorrel, Creeping, Yellow
Dogbane, Hemp	Ragweed, Western	Wormwood, Absinth, Louisiana
Dogfennel (Cypressweed)	Redvine	Yankeeweed
Fern, Bracken	Sericia Lespedeza	Yarrow, Common

SPECIFIC USE DIRECTIONS

BETWEEN CROP APPLICATIONS ~~Preplant application (p~~Postharvest, fallow, crop stubble, set-aside) for broadleaf weed control only	
Application Rates	• Apply 22 fluid ounces of XtendiMax® With VaporGrip® Technology per acre.
Maximum Rates	• ~~Per treated acre per application: 22 fluid ounces (0.5 lb. a.e. dicamba per acre).~~ • Per treated acre per year: 88 fluid ounces (2.0 lb. a.e. dicamba per acre).
Application Timing	• XtendiMax® With VaporGrip® Technology can be applied either postharvest in the fall, spring, or summer during the fallow period or to crop stubble/set-aside acres. • For best performance, apply XtendiMax® With VaporGrip® Technology when annual weeds are less than 4 inches tall, when biennial weeds are in the rosette stage, and to perennial weed regrowth in late summer or fall following a mowing or tillage treatment. • The most effective control of upright perennial broadleaf weeds such as Canada thistle and Jerusalem artichoke occurs if XtendiMax® With VaporGrip® Technology is applied when the majority of weeds have at least 4 – 6 inches of regrowth or for weeds such as field bindweed and hedge bindweed that are in or beyond the full bloom stage.
Application Method	• Apply XtendiMax® With VaporGrip® Technology as a broadcast or spot treatment to emerged and actively growing weeds after crop harvest (postharvest) and before a killing frost or in the fallow cropland or crop stubble the following spring or summer.
Livestock Grazing or Feeding	• Permitted.
Use Precautions	• Avoid disturbing treated areas following application. • Treatments may not kill weeds that develop from seed or underground plant parts, such as rhizomes or bulblets, after the effective period for XtendiMax® With VaporGrip® Technology. For seedling control, a follow-up program or other cultural practices could be instituted. • Refer to the "Rotational Crops" section of this label for the recommended interval between application and planting to prevent crop injury.

Commented [SC7]: These uses are not covered by the preplant instructions for DT cotton and soybean. This "Between Crop Applications" use:
(1) Offers growers post-harvest weed control opportunity to have a low-volatility dicamba with greatly improved application requirements to mitigate OTM and protection of endangered species/areas (vs the myriad other dicambas with this label provision).
(2) Fall or post-harvest applications tank-mixed with other herbicides can be a very effective tool to manage escaped or newly emerged weeds after harvest equipment, fall tillage, or other production practice has occurred before hard freeze to manage spring weed populations.
(3) Allowing additional post-harvest uses also allows retailers and growers to use left-over stock of this low-volatility product in this manner vs other dicambas.

CROPS WITH XTEND® TECHNOLOGY

Cotton with XtendFlex® Technology (including Bollgard II® XtendFlex® COTTON, Bollgard® 3 XtendFlex® COTTON, or XtendFlex® COTTON) and soybean with Roundup Ready 2 Xtend® Technology or XtendFlex® Technology CONTAIN A PATENTED GENE THAT PROVIDES TOLERANCE TO DICAMBA, THE ACTIVE INGREDIENT IN THIS PRODUCT. THIS PRODUCT WILL CAUSE SEVERE CROP INJURY OR DESTRUCTION AND YIELD LOSS IF APPLIED TO COTTON AND SOYBEAN THAT ARE NOT DICAMBA TOLERANT, INCLUDING COTTON AND SOYBEAN WITH A TRAIT ENGINEERED TO CONFER TOLERANCE TO AUXIN HERBICIDES OTHER THAN DICAMBA. FOLLOW THE REQUIREMENTS SET FORTH HEREIN TO PREVENT SEVERE CROP INJURY OR DESTRUCTION AND YIELD LOSS. CONTACT WITH FOLIAGE, GREEN STEMS, OR FRUIT OF CROPS, OR ANY

DESIRABLE PLANTS THAT DO NOT CONTAIN A DICAMBA TOLERANCE GENE OR ARE NOT NATURALLY TOLERANT TO DICAMBA, COULD RESULT IN SEVERE PLANT INJURY OR DESTRUCTION.

XtendiMax® With VaporGrip® Technology is approved by U.S. EPA for use in cotton with XtendFlex® Technology and in soybean with Roundup Ready 2 Xtend® Technology or XtendFlex® Technology only in the following states, subject to county restriction as noted: Alabama, Arkansas, Arizona, Colorado, Delaware, Florida (excluding Palm Beach County), Georgia, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maryland, Michigan, Minnesota, Mississippi, Missouri, Nebraska, New Jersey, New Mexico, New York, North Carolina, North Dakota, Oklahoma, Ohio, Pennsylvania, South Carolina, South Dakota, Tennessee (excluding Wilson County), Texas, Virginia, West Virginia, Wisconsin.

Information on cotton with XtendFlex® Technology and on soybean with Roundup Ready 2 Xtend® Technology or XtendFlex® Technology can be obtained from your seed supplier or Bayer representative. Cotton with XtendFlex® Technology and soybean with Roundup Ready 2 Xtend® Technology or XtendFlex® Technology must be purchased from an authorized licensed seed supplier.

Cotton with XtendFlex® Technology, soybean with Roundup Ready 2 Xtend® Technology or XtendFlex® Technology, and methods of controlling weeds and applying dicamba in cotton with XtendFlex® Technology and in soybean with Roundup Ready 2 Xtend® Technology or XtendFlex® Technology are protected under U.S. patent law. No license to use cotton with XtendFlex® Technology or soybean with Roundup Ready 2 Xtend® Technology or XtendFlex® Technology is granted or implied with the purchase of this herbicide product. Cotton with XtendFlex® Technology and soybean with Roundup Ready 2 Xtend® Technology or XtendFlex® Technology are owned by Bayer and a license must be obtained from Bayer before using it. Contact your Authorized Bayer Retailer for information on obtaining a license to use cotton with XtendFlex® Technology and soybean with Roundup Ready 2 Xtend® Technology or XtendFlex® Technology.

COTTON WITH XTENDFLEX® TECHNOLOGY	
Application Rate	• ~~Using the appropriate application rate may reduce the selection for resistant weeds.~~ • **Burndown/Early Preplant, Preplant, At-Planting, Preemergence:** Apply ~~a maximum of~~ 22 fluid ounces (0.5 lb. acid equivalent (a.e.) dicamba) per acre for a single burndown/early preplant, preplant, at-planting, or preemergence application. • **Postemergence (in-crop):** For any single, in-crop application, apply 22 fluid ounces (0.5 lb. a.e. dicamba) per acre.
Maximum Rates	• ~~*Maximum single application*: 22 fluid ounces per acre (0.5 lb. a.e. dicamba per acre)~~ • *Total of all Burndown/Early Preplant, Preplant, At-Planting, and Preemergence applications*: 44 fluid ounces per acre (1.0 lb. a.e. dicamba per acre) • *Total of all in-crop applications*: 44 fluid ounces per acre (1.0 lb. a.e. dicamba per acre) • *Combined total per year for all applications*: 88 fluid ounces per acre (2.0 lb. a.e. dicamba per acre)
Application Timing	• **Burndown/Early Preplant, Preplant, At-Planting, Preemergence:** This product may be applied before, during, or immediately after planting. • **Postemergence (in-crop):** This product may be applied in-crop up to and including July 30.
Number of Applications	• Sequential applications of this product may be necessary to control new flushes of weeds or on tough-to-control weeds. Allow at least 7 days between applications. • A maximum of **two** burndown/early preplant, preplant, at-planting, and preemergence and **two** in-crop applications may be made.
Spray Volume	• Apply this product in a minimum of 15 gallons of spray solution per acre as a broadcast application. • Use 20 gallons per acre or greater when treating dense weed canopy/vegetation.
Livestock Grazing or Feeding	• Permitted.
Use Precautions	• Refer to the "Weeds Controlled or Suppressed" section of this label for specific weeds controlled. • For best performance, control weeds early when they are less than 4 inches. • Postemergence applications of this product mixed with adjuvants may cause a leaf response to cotton with XtendFlex® Technology. The symptoms usually appear as necrotic spots on fully expanded leaves. EC-based products that are tank mixed with products containing dicamba may increase the severity of the leaf damage. • For postemergence applications with a hooded in-row sprayer, cotton must be a minimum of 15 inches tall at the time of application. • For postemergence applications with a directed layby sprayer, the release point for the herbicide must not be more than 10 inches from the soil and cotton must be at least 20 inches in height. Spray tip must be angled downward to the soil making sure no spray droplets remain in the air.
Use Restrictions	• DO NOT apply less than 22 fluid ounces (0.5 lb. a.e. dicamba) per acre. • DO NOT exceed two pre-emergent applications. • DO NOT exceed two post-emergent applications. • DO NOT exceed 88 fluid ounces per acre (2.0 lb. a.e. dicamba per acre) per year.

SOYBEAN WITH ROUNDUP READY 2 XTEND® TECHNOLOGY OR XTENDFLEX® TECHNOLOGY	
Application Rate	• ~~Using the appropriate application rate may reduce the selection for resistant weeds.~~

	• **Burndown/Early Preplant, Preplant, At-Planting, Preemergence:** Apply ~~a maximum of~~ 22 fluid ounces (0.5 lb. acid equivalent (a.e.) dicamba) per acre for a single burndown/early preplant, preplant, at-planting, or preemergence application. • **Postemergence (in-crop):** For any single, in-crop application, apply 22 fluid ounces (0.5 lb. a.e. dicamba) per acre.
Maximum Rates	• ~~*Maximum single application*: 22 fluid ounces per acre (0.5 lb. a.e. dicamba per acre)~~ • *Total of all Burndown/Early Preplant, Preplant, At-Planting, and Preemergence applications*: 44 fluid ounces per acre (1.0 lb. a.e. dicamba per acre) • *Total of all in-crop applications*: 44 fluid ounces per acre (1.0 lb. a.e. dicamba per acre) • *Combined total per year for all applications*: 88 fluid ounces per acre (2.0 lb. a.e. dicamba per acre)
Application Timing	• **Burndown/Early Preplant, Preplant, At-Planting, Preemergence:** This product may be applied before, during, or immediately after planting. • **Postemergence (in-crop):** This product may only be applied in-crop up to and including June 30. Applications occurring after R1 are prohibited as crop response may occur.
Number of Applications	• A second application may be necessary to control new flushes of weeds. Allow at least 7 days between applications. For best results, apply after some weed re-growth has occurred. • A maximum of ~~maximum of~~ **two** burndown/early preplant, preplant, at-planting, and preemergence and **two** in-crop applications may be made.
Spray Volume	• Apply this product in a minimum of 15 gallons of spray solution per acre as a broadcast application. • Use 20 gallons per acre or greater when treating dense weed canopy/vegetation.
Livestock Grazing or Feeding	• Permitted.
Use Precautions	• Refer to the "Weeds Controlled or Suppressed" section of this label for specific weeds controlled. • For best performance, control weeds early when they are less than 4 inches. • Postemergence application under stressful environments may cause temporary loss of turgor, a response commonly described as leaf droop in soybean with Roundup Ready 2 Xtend® Technology or XtendFlex® Technology. Typically, affected plants recover in 1-3 days depending on the level of droop and environmental conditions. • For postemergence applications with a hooded in-row sprayer, soybeans must be a minimum of 15 inches tall at the time of application. • For postemergence applications with a directed layby sprayer, the release point for the herbicide must not be more than 10 inches from the soil and soybeans must be at least 20 inches in height. Spray tip must be angled downward to the soil making sure no spray droplets remain in the air
Use Restrictions	• DO NOT apply less than 22 fluid ounces (0.5 lb. a.e. dicamba) per acre. • DO NOT exceed two pre-emergent applications. • DO NOT exceed two post-emergent applications. • DO NOT exceed 88 fluid ounces per acre (2.0 lb. a.e. dicamba per acre) per year.

STORAGE AND DISPOSAL

Proper pesticide storage and disposal are essential to protect against exposure to people and the environment due to leaks and spills, excess product or waste, and vandalism. Do not allow this product to contaminate water, foodstuffs, feed or seed by storage or disposal.

Pesticide storage
Store pesticides away from food, pet food, feed, seed, fertilizers, and veterinary supplies. Keep container closed to prevent spills and contamination.

Pesticide disposal
To avoid wastes, use all material in this container, including rinsate, by application according to label directions. If wastes cannot be avoided, offer remaining product to a waste disposal facility or pesticide disposal program. Such programs are often run by state or local governments or by industry. All disposal must be in accordance with applicable federal, state, and local regulations and procedures.

Container handling and disposal
[*Insert appropriate Container Handling and Disposal Statement and Refilling Limitation from the following options*]

[*CONTAINER HANDLING AND DISPOSAL STATEMENT AND REFILLING LIMITATION FOR NONREFILLABLE RIGID CONTAINERS OF LESS THAN 1-GALLON CAPACITY*]
Nonrefillable container. Do not reuse or refill this container.

[*Alternative container statement:* Nonrefillable container. Do not reuse this container to hold materials other than pesticides or dilute pesticides (rinsate). After emptying and cleaning, it may be allowable to temporarily hold rinsate or other pesticide-related materials in this container. Contact your state regulatory agency to determine allowable practices in your state.]

Triple rinse this container promptly after emptying.

Triple rinse as follows: Empty the remaining contents into application equipment or mix-tank and continue to drain for 10 seconds after the flow begins to drip. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or mix-tank, or store rinsate for later use or disposal. Continue to drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times.

Once properly rinsed, some plastic [*Optional text:* agricultural] pesticide containers can be taken to a container collection site or picked up for recycling. [*Alternative container disposal statement:* Then offer the container for recycling, if available.]

[*Optional container disposal statement:* To find the nearest collection site, contact your chemical dealer or Bayer at 1-866-99BAYER (1-866-992-2937).]
If recycling is not available, dispose of in accordance with federal, state and local regulations and procedures, which may include puncturing the properly rinsed container and disposing in a sanitary landfill.

[*CONTAINER HANDLING AND DISPOSAL STATEMENT AND REFILLING LIMITATION FOR NONREFILLABLE RIGID PLASTIC 2.5-GALLON CONTAINER AND OTHER NONREFILLABLE CONTAINERS OF GREATER THAN 1-GALLON BUT EQUAL TO OR LESS THAN 5-GALLON CAPACITY*]
Nonrefillable container. Do not reuse this container to hold materials other than pesticides or dilute pesticides (rinsate). After emptying and cleaning, it may be allowable to temporarily hold rinsate or other pesticide-related materials in this container. Contact your state regulatory agency to determine allowable practices in your state.

[*Alternative container statement:* Nonrefillable container. Do not reuse or refill this container.]

Triple rinse or pressure rinse (or equivalent) this container promptly after emptying.

Triple rinse as follows: Empty the remaining contents into application equipment or mix-tank and continue to drain for 10 seconds after the flow begins to drip. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or mix-tank, or store rinsate for later use or disposal. Continue to drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times.

Pressure rinse as follows: Empty the remaining contents into application equipment or mix-tank and continue to drain for 10 seconds after the flow begins to drip. Place container so that it can drain directly into application equipment or mix-tank while rinsing, or collect rinsate for later use or disposal. Insert pressure rinsing nozzle into the side of the container and rinse at about 40 PSI for at least 30 seconds. Continue to drain for 10 seconds after the flow begins to drip.

Once properly rinsed, some plastic [*Optional text:* agricultural] pesticide containers can be taken to a container collection site or picked up for recycling. [*Alternative container disposal statement:* Then offer the container for recycling, if available.]

[*Optional container disposal statement:* To find the nearest collection site, contact your chemical dealer or Bayer at 1-866-99BAYER (1-866-992-2937).]

If recycling is not available, dispose of in accordance with federal, state and local regulations and procedures, which may include puncturing the properly rinsed container and disposing in a sanitary landfill.

[*CONTAINER HANDLING AND DISPOSAL STATEMENT AND REFILLING LIMITATION FOR NONREFILLABLE RIGID PLASTIC 30-GALLON CONTAINER AND OTHER NONREFILLABLE CONTAINERS OF GREATER THAN 5-GALLON CAPACITY*]
Nonrefillable container. Do not reuse or refill this container.

[*Alternative container statement:* Nonrefillable container. Do not reuse this container to hold materials other than pesticides or dilute pesticides (rinsate). After emptying and cleaning, it may be allowable to temporarily hold rinsate or other pesticide-related materials in this container. Contact your state regulatory agency to determine allowable practices in your state.]

Triple rinse or pressure rinse (or equivalent) this container promptly after emptying.

[*Optional label text:* For containers not equipped with pumping systems,] Triple rinse as follows: Empty the remaining contents into application equipment or mix-tank. Fill the container ¼ full with water. Replace and tighten closures. Tip the container on its side and roll it back and forth for 30 seconds, ensuring at least one complete revolution. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or mix-tank, or store rinsate for later use or disposal. Repeat this procedure two more times.

[*Alternative or additional triple rinsing instructions for large containers equipped with pumping systems:* [*Optional label text:* For large containers equipped with pumping systems,] Triple rinse as follows: Empty the remaining contents into application equipment or mix-tank. Fill the container about 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times. ~~Repeat this procedure two more times.~~]

Pressure rinse as follows: Empty the remaining contents into application equipment or mix-tank and continue to drain for 10 seconds after the flow begins to drip. Place container so that it can drain directly into application equipment or mix-tank while rinsing, or collect rinsate for later use or disposal. Insert pressure rinsing nozzle into the side of the container and rinse at about 40 PSI for at least 30 seconds. Continue to drain for 10 seconds after the flow begins to drip.

Once properly rinsed, some plastic [*Optional text:* agricultural] pesticide containers can be taken to a container collection site or picked up for recycling. [*Alternative container disposal statement:* Then offer the container for recycling, if available.]

[*Optional container disposal statement:* Some container manufacturers offer container recycling. See additional information regarding manufacturer recycling programs attached to this container, if available. If no recycling information is available on this container, contact your chemical dealer or Bayer at 1-866-99BAYER (1-866-992-2937) to find the nearest recycling location.]

[*Optional container disposal statement:* To find the nearest collection site, contact your chemical dealer or Bayer at 1-866-99BAYER (1-866-992-2937).]

If recycling is not available, dispose of in accordance with federal, state and local regulations and procedures, which may include puncturing the properly rinsed container and disposing in a sanitary landfill.

[*Optional container disposal statement:* Return Properly Rinsed Container to Bayer for Recycling – Call 1-866-99BAYER (1-866-992-2937).]

[*Optional additional container disposal statement:* IBC EMPTY? – FREE CALL – 1-888-SCHUETZ (1-888-724-8389) www.schuetz.net/ticket; Schuetz ticket service]

[*Optional additional container disposal statement:* FREE IBC PICKUP] [For continental USA and Canada only.]

[*Optional additional container disposal statement:* RETURNnet SYSTEM – To return empty IBC's Email or Call – www.returnnetsystem.com – 1-888-758-SHIP (1-888-758-7447) – United States and Canada – IBCNA – Clarkston, Michigan – USA]

[*CONTAINER HANDLING AND DISPOSAL STATEMENT AND REFILLING LIMITATION FOR ALL REFILLABLE CONTAINERS, EXCEPT TRANSPORT VEHICLES*]
Refillable container. Refill this container with pesticide only. Do not reuse this container for any other purpose.

Cleaning this container before refilling is the responsibility of the refiller. Cleaning this container before final disposal is the responsibility of the person disposing of the container.

To clean this container before final disposal, empty the remaining contents from the container into application equipment or mix-tank. Fill the container about 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times.

[*Optional container disposal statement:* Then offer the container for recycling, if available.]

[*Optional container disposal statement:* Some container manufacturers offer container recycling. See additional information regarding manufacturer recycling programs attached to this container, if available. If no recycling information is available on this container, contact your chemical dealer or Bayer at 1-866-99BAYER (1-866-992-2937) to find the nearest recycling location.]

[*Optional additional container disposal statement:* IBC EMPTY? – FREE CALL – 1-888-SCHUETZ (1-888-724-8389) www.schuetz.net/ticket; Schuetz ticket service]

[*Optional additional container disposal statement:* FREE IBC PICKUP] [For continental USA and Canada only.]

[*Optional additional container disposal statement:* RETURNnet SYSTEM – To return empty IBC's Email or Call – www.returnnetsystem.com – 1-888-758-SHIP (1-888-758-7447) – United States and Canada – IBCNA – Clarkston, Michigan – USA]

[*Optional container disposal statement:* To obtain information about recycling refillable containers, contact Bayer at 1-866-99BAYER (1-866-992-2937).]

[*Optional container disposal statement:* Return Properly Rinsed Container to Bayer for Recycling – Call 1-866-99BAYER (1-866-992-2937).]

[*Optional additional container label statements for the CUBE refillable packaging system only:*
CUBE Bayer Refillable Delivery System
FEATURES INCLUDE:
- Automatic Venting
- Heavy duty one-way 2-inch camloc ball valve with protective shield door
- Complete coated steel protective enclosure
- Durable 4-way plastic pallet
- Lift door to access one-way valve]

CONDITIONS OF SALE AND LIMITATIONS OF WARRANTY AND LIABILITY

Read the entire Directions for Use, Conditions, Disclaimer of Warranties, and Limitations of Liability before buying or using this product. If terms are not acceptable, return the unopened product container at once.

By using this product, user or buyer accepts the following Conditions, Disclaimer of Warranties, and Limitations of Liability.

CONDITIONS: The directions for use of this product are believed to be adequate and must be followed carefully. However, it is impossible to eliminate all risks associated with the use of this product. Crop injury, ineffectiveness, or other unintended consequences may result because of such factors as weather conditions, presence of other materials, or the manner of use or application inconsistent with this label (including conditions noted on the label , such as unfavorable soil conditions, unfavorable climate conditions, etc.), all of which are beyond the control of Bayer CropScience LP ("Bayer") or the seller. To the extent consistent with applicable law, all such risks shall be assumed by the user or buyer. Buyer and all users shall promptly notify Bayer of any claims whether based in contract, negligence, strict liability, other tort or otherwise

DISCLAIMER OF WARRANTIES: Subject to risks as set forth in the Conditions above, Bayer warrants that this product is reasonably fit for the purposes stated on the label when used for the purposes stated on the label when used in accordance with directions. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, BAYER MAKES NO OTHER WARRANTIES, EXPRESS OR IMPLIED, OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE OR OTHERWISE. BAYER MAKES NO RECOMMENDATION OR WARRANTY HEREIN REGARDING THE USE OF ANY PRODUCTS THAT MAY APPEAR ON THE WEBSITE REFERENCED IN THE TANK MIXING INSTRUCTIONS HEREIN, REGARDLESS OF WHETHER SUCH PRODUCT IS USED ALONE OR IN A TANK MIX WITH XtendiMax® With VaporGrip® Technology. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, BAYER DISCLAIMS ANY LIABILITY WHATSOEVER FOR SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, FOR IN-CROP (OVER-THE-TOP) USES ON CROPS WITH XTEND® TECHNOLOGY, CROP SAFETY AND WEED CONTROL PERFORMANCE ARE NOT WARRANTED BY BAYER WHEN THIS PRODUCT IS USED IN CONJUNCTION WITH "BROWN BAG" OR "BIN RUN" SEED SAVED FROM PREVIOUS YEAR'S PRODUCTION AND REPLANTED. FURTHER, TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, BAYER DOES NOT WARRANT THE WEED CONTROL PERFORMANCE OF DICAMBA-RESISTANT WEED BIOTYPES.

LIMITATIONS OF LIABILITY: To the extent consistent with applicable law, the exclusive remedy of the user or buyer for any and all losses, injuries, or damages resulting from the use or handling of this product, whether in contract, warranty, tort, negligence, strict liability or otherwise, shall not exceed the purchase price paid, or at Bayer's election, the replacement of product.

These Conditions of Sales, Disclaimer of Warranties and Limitations of Liability cannot be varied by any written or verbal statements or agreements. No employee or sales agent of Bayer or seller is authorized to vary or exceed the terms of the Disclaimer of Warranties or Limitations of Liability in any manner.

Bollgard II®, Bollgard®, Degree Xtra®, Field Master®, Harness®, Roundup Ready®, Roundup Ready 2 Xtend®, Roundup PowerMAX®, RT 3®, Roundup WeatherMAX®, XtendiMax®, XtendFlex®, and VaporGrip® are registered trademarks of Bayer Technology LLC. All other trademarks are the property of their respective owners.

PRODUCED FOR

Bayer CropScience

Bayer CropScience LP
800 N. Lindbergh Blvd.
St. Louis, MO 63167
1-866-99BAYER (1-866-992-2937)

XTENDIMAX® WITH VAPORGRIP® TECHNOLOGY (PENDING) 10/~~14~~20/2020

Message

From: Crawford, Lydia [Crawford.Lydia@epa.gov]
Sent: 10/16/2020 8:46:32 PM
To: George Sabbagh [george.sabbagh@bayer.com]
CC: Hathaway, Margaret [Hathaway.Margaret@epa.gov]; Meadows, Sarah [Meadows.Sarah@epa.gov]; Schmid, Emily [Schmid.Emily@epa.gov]; Kenny, Daniel [Kenny.Dan@epa.gov]; Echeverria, Marietta [Echeverria.Marietta@epa.gov]
Subject: Xtendimax label comments
Attachments: MASTER LABEL_XtendiMax_264-RERN_20201014 LC ES ME SG.sbg.pdf

Good evening George,

Please see the attached label comments for 264-RERN. Make requested changes and send back clean and highlighted copies of the label as quickly as you can. If you have any rebuttals, please include them in the body of the email response. Hope you have a pleasant weekend.
Thanks,

Lydia Crawford PhD
Biologist | Herbicide Branch | Registration Division
U.S. Environmental Protection Agency | Office of Pesticide Programs
(703) 347-0622 | Crawford.Lydia@epa.gov

RESTRICTED USE PESTICIDE
~~Only for retail sale to and use by Certified Applicators~~

This labeling expires on XX/XX/2025. DO NOT use or distribute this product after XX/XX/2025.

DICAMBA	GROUP	4	HERBICIDE

XtendiMax® With VaporGrip® Technology

ABN: M1768 Herbicide

For weed control in cotton with XtendFlex® Technology and soybean with Roundup Ready 2 Xtend® Technology or XtendFlex® Technology.

XtendiMax® With VaporGrip® Technology is approved by U.S. EPA for use in ~~these dicamba-tolerant crops~~ only in the following states, subject to county restrictions as noted: Alabama, Arkansas, Arizona, Colorado, Delaware, Florida (excluding Palm Beach County), Georgia, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maryland, Michigan, Minnesota, Mississippi, Missouri, Nebraska, New Jersey, New Mexico, New York, North Carolina, North Dakota, Oklahoma, Ohio, Pennsylvania, South Carolina, South Dakota, Tennessee (excluding Wilson County), Texas, Virginia, West Virginia, Wisconsin.

Check the registration status of each product in each state before using.

ACTIVE INGREDIENT: Dicamba
Diglycolamine salt of dicamba (3,6-dichloro-*o*-anisic acid)* **42.80%**
OTHER INGREDIENTS: **57.20%**
TOTAL: **100.00%**
*Contains 29.0% 3,6-dichloro-*o*-anisic acid (2.9 pounds acid equivalent per U.S. gallon or 350 grams per liter)

EPA Reg. No. 264-RERN **EPA Est. No.**

CAUTION
KEEP OUT OF REACH OF CHILDREN

For MEDICAL and TRANSPORTATION Emergencies ONLY Call 24 Hours a Day 1-800-334-7577

For PRODUCT USE Information Call 1-866-99BAYER (1-866-992-2937)

For Incidence of Non-performance or Off-Target Movement or for Questions Regarding Buffer Requirements or Sensitive Crop Registries Call 1-844-RRXTEND (1-844-779-8363)

Please refer to [back panel] [booklet] for additional precautionary statements and directions for use. [Note to reviewer: Location of additional precautionary statements and directions for use will vary between those listed, depending on container type/size.]

Net Contents:

FIRST AID	
IF IN EYES:	• Hold eye open and rinse slowly and gently with water for 15 to 20 minutes. • Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. • Call a poison control center or doctor for treatment advice.

IF SWALLOWED:	• Call a poison control center or doctor immediately for treatment advice. • Have person sip a glass of water if able to swallow. • DO NOT induce vomiting unless told to do so by a poison control center or doctor. • DO NOT give anything by mouth to an unconscious person.
IF ON SKIN OR CLOTHING:	• Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15 to 20 minutes. • Call a poison control center or doctor for treatment advice.
In case of emergency, call the toll-free Bayer Emergency Response telephone number: 1-800-334-7577. Have the product container or label with you when calling a poison control center or doctor or when going for treatment.	

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION

- Causes moderate eye irritation.
- Avoid contact with eyes or clothing.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

All mixers, loaders, applicators, and other handlers must wear:

- Long-sleeved shirt and long pants
- Waterproof gloves
- Shoes plus socks

Follow the manufacturer's instructions for cleaning and maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

ENGINEERING CONTROLS

When handlers use closed systems, or enclosed cabs in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240 (d) (4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

IMPORTANT: When reduced PPE is worn because a closed system is being used, handlers must be provided all PPE specified above for "all mixers, loaders, applicators, and other handlers" and have such PPE immediately available for use in an emergency, such as a spill or equipment breakdown.

USER SAFETY RECOMMENDATIONS

User should:

- Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet.
- Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

ENVIRONMENTAL HAZARDS

DO NOT apply directly to water, or to areas where surface water is present, or to intertidal areas below the mean high-water mark. DO NOT contaminate water when disposing of equipment washwaters or rinsate. Apply this product only as directed on the label.

Ground Water Advisory: This chemical is known to leach through soil into ground water under certain conditions as a result of agricultural use. Use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in ground water contamination.

GROUND AND SURFACE WATER PROTECTION

Point source contamination: To prevent point source contamination, DO NOT mix or load this pesticide product within 50 feet of wells (including abandoned wells and drainage wells), sink holes, perennial or intermittent streams and rivers, and natural or impounded lakes and reservoirs. DO NOT apply pesticide product within 50 feet of wells. This setback does not apply to properly capped or plugged abandoned wells and does not apply to impervious pad or properly diked mixing/loading areas as described below.

Mixing, loading, rinsing, or washing operations performed within 50 feet of a well are allowed only when conducted on an impervious pad constructed to withstand the weight of the heaviest load that may be on or move across the pad. The pad must be self-contained to prevent surface water flow over or from the pad. The pad capacity must be maintained at 110% that of the largest pesticide container or application equipment used on the pad and have sufficient capacity to contain all product spills, equipment or container leaks, equipment washwaters, and rainwater that may fall on the pad. The containment capacity does not apply to vehicles delivering pesticide shipments to the mixing/loading site. States may have in effect additional requirements regarding wellhead setbacks and operational containment.

Care must be taken when using this product to prevent: a) back siphoning into wells, b) spills, or c) improper disposal of excess pesticide, spray mixtures, or rinsates. Check valves or anti-siphoning devices must be used on all mixing equipment.

Movement by surface runoff or through soil: DO NOT apply if soil is saturated with water or when rainfall that may exceed soil field capacity is forecasted to occur within 48 hours.

Under some conditions, dicamba has the potential for runoff several days after application. Poorly draining, wet, or erodible soils with readily visible slopes toward adjacent sensitive areas are more prone to produce runoff. When used on erodible soils, best management practices for minimizing runoff should be employed. Consult your local Soil Conservation Service for recommendations in your use area.

Ground water contamination may occur in areas where soils are permeable or coarse and ground water is near the surface. DO NOT apply to impervious substrates such as paved or highly compacted surfaces in areas with high potential for ground water contamination. DO NOT apply to soils classified as sand with less than 3% organic matter and where ground water depth is shallow.

Movement by water erosion of treated soil: DO NOT apply or incorporate this product through any type of irrigation equipment nor by flood or furrow irrigation. Ensure treated areas have received at least one-half inch rainfall (or irrigation) before using tailwater for subsequent irrigation of other fields.

PROTECTING ENDANGERED SPECIES / PESTICIDE USE LIMITATION AREAS

Use of this product in a manner inconsistent with its labeling may pose a hazard to endangered or threatened species. When using this product, you must follow the measures contained in the Endangered Species Protection Bulletin for the area in which you are applying the product. To obtain Bulletins, no more than six months before using this product, consult https://www.epa.gov/endangered-species/bulletins-live-two-view-bulletins or call 1-844-447-3813. You must use the Bulletin valid for the month in which you will apply the product.

It is a Federal offense to use any pesticide in a manner that results in the death of an endangered species.

PHYSICAL OR CHEMICAL HAZARDS

DO NOT store or heat near oxidizing agents as a hazardous chemical reaction may occur.

DIRECTIONS FOR USE

RESTRICTED USE PESTICIDE

It is a violation of Federal law to use this product in any manner inconsistent with its labeling. This labeling must be in the user's possession during application. Read the entire label before using this product.

DO NOT apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

For important crop safety information, refer to the Use Directions section under the specific crop.

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. This standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses and of handlers of agricultural pesticides. It contains requirements for training, decontamination, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about Personal Protective Equipment (PPE), notification to workers, and restricted-entry intervals. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

DO NOT enter or allow worker entry into treated areas during the restricted-entry interval **(REI) of 24 hours.**

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water is:

- Coveralls worn over short-sleeved shirt and short pants
- Chemical-resistant footwear plus socks
- Waterproof gloves
- Chemical-resistant headgear for overhead exposure
- Protective eyewear

NON-AGRICULTURAL USE REQUIREMENTS

The requirements in this box apply to uses of this product that are NOT within the scope of the Worker Protection Standard for agricultural pesticides (40 CFR Part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries, or greenhouses.

DO NOT enter or allow people (or pets) to enter the treated area until sprays have dried.

PRODUCT INFORMATION

XtendiMax® With VaporGrip® Technology is:

- a water-soluble formulation intended for control and suppression of many annual, biennial, and perennial broadleaf weeds listed in the Weeds Controlled section of this label. This product may be used for control of these weeds in cotton with XtendFlex® Technology and soybean with Roundup Ready 2 Xtend® Technology or XtendFlex® Technology.
- a contact, systemic herbicide, with limited soil activity on small seeded broadleaf weeds, including waterhemp, lambsquarters, and Palmer pigweed, depending on rainfall and soil type.
- readily absorbed by plants through shoot and root uptake, translocates throughout the plant's system, and accumulates in areas of active growth. XtendiMax® With VaporGrip® Technology interferes with plant growth hormones (auxins) resulting in death of many broadleaf weeds.

Additional state restrictions and requirements may apply. The applicator must comply with any additional state requirements and restrictions.

Refer to the specific use directions and restrictions in each Crop, Crop Group, or Crop Subgroup table. Follow all requirements and restrictions on www.xtendimaxapplicationrequirements.com.

APPLICATION REQUIREMENTS OVERVIEW

Read and follow all applicable restrictions, precautions, and directions on the container label and booklet and at www.xtendimaxapplicationrequirements.com. For product questions or inquiries and/or to report any nonperformance of this product against any particular weed species, call 1-844-RRXTEND (1-844-779-8363). It is recommended that the certified applicator visit www.xtendimaxapplicationrequirements.com to obtain a copy of the Summary of Application Requirements for reference prior to and during application.

REQUIREMENTS	LABEL SECTIONS
Mandatory Training: ☐ Prior to applying, applicator must complete dicamba ~~or auxin-specific training.~~ Only certified applicators may apply this product.	➢ Training (p. 5)
Record Keeping: ☐ Certified applicators must keep records for a period of two years.	➢ Record Keeping (p. 6)
Application: ☐ For EVERY application of XtendiMax® With VaporGrip® Technology, both an approved **Drift Reduction Adjuvant (DRA)** and **Volatility Reduction Adjuvant (VRA)** must be included in the spray solution. Refer to www.xtendimaxapplicationrequirements.com for a list of approved DRAs and VRAs. ☐ *Rate and Timing*: Apply 22 fluid ounces per acre (0.5 lb. a.e. dicamba) for any single pre-emergent or in-crop application in: ○ Cotton with XtendFlex® Technology up to and including July 30, and ○ Soybean with Roundup Ready 2 Xtend® Technology or XtendFlex® Technology up to and including June 30 ~~or R1 growth stage, whichever comes first.~~ ○ For details ~~and other crop uses,~~ see Specific Use Directions. ☐ *Spray volume:* Apply in a minimum of 15 gallons of spray solution per acre. ☐ *Tank mixing*: Use only approved tank-mix partners found at www.xtendimaxapplicationrequirements.com. ○ Refer to all product labels to determine mix order or perform a mix compatibility test.	➢ Tank Mix Partners and Compatibility Testing (p. 9) ➢ Specific Use Directions (pp. 12-14) ➢ Specific Use Directions (pp. 12-14) ➢ Tank Mix Partners and Compatibility Testing (p. 9)

Application Equipment: ☐ *Spray system equipment cleanout*: Ensure entire sprayer system is properly cleaned before and after application. ☐ *Nozzles*: Use only approved nozzles within specified pressures found at www.xtendimaxapplicationrequirements.com. ☐ *Spray boom height*: Maximum boom height is 24 inches above target pest or crop canopy. ☐ *Ground speed*: DO NOT exceed 15 mph.	➢ Equipment Requirements (p. 7)
Environmental Conditions: ☐ *Wind speed*: Apply when wind speed, measured at boom height, is 3-10 mph when using broadcast open-boom equipment. ☐ *Inversions*: DO NOT spray during an inversion; only spray between one hour after sunrise and two hours before sunset when using broadcast open-boom equipment. ☐ *Temperature/humidity*: When making applications in hot and dry conditions, use larger droplets to reduce effects of evaporation. ☐ *Rainfall*: DO NOT apply this product if rain that may exceed soil field capacity and result in soil runoff is forecasted in the next 48 hours.	➢ Environmental Requirements (p. 7)
Downwind Requirements: ☐ *Sensitive crops and certain plants downwind*: DO NOT apply if sensitive crops and/or certain plants, as defined below in this label, are planted on an adjacent downwind field or area when using broadcast open-boom equipment. ☐ *Downwind buffer*: After determining no adjacent sensitive crops and/or certain plants are downwind, maintain a 240-ft downwind buffer when applying with broadcast open-boom equipment.	➢ Adjacent Sensitive Crops and Certain Plants (p. 8) ➢ Buffer Requirements (p. 8)
Drift Reduction Technology: ☐ See Optional Use of Drift Reduction Technology section for details on application requirements and the potential to qualify for reduced use restrictions.	➢ Optional Use of Drift Reduction Technology (p. 8)

USE RESTRICTIONS

- DO NOT USE ANY TANK MIX PRODUCT OR ANY NOZZLE AND PRESSURE COMBINATION WITH XTENDIMAX® WITH VAPORGRIP® TECHNOLOGY THAT IS NOT IDENTIFIED ON THE LIST OF APPROVED PRODUCTS FOUND AT www.xtendimaxapplicationrequirements.com.
- DO NOT TANK MIX AMMONIUM SULFATE (AMS) WITH THIS PRODUCT.
- DO NOT EXCEED 88 FLUID OUNCES (2 POUNDS ACID EQUIVALENT (A.E.) DICAMBA) OF XTENDIMAX® WITH VAPORGRIP® TECHNOLOGY PER ACRE PER YEAR.
- DO NOT EXCEED 88 FLUID OUNCES (2 POUNDS A.E. DICAMBA) PER ACRE PER YEAR FROM ALL DICAMBA APPLICATIONS IF MORE THAN ONE DICAMBA-CONTAINING PRODUCT IS APPLIED TO THE SAME SITE WITHIN THE SAME YEAR.
- DO NOT MAKE APPLICATION OF THIS PRODUCT IF RAIN IS EXPECTED IN THE NEXT 48 HOURS THAT MAY EXCEED SOIL FIELD CAPACITY AND RESULT IN SOIL RUNOFF.
- DO NOT APPLY THROUGH ANY TYPE OF IRRIGATION EQUIPMENT. DO NOT TREAT IRRIGATION DITCHES OR WATER USED FOR CROP IRRIGATION OR DOMESTIC PURPOSES.
- DO NOT APPLY TO CROPS UNDER STRESS DUE TO LACK OF MOISTURE, HAIL DAMAGE, FLOODING, HERBICIDE INJURY, MECHANICAL INJURY, INSECTS, OR WIDELY FLUCTUATING TEMPERATURES AS INJURY MAY RESULT.
- DO NOT APPLY THIS PRODUCT IF SENSITIVE CROPS AND CERTAIN PLANTS ARE PLANTED ON AN ADJACENT DOWNWIND FIELD OR AREA.
- DO NOT APPLY THIS PRODUCT AERIALLY.
- Restricted Entry Interval (REI): 24 hours.

USE PRECAUTIONS

- In case material is released or spilled: dike and contain the spill with inert material (sand, earth, etc.) and transfer liquid and solid diking material to separate containers for disposal. Remove contaminated clothing and wash affected skin areas with soap and water. Wash clothing before re-use. Keep the spill out of all sewers and open bodies of water.
- Rainfast period: Rainfall or irrigation occurring within 4 hours after postemergence applications may reduce the effectiveness of this product.

TRAINING

Prior to applying this product, dicamba- or auxin-specific training must be completed to obtain certification. Once completed, dicamba- or auxin-specific training is then required every other year for all applicators of this product. If state-specific training is required by the state where the applicator intends to apply this product, the applicator must complete training from the state or state-authorized provider. Otherwise, the applicator may complete dicamba- or auxin-specific training provided either by the state/state-authorized provider or by a registrant of a dicamba product approved for in-crop use with dicamba-tolerant crops.

RECORD KEEPING

The following records must be generated as soon as practical but **no later than 72 hours after application**. The certified applicator must keep these records for a period of **two years**. Records must be made available to State Pesticide Control Official(s), USDA, and EPA upon request. See www.xtendimaxapplicationrequirements.com for an example form summarizing record keeping requirements.

Keep records of the following items for each application of XtendiMax® With VaporGrip® Technology:

1. All Items required by 7 CFR Part 110 (RECORDKEEPING ON RESTRICTED USE PESTICIDES BY CERTIFIED APPLICATORS), including:
    a. The brand or product name
    b. The EPA registration number
    c. The total amount applied
    d. The month, day, and year of application
    e. The location of the application
    f. The crop, commodity, stored product, or site of application
    g. The size of treated area
    h. The name of the certified applicator
    i. The certification number of the certified applicator
2. *Training*: Completion date and provider of required training and proof of completion.
3. *Receipts of Purchase*: Receipts or copies for the purchase of this product.
4. *Product Label*: A copy of this product label and any state special local needs label that supplements this label.
5. *Crop Planting Date*: Record of the date at which the crop was planted.
6. *Sensitive Crops and Certain Plants Awareness*:
    a. Document that a sensitive crop registry was consulted. At a minimum, documentation must include the name of the sensitive crop registry and the date it was consulted.
    b. Record of a survey of adjacent areas documenting the sensitive crops and/or certain plants (as defined below in this label) surrounding the field prior to application. At a minimum, records must include documentation of adjacent sensitive crops and/or certain plants and the date the survey was conducted.
7. *Buffer Requirement*: Record of the buffer distance calculation and any areas included within the buffer distance calculations as allowed in the Spray Drift Management and Optional Use of Drift Reduction Technology sections of this label.
8. *Start and Finish Times of Each Application*: Record of the time at which the application started and finished.
9. *Application Timing*: Record of the type of application (for example: preemergence, postemergence) and the number of days after planting if postemergence.
10. *Air Temperature*: Record of the air temperature in degrees Fahrenheit at the start and completion of each application.
11. *Wind Speed and Direction*: Record of the wind speed and direction (the direction from which the wind is blowing) at boom height at the start and completion of each application.
12. *Nozzle and Pressure*: Record of the spray nozzle manufacturer/brand, type, orifice size, and operating pressure used during each application of this product.
13. *Tank Mix Products*: Record of the brand names and EPA registration numbers (if applicable) for all products that were tank mixed with this product for each application.
14. *Mandatory Drift and Volatility Reduction Adjuvants*: Receipts or copies for the purchase of both an approved DRA and VRA, as well as a record of the volume of each added to the tank prior to application.
15. *Spray System Cleanout*: At a minimum, records must include confirmation that the spray system was clean before using this product and that the post-application cleanout was completed in accordance with the Proper Spray System Equipment Cleanout section of this label.

HERBICIDE RESISTANCE MANAGEMENT RECOMMENDATIONS

The dicamba active ingredient in XtendiMax® With VaporGrip® Technology is a Group 4 herbicide. Any weed population may contain or develop plants naturally resistant to XtendiMax® With VaporGrip® Technology and other Group 4 herbicides. The resistant biotypes may dominate the weed population if these herbicides are used repeatedly in the same field. Appropriate resistance management strategies should be followed.

To delay herbicide resistance, take one or more of the following steps:

- Limit cultivation and/or mechanical tillage within 7 days after application, as this may result in reduced efficacy and promote regrowth of treated weeds.
- Rotate the use of XtendiMax® With VaporGrip® Technology or other Group 4 herbicides within a growing season sequence or among growing seasons with different herbicide groups that control the same weeds in a field.
- Use tank mixtures with herbicides from a different herbicide Group if such use is permitted.
- Adopt an integrated weed-management program for herbicide use that includes scouting and uses historical information related to herbicide use and crop rotation and that considers tillage (or other mechanical control methods), cultural (*e.g.*, higher crop seeding rates; precision fertilizer application method and timing to favor the crop and not the weeds), biological (weed-competitive crops or varieties), and other management practices.
- Scout after herbicide application to monitor weed populations for early signs of resistance development. Indicators of possible herbicide resistance include: (1) failure to control a weed species normally controlled by the herbicide at the dose applied, especially if control is achieved on adjacent weeds; (2) a spreading patch of non-controlled plants of a particular weed species; (3) surviving plants mixed with controlled individuals of the same species. If resistance is suspected, prevent weed seed production in the affected area by an alternative herbicide from a different group or by a mechanical method such as hoeing or tillage. Prevent movement of resistant weed seeds to other fields by cleaning harvesting and tillage equipment when moving between fields and by planting clean seed.

- If a weed pest population continues to progress after treatment with this product, switch to another management strategy or herbicide with an effective mode of action, if available, and contact Bayer at 1-844-RRXTEND (1-844-779-8363).
- Contact your local extension specialist or certified crop advisors for additional pesticide resistance-management and/or integrated weed-management recommendations for specific crops and weed biotypes.
- For further information or to report suspected resistance contact Bayer at 1-844-RRXTEND (1-844-779-8363).

Management of Dicamba-Resistant Biotypes

Appropriate testing is critical in order to determine if a weed is resistant to dicamba. Contact your Bayer representative to determine if resistance in any particular weed biotype has been confirmed in your area or visit www.iwilltakeaction.com or www.weedscience.org.

Bayer is not responsible for any losses that result from the failure of this product to control dicamba-resistant weed biotypes.

The following good agronomic practices can reduce the spread of confirmed dicamba-resistant biotypes:

- If a naturally occurring resistant biotype is present in your field, this product may be tank mixed or applied sequentially with an appropriately labeled herbicide with a different mode of action to achieve control (read Tank Mixing section for more information).
- Cultural and mechanical control practices (*e.g.*, crop rotation or tillage) can also be used as appropriate.
- Scout treated fields after herbicide application and control weed escapes, including resistant biotypes, before they set seed.
- Thoroughly clean equipment, as practical, for all weed seeds before leaving fields known to contain resistant biotypes.

SPRAY DRIFT MANAGEMENT

THE APPLICATOR IS RESPONSIBLE FOR AVOIDING OFF-SITE SPRAY DRIFT. The applicator is responsible for compliance with state and local pesticide regulations, including any state or local pesticide drift regulations.

Applications using larger droplets reduces drift potential but will not prevent drift if the application is made improperly or under unfavorable environmental conditions. The interaction of weather-related factors and equipment must be monitored to maximize performance and on-target spray deposition. The applicator is responsible for considering all these factors when making a spray decision. BE AWARE OF NEARBY NON-TARGET SITES AND CHANGING ENVIRONMENTAL CONDITIONS.

Environmental Requirements

Wind Speed

Wind speed must be measured in the field of application at boom height prior to and after application.

Only apply when wind speed at boom height is between 3 MPH and 10 MPH during application.

Temperature Inversions

DO NOT apply this product during a temperature inversion as the off-target movement potential is high.

Applications of this product may ONLY occur one hour after sunrise through two hours before sunset. In general, temperature inversions are more likely during nighttime hours.

- Temperature inversions are characterized by increasing temperature with altitude and are common on nights with limited cloud cover and light to no wind.
- The presence of an inversion can be indicated by ground fog or by the movement of smoke from a ground source or an aircraft smoke generator. Smoke that layers and moves laterally in a concentrated cloud (under low wind conditions) indicates an inversion, while smoke that moves upward and rapidly dissipates indicates good vertical air mixing.

Temperature and Humidity

When making applications in hot and dry conditions, use larger droplets to reduce effects of evaporation (for example: increase orifice size and/or increase spray volume as directed on www.xtendimaxapplicationrequirements.com).

Equipment Requirements

Nozzle Type

To produce minimal amounts of fine spray particles, the applicator must use an approved nozzle within a specified pressure range as found at www.xtendimaxapplicationrequirements.com.

Equipment Ground Speed

DO NOT exceed a ground speed of 15 miles per hour. Select a ground speed that will deliver the desired spray volume while maintaining the desired spray pressure. Slower speeds generally result in better spray coverage and deposition on the target area. Provided the applicator can maintain the required nozzle pressure, it is recommended that tractor speed is reduced to 5 miles per hour at field edges.

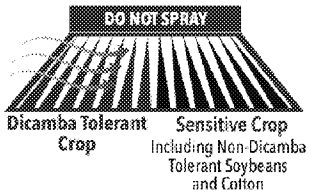
Spray Boom Height

Maximum boom height is 24 inches above target pest or crop canopy.

Adjacent Sensitive Crops and Certain Plants

DO NOT SPRAY this product when wind is blowing toward adjacent sensitive crops and certain plants, as defined immediately below.

It is important for the applicator to be aware that wind direction may vary during the application. If wind direction shifts such that the wind is blowing toward adjacent sensitive crops and/or certain plants, the applicator **must STOP** the application.



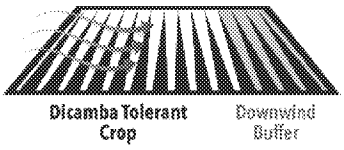
Before making an application, 1) consult a sensitive crop registry (such as FieldWatch or state/federal registry), 2) survey adjacent fields and areas, and 3) confirm the type or variety of plants and crops surrounding the field prior to application. At a minimum, records must include the name of the sensitive crop registry, the date it was consulted, documentation of adjacent plants and crops/areas surrounding the field of application, and the date the survey was conducted.

Dicamba-sensitive crops and/or certain plants include, but are not limited to, non-dicamba-tolerant soybeans and cotton, tomatoes and other fruiting vegetables (EPA crop group 8), fruit trees, cucurbits (EPA crop group 9), grapes, beans, flowers, ornamentals, peas, potatoes, sunflower, tobacco, and other broadleaf plants, including if these plants are in a greenhouse. Severe injury or destruction could occur if any contact between this product and these plants occurs.

If you have questions regarding sensitive crop registries contact Bayer at 1-844-RRXTEND (1-844-779-8363) **prior to application**.

Buffer Requirements

After determining no adjacent sensitive crops and/or certain plants are downwind, the applicator must always maintain a 240-foot downwind buffer between the last treated row and the nearest downwind field edge when applying using broadcast open-boom equipment. For reduced downwind buffer distances, refer to Optional Use of Drift Reduction Technology section of this label.



The following areas may be included in the buffer distance ~~calculation~~ when directly adjacent to the treated field edges:

- Roads, paved or gravel surfaces, mowed and/or managed areas adjacent to field such as rights of way
- Planted agricultural fields containing: corn, dicamba-tolerant cotton, dicamba-tolerant soybean, sorghum, proso millet, small grains, or sugarcane. If the applicator intends to include such crops as dicamba-tolerant cotton and/or dicamba-tolerant soybeans in the buffer distance calculation, the applicator must confirm the crops are in fact dicamba-tolerant.
- Agricultural fields that have been prepared for planting
- Areas covered by the footprint of a building, silo, or other man-made structure with walls and/or roof

If you have questions regarding Buffer Requirement, contact Bayer at 1-844-RRXTEND (1-844-779-8363) **prior to application**.

Optional Use of Drift Reduction Technology

This product may be optionally applied using hooded/shielded broadcast, hooded/shielded in-row, or ~~directed layby~~ equipment for postemergence weed control as well as residual control of susceptible weeds. The applicator must use an approved nozzle within a specified pressure range as found at www.xtendimaxapplicationrequirements.com. Using a hooded sprayer or other drift reduction technology (DRT) in combination with approved nozzles is recommended to further reduce drift potential. Applications of this product may qualify for reduced use restrictions, such as a reduced buffer distance, provided a **qualified DRT** listed on www.xtendimaxapplicationrequirements.com is used.

Hooded/Shielded Broadcast Sprayer:

For hooded/shielded sprayers, all application nozzles must be contained within the enclosed area. Shielding the boom or individual nozzles can reduce the effects of wind. However, it is the responsibility of the applicator to verify that the shields are preventing drift and not interfering with uniform deposition of the product. Applicators must ensure the sprayer system is off or controlled during turns to further prevent spray drift. Refer to the hooded/shielded sprayer manufacturer use specifications prior to use.

If using a **qualified** hooded/shielded sprayer listed on www.xtendimaxapplicationrequirements.com, the following apply:

- *Reduced Buffer Distance*: The applicator must always maintain a [minimum 30-foot] downwind buffer between the last treated row and the nearest downwind field edge.
- ~~*Adjacent Sensitive Crops and Certain Plants*: The applicator must utilize the [minimum 30-foot] downwind buffer between the last treated row and the nearest downwind field edge.~~

TANK MIX PARTNERS AND COMPATIBILITY TESTING

Tank Mixing

All applications of this product require the inclusion of both a drift reduction adjuvant (DRA) and a volatility reduction adjuvant (VRA), such as a VaporGrip® Xtra Agent product or an approved VRA equivalent, in the tank mix. Only tank mix products that have been tested and found to not adversely affect the offsite movement potential of XtendiMax® With VaporGrip® Technology may be tank mixed with XtendiMax® With VaporGrip® Technology. The applicator must check the website found at www.xtendimaxapplicationrequirements.com for a list of approved tank mix products no more than 7 days before applying XtendiMax® With VaporGrip® Technology.

Compatibility

XtendiMax® With VaporGrip® Technology is physically and biologically compatible with many registered pesticides, fertilizers, micronutrients, and spray adjuvants. However, as many components, may be present in a tank mix combination, there is potential for adverse chemical reactions. It is impossible to determine physical, biological, and plant compatibility for all scenarios that may be encountered; therefore, it is recommended that users determine the chemical, physical, biological, and plant compatibility of such mixes prior to application on a broad commercial scale.

NOTE: DO NOT use PVA (polyvinyl acetate) packets in a tank mix with products that contain boron or release free chlorine. The resultant reaction of PVA and boron or free chlorine is a plastic that is not soluble in water or solvents.

APPLICATION INSTRUCTIONS

APPLY THIS PRODUCT USING PROPERLY MAINTAINED AND CALIBRATED EQUIPMENT CAPABLE OF DELIVERING THE REQUIRED VOLUMES.

XtendiMax® With VaporGrip® Technology can be applied to actively growing weeds as broadcast, band, or spot spray applications using water as a carrier. For best results, treat weeds early when they are relatively small (less than 4 inches). Timely application to small weeds early in the season will improve control and reduce weed competition.

Ground Application (Broadcast)

Water Volume: Use a minimum of 15 gallons of spray solution per broadcast acre for optimal performance. Use 20 gallons per acre or greater when treating dense weed canopy/vegetation.

Ground Application (Hooded In-Row and Directed Layby)

When applying XtendiMax® With VaporGrip® Technology by hooded in-row or layby sprayers, determine the amount of herbicide and water volume needed using the following formula:

$$\frac{\text{band width (inches)}}{\text{row width (inches)}} * \text{broadcast rate per acre} = \text{rate per treated acre}$$

$$\frac{\text{band width (inches)}}{\text{row width(inches)}} * \text{broadcast spray volume per acre} = \text{spray volume per treated acre}$$

SPRAY SYSTEM EQUIPMENT CLEANOUT

You must ensure that the spray system used to apply this product is clean before using this product. Failure to properly clean the entire spray system can result in inadvertent contamination of the spray system. Contamination of the spray system may cause injury to non-dicamba-tolerant soybeans and other sensitive crops.

Inadvertent contamination can also occur in equipment used for bulk product handling and mixing prior to use in the spray system. Care should be taken to reduce contamination not only in the spray system but in any equipment used to transfer or deliver product. For example, bulk handling and mixing equipment containing this product should be segregated when possible to reduce potential for cross-contamination. Consider using block and check valves to avoid backflow during transfer. Piping should be reviewed to ensure there is not potential for product build-up. Dedicated nurse trucks and tender equipment should be used when possible.

Clean equipment **immediately after using** this product, using a **triple rinse** procedure as follows:

1. After spraying, drain the sprayer (including boom and lines) immediately. DO NOT allow the spray solution to remain in the spray boom lines overnight prior to flushing.
2. Flush tank, hoses, boom, and nozzles with clean water. If equipped, open boom ends and flush.
3. Inspect and clean all strainers, screens, and filters.
4. Prepare a cleaning solution with a commercial detergent or sprayer cleaner or ammonia according to the manufacturer's directions.
5. Take care to wash all parts of the tank, including the inside top surface. Start agitation in the sprayer and thoroughly recirculate the cleaning solution for at least 15 minutes. All visible deposits must be removed from the spraying system.
6. Flush hoses, spray lines, and nozzles for at least 1 minute with the cleaning solution.
7. Remove nozzles, screens, and strainers and clean separately in the cleaning solution after completing the above procedures.
8. Drain pump, filter, and lines.
9. Rinse the complete spraying system with clean water.
10. Clean and wash off the outside of the entire sprayer and boom.
11. All rinse water must be disposed of in compliance with local, state, and federal guidelines.

ROTATIONAL CROPS

When counting days from the application of this product, do not count days when the ground is frozen. Moisture is essential for the degradation of this herbicide in soil. If dry weather prevails, use cultivation to allow herbicide contact with moist soil.

No rotational cropping restrictions apply when rotating to soybean with Roundup Ready 2 Xtend® Technology or XtendFlex® Technology or to cotton seed with XtendFlex® Technology (including Bollgard® 3 XtendFlex® Cotton, Bollgard II® XtendFlex® Cotton, or XtendFlex® Cotton). For other crops, the interval between application and planting rotational crop is given below. Planting at intervals less than specified below may result in crop injury.

For application rates of this product of **22 fluid ounces per acre per ~~season:~~**

- No planting restrictions apply beyond 120 days after application.
- East of the Mississippi River:
  - Wait a minimum of 30 days for 22 fluid ounces applied per acre before planting.
- West of the Mississippi River:
  - Wait a minimum of 45 days for 22 fluid ounces applied per acre before planting.
  - In areas with less than 30 inches of annual rainfall wait a minimum of 100 days before planting (furrow and/or overhead irrigation can be included in rainfall determination).

For application rates of this product of **44 to 88 fluid ounces per acre per ~~season:~~**

- In areas with less than 30 inches of annual rainfall:
  - Wait a minimum of 180 days before planting crops (furrow and/or overhead irrigation can be included in rainfall determination).
- In areas with 30 inches or more annual rainfall:
  - Wait a minimum of 120 days after application before planting.

WEEDS CONTROLLED OR SUPPRESSED

General Weed List, Including ALS-, Glyphosate-, and Triazine-Resistant Biotypes

ANNUAL WEEDS		
Alkanet	Flixweed	Pusley, Florida
Amaranth, Palmer, Powell, Spiny	Fumitory	Radish, Wild
Aster, Slender	Goosefoot, Nettleleaf	Ragweed, Common, Giant (Buffaloweed), Lance-Leaf
Bedstraw, Catchweed	Hempnettle	Rocket, London, Yellow
Beggarweed, Florida	Henbit	Rubberweed, Bitter (Bitterweed)
Broomweed, Common	Jacobs-Ladder	Salsify
Buckwheat, Tartary, Wild	Jimsonweed	Senna, Coffee
Buffalobur	Knawel (German Moss)	Sesbania, Hemp
Burclover, California	Knotweed, Prostrate	Shepherdpurse
Burcucumber	Kochia	Sicklepod
Buttercup, Corn, Creeping, Roughseed, Western Field	Ladysthumb	Sida, Prickly (Teaweed)
Carpetweed	Lambsquarters Common	Smartweed, Green, Pennsylvania
Catchfly, Nightflowering	Lettuce, Miners, Prickly	Sneezeweed, Bitter
Chamomile, Corn	Mallow, Common, Venice	Sowthistle, Annual, Spiny
Chevil, Bur	Marestail (Horseweed)	Spanish Needles
Chickweed, Common	Mayweed	Spikeweed, Common
Clovers	Morningglory, Ivyleaf, Tall	Spurge, Prostrate, Leafy
Cockle, Corn, Cow, White	Mustard, Black, Blue, Tansy, Treacle, Tumble, Wild, Yellowtops	Spurry, Corn
Cocklebur, Common	Nightshade, Black, Cutleaf	Starbur, Bristly
Copperleaf, Hophornbeam	Pennycress, Field (Fanweed, Frenchweed, Stinkweed)	Starwort, Little
Cornflower (Bachelor Button)	Pepperweed, Virginia (Peppergrass)	Sumpweed, Rough
Croton, Tropic, Woolly	Pigweed, Prostrate, Redroot (Carelessweed), Rough, Smooth, Tumble	Sunflower, Common (Wild), Volunteer
Daisy, English	Pineappleweed	Thistle, Russian
Dragonhead, American	Poorjoe	Velvetleaf
Eveningprimrose, Cutleaf	Poppy, Red-horned	Waterhemp, Common, Tall
Falseflax, Smallseed	Puncturevine	Waterprimrose, Winged
Fleabane, Annual	Purslane, Common	Wormwood

BIENNIAL WEEDS		
Burdock, Common	Gromwell	Starthistle, Yellow
Carrot, Wild (Queen Anne's Lace)	Knapweed, Diffuse, Spotted	Sweetclover
Cockle, White	Mallow, Dwarf	Teasel
Eveningprimrose, Common	Plantain, Bracted	Thistle, Bull, Milk, Musk, Plumeless
Geranium, Carolina	Ragwort, Tansy	

PERENNIAL WEEDS		
Alfalfa	Garlic, Wild	Smartweed, Swamp
Artichoke, Jerusalem	Goldenrod, Canada, Missouri	Snakeweed, Broom
Aster, Spiny, Whiteheath	Goldenweed, Common	Sorrel, Red (Sheep Sorrel)
Bedstraw, Smooth	Hawkweed	Sowthistle, Perennial
Bindweed, Field, Hedge	Henbane, Black	Spurge, Leafy
Blueweed, Texas	Horsenettle, Carolina	Sundrops
Bursage, Woollyleaf (Bur Ragweed, Povertyweed)	Ironweed	Thistle, Canada, Scotch
Buttercup, Tall	Knapweed, Black, Diffuse, Russian, Spotted	Toadflex, Dalmatian
Campion, Bladder	Milkweed, Climbing, Common, Honeyvine, Western Whorled	Tropical Soda Apple
Chickweed, Field, Mouseear	Nettle, Stinging	Trumpetcreeper (Buckvine)
Chicory	Nightshade, Silverleaf (White Horsenettle)	Vetch
Clover, Hop	Onion, Wild	Waterhemlock, Spotted
Dandelion, Common	Plantain, Broadleaf, Buckhorn	Waterprimrose, Creeping
Dock Broadleaf (Bitterdock), Curly	Pokeweed	Woodsorrel, Creeping, Yellow
Dogbane, Hemp	Ragweed, Western	Wormwood, Absinth, Louisiana
Dogfennel (Cypressweed)	Redvine	Yankeeweed
Fern, Bracken	Sericia Lespedeza	Yarrow, Common

SPECIFIC USE DIRECTIONS

BETWEEN CROP APPLICATIONS Preplant application (postharvest, fallow, crop stubble, set-aside) for broadleaf weed control only	
Application Rates	• Apply 22 fluid ounces of XtendiMax® With VaporGrip® Technology per acre.
Maximum Rates	• Per treated acre per application: 22 fluid ounces (0.5 lb. a.e. dicamba per acre). • Per treated acre per year: 88 fluid ounces (2.0 lb. a.e. dicamba per acre).
Application Timing	• XtendiMax® With VaporGrip® Technology can be applied either postharvest in the fall, spring, or summer during the fallow period or to crop stubble/set-aside acres. • For best performance, apply XtendiMax® With VaporGrip® Technology when annual weeds are less than 4 inches tall, when biennial weeds are in the rosette stage, and to perennial weed regrowth in late summer or fall following a mowing or tillage treatment. • The most effective control of upright perennial broadleaf weeds such as Canada thistle and Jerusalem artichoke occurs if XtendiMax® With VaporGrip® Technology is applied when the majority of weeds have at least 4 – 6 inches of regrowth or for weeds such as field bindweed and hedge bindweed that are in or beyond the full bloom stage.
Application Method	• Apply XtendiMax® With VaporGrip® Technology as a broadcast or spot treatment to emerged and actively growing weeds after crop harvest (postharvest) and before a killing frost or in the fallow cropland or crop stubble the following spring or summer.
Livestock Grazing or Feeding	• Permitted.
Use Precautions	• Avoid disturbing treated areas following application. • Treatments may not kill weeds that develop from seed or underground plant parts, such as rhizomes or bulblets, after the effective period for XtendiMax® With VaporGrip® Technology. For seedling control, a follow-up program or other cultural practices could be instituted. • Refer to the Rotational Crops section of this label for the recommended interval between application and planting to prevent crop injury.

CROPS WITH XTEND® TECHNOLOGY

Cotton with XtendFlex® Technology (including Bollgard II® XtendFlex® COTTON, Bollgard® 3 XtendFlex® COTTON, or XtendFlex® COTTON) and soybean with Roundup Ready 2 Xtend® Technology or XtendFlex® Technology CONTAIN A PATENTED GENE THAT PROVIDES TOLERANCE TO DICAMBA, THE ACTIVE INGREDIENT IN THIS PRODUCT. THIS PRODUCT WILL CAUSE SEVERE CROP INJURY OR DESTRUCTION AND YIELD LOSS IF APPLIED TO COTTON AND SOYBEAN THAT ARE NOT DICAMBA TOLERANT, INCLUDING COTTON AND SOYBEAN WITH A TRAIT ENGINEERED TO CONFER TOLERANCE TO AUXIN HERBICIDES OTHER THAN DICAMBA. FOLLOW THE REQUIREMENTS SET FORTH HEREIN TO PREVENT SEVERE CROP INJURY OR DESTRUCTION AND YIELD LOSS. CONTACT WITH FOLIAGE, GREEN STEMS, OR FRUIT OF CROPS, OR ANY DESIRABLE PLANTS THAT DO NOT CONTAIN A DICAMBA TOLERANCE GENE OR ARE NOT NATURALLY TOLERANT TO DICAMBA, COULD RESULT IN SEVERE PLANT INJURY OR DESTRUCTION.

XtendiMax® With VaporGrip® Technology is approved by U.S. EPA for use in cotton with XtendFlex® Technology and in soybean with Roundup Ready 2 Xtend® Technology or XtendFlex® Technology only in the following states, subject to county restriction as noted: Alabama, Arkansas, Arizona, Colorado, Delaware, Florida (excluding Palm Beach County), Georgia, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maryland, Michigan, Minnesota, Mississippi, Missouri, Nebraska, New Jersey, New Mexico, New York, North Carolina, North Dakota, Oklahoma, Ohio, Pennsylvania, South Carolina, South Dakota, Tennessee (excluding Wilson County), Texas, Virginia, West Virginia, Wisconsin.

Information on cotton with XtendFlex® Technology and on soybean with Roundup Ready 2 Xtend® Technology or XtendFlex® Technology can be obtained from your seed supplier or Bayer representative. Cotton with XtendFlex® Technology and soybean with Roundup Ready 2 Xtend® Technology or XtendFlex® Technology must be purchased from an authorized licensed seed supplier.

Cotton with XtendFlex® Technology, soybean with Roundup Ready 2 Xtend® Technology or XtendFlex® Technology, and methods of controlling weeds and applying dicamba in cotton with XtendFlex® Technology and in soybean with Roundup Ready 2 Xtend® Technology or XtendFlex® Technology are protected under U.S. patent law. No license to use cotton with XtendFlex® Technology or soybean with Roundup Ready 2 Xtend® Technology or XtendFlex® Technology is granted or implied with the purchase of this herbicide product. Cotton with XtendFlex® Technology and soybean with Roundup Ready 2 Xtend® Technology or XtendFlex® Technology are owned by Bayer and a license must be obtained from Bayer before using it. Contact your Authorized Bayer Retailer for information on obtaining a license to use cotton with XtendFlex® Technology and soybean with Roundup Ready 2 Xtend® Technology or XtendFlex® Technology.

COTTON WITH XTENDFLEX® TECHNOLOGY	
Application Rate	• Using the appropriate application rate may reduce the selection for resistant weeds. • **Burndown/Early Preplant, Preplant, At-Planting, Preemergence:** Apply a maximum of 22 fluid ounces (0.5 lb. acid equivalent (a.e.) dicamba) per acre for a single burndown/early preplant, preplant, at-planting, or preemergence application. • **Postemergence (in-crop):** For any single, in-crop application, apply 22 fluid ounces (0.5 lb. a.e. dicamba) per acre.
Maximum Rates	• *Maximum single application*: 22 fluid ounces per acre (0.5 lb. a.e. dicamba per acre) • *Total of all Burndown/Early Preplant, Preplant, At-Planting, and Preemergence applications*: 44 fluid ounces per acre (1.0 lb. a.e. dicamba per acre) • *Total of all in-crop applications*: 44 fluid ounces per acre (1.0 lb. a.e. dicamba per acre) • *Combined total per year for all applications*: 88 fluid ounces per acre (2.0 lb. a.e. dicamba per acre)
Application Timing	• **Burndown/Early Preplant, Preplant, At-Planting, Preemergence:** This product may be applied before, during, or immediately after planting. • **Postemergence (in-crop):** This product may be applied in-crop up to and including July 30.
Number of Applications	• Sequential applications of this product may be necessary to control new flushes of weeds or on tough-to-control weeds. Allow at least 7 days between applications. • A maximum of **two** burndown/early preplant, preplant, at-planting, and preemergence and **two** in-crop applications may be made.
Spray Volume	• Apply this product in a minimum of 15 gallons of spray solution per acre as a broadcast application. • Use 20 gallons per acre or greater when treating dense weed canopy/vegetation.
Livestock Grazing or Feeding	• Permitted.
Use Precautions	• Refer to the Weeds Controlled or Suppressed section of this label for specific weeds controlled. • Postemergence applications of this product mixed with adjuvants may cause a leaf response to cotton with XtendFlex® Technology. The symptoms usually appear as necrotic spots on fully expanded leaves. EC-based products that are tank mixed with products containing dicamba may increase the severity of the leaf damage. • For postemergence applications with a hooded in-row sprayer, cotton must be a minimum of 15 inches tall at the time of application. • For postemergence applications with a directed layby sprayer, the release point for the herbicide must not be more than 10 inches from the soil and cotton must be at least 20 inches in height. Spray tip must be angled downward to the soil making sure no spray droplets remain in the air.
Use Restrictions	• DO NOT apply less than 22 fluid ounces (0.5 lb. a.e. dicamba) per acre.

SOYBEAN WITH ROUNDUP READY 2 XTEND® TECHNOLOGY OR XTENDFLEX® TECHNOLOGY	
Application Rate	• Using the appropriate application rate may reduce the selection for resistant weeds. • **Burndown/Early Preplant, Preplant, At-Planting, Preemergence:** Apply a maximum of 22 fluid ounces (0.5 lb. acid equivalent (a.e.) dicamba) per acre for a single burndown/early preplant, preplant, at-planting, or preemergence application. • **Postemergence (in-crop):** For any single, in-crop application, apply 22 fluid ounces (0.5 lb. a.e. dicamba) per acre.
Maximum Rates	• *Maximum single application*: 22 fluid ounces per acre (0.5 lb. a.e. dicamba per acre) • *Total of all Burndown/Early Preplant, Preplant, At-Planting, and Preemergence applications*: 44 fluid ounces per acre (1.0 lb. a.e. dicamba per acre) • *Total of all in-crop applications*: 44 fluid ounces per acre (1.0 lb. a.e. dicamba per acre) • *Combined total per year for all applications*: 88 fluid ounces per acre (2.0 lb. a.e. dicamba per acre)
Application Timing	• **Burndown/Early Preplant, Preplant, At-Planting, Preemergence:** This product may be applied before, during, or immediately after planting. • **Postemergence (in-crop):** This product may only be applied in-crop up to and including June 30. Applications occurring after R1 are prohibited as crop response may occur.
Number of Applications	• A second application may be necessary to control new flushes of weeds. Allow at least 7 days between applications. For best results, apply after some weed re-growth has occurred. • A maximum of maximum of **two** burndown/early preplant, preplant, at-planting, and preemergence and **two** in-crop applications may be made.
Spray Volume	• Apply this product in a minimum of 15 gallons of spray solution per acre as a broadcast application. • Use 20 gallons per acre or greater when treating dense weed canopy/vegetation.
Livestock Grazing or Feeding	• Permitted.
Use Precautions	• Refer to the Weeds Controlled or Suppressed section of this label for specific weeds controlled. • Postemergence application under stressful environments may cause temporary loss of turgor, a response commonly described as leaf droop in soybean with Roundup Ready 2 Xtend® Technology or XtendFlex® Technology. Typically, affected plants recover in 1-3 days depending on the level of droop and environmental conditions. • For postemergence applications with a hooded in-row sprayer, soybeans must be a minimum of 15 inches tall at the time of application. • For postemergence applications with a directed layby sprayer, the release point for the herbicide must not be more than 10 inches from the soil and soybeans must be at least 20 inches in height. Spray tip must be angled downward to the soil making sure no spray droplets remain in the air
Use Restrictions	• DO NOT apply less than 22 fluid ounces (0.5 lb. a.e. dicamba) per acre.

STORAGE AND DISPOSAL

Proper pesticide storage and disposal are essential to protect against exposure to people and the environment due to leaks and spills, excess product or waste, and vandalism. Do not allow this product to contaminate water, foodstuffs, feed or seed by storage or disposal.

Pesticide storage
Store pesticides away from food, pet food, feed, seed, fertilizers, and veterinary supplies. Keep container closed to prevent spills and contamination.

Pesticide disposal
To avoid wastes, use all material in this container, including rinsate, by application according to label directions. If wastes cannot be avoided, offer remaining product to a waste disposal facility or pesticide disposal program. Such programs are often run by state or local governments or by industry. All disposal must be in accordance with applicable federal, state, and local regulations and procedures.

Container handling and disposal
[*Insert appropriate Container Handling and Disposal Statement and Refilling Limitation from the following options*]

[*CONTAINER HANDLING AND DISPOSAL STATEMENT AND REFILLING LIMITATION FOR NONREFILLABLE RIGID CONTAINERS OF LESS THAN 1-GALLON CAPACITY*]
Nonrefillable container. Do not reuse or refill this container.

[*Alternative container statement:* Nonrefillable container. Do not reuse this container to hold materials other than pesticides or dilute pesticides (rinsate). After emptying and cleaning, it may be allowable to temporarily hold rinsate or other pesticide-related materials in this container. Contact your state regulatory agency to determine allowable practices in your state.]

Triple rinse this container promptly after emptying.

Triple rinse as follows: Empty the remaining contents into application equipment or mix-tank and continue to drain for 10 seconds after the flow begins to drip. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or mix-tank, or store rinsate for later use or disposal. Continue to drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times.

Once properly rinsed, some plastic [*Optional text:* agricultural] pesticide containers can be taken to a container collection site or picked up for recycling. [*Alternative container disposal statement:* Then offer the container for recycling, if available.]

[*Optional container disposal statement:* To find the nearest collection site, contact your chemical dealer or Bayer at 1-866-99BAYER (1-866-992-2937).]

If recycling is not available, dispose of in accordance with federal, state and local regulations and procedures, which may include puncturing the properly rinsed container and disposing in a sanitary landfill.

[*CONTAINER HANDLING AND DISPOSAL STATEMENT AND REFILLING LIMITATION FOR NONREFILLABLE RIGID PLASTIC 2.5-GALLON CONTAINER AND OTHER NONREFILLABLE CONTAINERS OF GREATER THAN 1-GALLON BUT EQUAL TO OR LESS THAN 5-GALLON CAPACITY*]
Nonrefillable container. Do not reuse this container to hold materials other than pesticides or dilute pesticides (rinsate). After emptying and cleaning, it may be allowable to temporarily hold rinsate or other pesticide-related materials in this container. Contact your state regulatory agency to determine allowable practices in your state.

[*Alternative container statement:* Nonrefillable container. Do not reuse or refill this container.]

Triple rinse or pressure rinse (or equivalent) this container promptly after emptying.

Triple rinse as follows: Empty the remaining contents into application equipment or mix-tank and continue to drain for 10 seconds after the flow begins to drip. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or mix-tank, or store rinsate for later use or disposal. Continue to drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times.

Pressure rinse as follows: Empty the remaining contents into application equipment or mix-tank and continue to drain for 10 seconds after the flow begins to drip. Place container so that it can drain directly into application equipment or mix-tank while rinsing, or collect rinsate for later use or disposal. Insert pressure rinsing nozzle into the side of the container and rinse at about 40 PSI for at least 30 seconds. Continue to drain for 10 seconds after the flow begins to drip.

Once properly rinsed, some plastic [*Optional text:* agricultural] pesticide containers can be taken to a container collection site or picked up for recycling. [*Alternative container disposal statement:* Then offer the container for recycling, if available.]

[*Optional container disposal statement:* To find the nearest collection site, contact your chemical dealer or Bayer at 1-866-99BAYER (1-866-992-2937).]

If recycling is not available, dispose of in accordance with federal, state and local regulations and procedures, which may include puncturing the properly rinsed container and disposing in a sanitary landfill.

[*CONTAINER HANDLING AND DISPOSAL STATEMENT AND REFILLING LIMITATION FOR NONREFILLABLE RIGID PLASTIC 30-GALLON CONTAINER AND OTHER NONREFILLABLE CONTAINERS OF GREATER THAN 5-GALLON CAPACITY*]
Nonrefillable container. Do not reuse or refill this container.

[*Alternative container statement:* Nonrefillable container. Do not reuse this container to hold materials other than pesticides or dilute pesticides (rinsate). After emptying and cleaning, it may be allowable to temporarily hold rinsate or other pesticide-related materials in this container. Contact your state regulatory agency to determine allowable practices in your state.]

Triple rinse or pressure rinse (or equivalent) this container promptly after emptying.

[*Optional label text:* For containers not equipped with pumping systems,] Triple rinse as follows: Empty the remaining contents into application equipment or mix-tank. Fill the container ¼ full with water. Replace and tighten closures. Tip the container on its side and roll it back and forth for 30 seconds, ensuring at least one complete revolution. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or mix-tank, or store rinsate for later use or disposal. Repeat this procedure two more times.

[*Alternative or additional triple rinsing instructions for large containers equipped with pumping systems:* [*Optional label text:* For large containers equipped with pumping systems,] Triple rinse as follows: Empty the remaining contents into application equipment or mix-tank. Fill the container about 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times. ~~Repeat this procedure two more times.~~]

Pressure rinse as follows: Empty the remaining contents into application equipment or mix-tank and continue to drain for 10 seconds after the flow begins to drip. Place container so that it can drain directly into application equipment or mix-tank while rinsing, or collect rinsate for later use or disposal. Insert pressure rinsing nozzle into the side of the container and rinse at about 40 PSI for at least 30 seconds. Continue to drain for 10 seconds after the flow begins to drip.

Once properly rinsed, some plastic [*Optional text:* agricultural] pesticide containers can be taken to a container collection site or picked up for recycling. [*Alternative container disposal statement:* Then offer the container for recycling, if available.]

[*Optional container disposal statement:* Some container manufacturers offer container recycling. See additional information regarding manufacturer recycling programs attached to this container, if available. If no recycling information is available on this container, contact your chemical dealer or Bayer at 1-866-99BAYER (1-866-992-2937) to find the nearest recycling location.]

[*Optional container disposal statement:* To find the nearest collection site, contact your chemical dealer or Bayer at 1-866-99BAYER (1-866-992-2937).]

If recycling is not available, dispose of in accordance with federal, state and local regulations and procedures, which may include puncturing the properly rinsed container and disposing in a sanitary landfill.

[*Optional container disposal statement:* Return Properly Rinsed Container to Bayer for Recycling – Call 1-866-99BAYER (1-866-992-2937).]

[*Optional additional container disposal statement:* IBC EMPTY? – FREE CALL – 1-888-SCHUETZ (1-888-724-8389) www.schuetz.net/ticket; Schuetz ticket service]

[*Optional additional container disposal statement:* FREE IBC PICKUP] [For continental USA and Canada only.]

[*Optional additional container disposal statement:* RETURNnet SYSTEM – To return empty IBC's Email or Call – www.returnnetsystem.com – 1-888-758-SHIP (1-888-758-7447) – United States and Canada – IBCNA – Clarkston, Michigan – USA]

[*CONTAINER HANDLING AND DISPOSAL STATEMENT AND REFILLING LIMITATION FOR ALL REFILLABLE CONTAINERS, EXCEPT TRANSPORT VEHICLES*]
Refillable container. Refill this container with pesticide only. Do not reuse this container for any other purpose.

Cleaning this container before refilling is the responsibility of the refiller. Cleaning this container before final disposal is the responsibility of the person disposing of the container.

To clean this container before final disposal, empty the remaining contents from the container into application equipment or mix-tank. Fill the container about 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times.

[*Optional container disposal statement:* Then offer the container for recycling, if available.]

[*Optional container disposal statement:* Some container manufacturers offer container recycling. See additional information regarding manufacturer recycling programs attached to this container, if available. If no recycling information is available on this container, contact your chemical dealer or Bayer at 1-866-99BAYER (1-866-992-2937) to find the nearest recycling location.]

[*Optional additional container disposal statement:* IBC EMPTY? – FREE CALL – 1-888-SCHUETZ (1-888-724-8389) www.schuetz.net/ticket; Schuetz ticket service]

[*Optional additional container disposal statement:* FREE IBC PICKUP] [For continental USA and Canada only.]

[*Optional additional container disposal statement:* RETURNnet SYSTEM – To return empty IBC's Email or Call – www.returnnetsystem.com – 1-888-758-SHIP (1-888-758-7447) – United States and Canada – IBCNA – Clarkston, Michigan – USA]

[*Optional container disposal statement:* To obtain information about recycling refillable containers, contact Bayer at 1-866-99BAYER (1-866-992-2937).]

[*Optional container disposal statement:* Return Properly Rinsed Container to Bayer for Recycling – Call 1-866-99BAYER (1-866-992-2937).]

[*Optional additional container label statements for the CUBE refillable packaging system only:*

CUBE Bayer Refillable Delivery System
FEATURES INCLUDE:
- Automatic Venting
- Heavy duty one-way 2-inch camloc ball valve with protective shield door
- Complete coated steel protective enclosure
- Durable 4-way plastic pallet
- Lift door to access one-way valve]

CONDITIONS OF SALE AND LIMITATIONS OF WARRANTY AND LIABILITY

Read the entire Directions for Use, Conditions, Disclaimer of Warranties, and Limitations of Liability before buying or using this product. If terms are not acceptable, return the unopened product container at once.

By using this product, user or buyer accepts the following Conditions, Disclaimer of Warranties, and Limitations of Liability.

CONDITIONS: The directions for use of this product are believed to be adequate and must be followed carefully. However, it is impossible to eliminate all risks associated with the use of this product. Crop injury, ineffectiveness, or other unintended consequences may result because of such factors as weather conditions, presence of other materials, or the manner of use or application inconsistent with this label (including conditions noted on the label , such as unfavorable soil conditions, unfavorable climate conditions, etc.), all of which are beyond the control of Bayer CropScience LP ("Bayer") or the seller. To the extent consistent with applicable law, all such risks shall be assumed by the user or buyer. Buyer and all users shall promptly notify Bayer of any claims whether based in contract, negligence, strict liability, other tort or otherwise

DISCLAIMER OF WARRANTIES: Subject to risks as set forth in the Conditions above, Bayer warrants that this product is reasonably fit for the purposes stated on the label when used for the purposes stated on the label when used in accordance with directions. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, BAYER MAKES NO OTHER WARRANTIES, EXPRESS OR IMPLIED, OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE OR OTHERWISE. BAYER MAKES NO RECOMMENDATION OR WARRANTY HEREIN REGARDING THE USE OF ANY PRODUCTS THAT MAY APPEAR ON THE WEBSITE REFERENCED IN THE TANK MIXING INSTRUCTIONS HEREIN, REGARDLESS OF WHETHER SUCH PRODUCT IS USED ALONE OR IN A TANK MIX WITH XtendiMax® With VaporGrip® Technology. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, BAYER DISCLAIMS ANY LIABILITY WHATSOEVER FOR SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT. FOR IN-CROP (OVER-THE-TOP) USES ON CROPS WITH XTEND® TECHNOLOGY, CROP SAFETY AND WEED CONTROL PERFORMANCE ARE NOT WARRANTED BY BAYER WHEN THIS PRODUCT IS USED IN CONJUNCTION WITH "BROWN BAG" OR "BIN RUN" SEED SAVED FROM PREVIOUS YEAR'S PRODUCTION AND REPLANTED.

LIMITATIONS OF LIABILITY: To the extent consistent with applicable law, the exclusive remedy of the user or buyer for any and all losses, injuries, or damages resulting from the use or handling of this product, whether in contract, warranty, tort, negligence, strict liability or otherwise, shall not exceed the purchase price paid, or at Bayer's election, the replacement of product.

These Conditions of Sales, Disclaimer of Warranties and Limitations of Liability cannot be varied by any written or verbal statements or agreements. No employee or sales agent of Bayer or seller is authorized to vary or exceed the terms of the Disclaimer of Warranties or Limitations of Liability in any manner.

Bollgard II®, Bollgard®, Degree Xtra®, Field Master®, Harness®, Roundup Ready®, Roundup Ready 2 Xtend®, Roundup PowerMAX®, RT 3®, Roundup WeatherMAX®, XtendiMax®, XtendFlex®, and VaporGrip® are registered trademarks of Bayer Technology LLC. All other trademarks are the property of their respective owners.

PRODUCED FOR

Bayer CropScience

Bayer CropScience LP
800 N. Lindbergh Blvd.
St. Louis, MO 63167
1-866-99BAYER (1-866-992-2937)

XTENDIMAX® WITH VAPORGRIP® TECHNOLOGY (PENDING) 10/14/2020

Message

From: Ian Murphy [ian.murphy@bayer.com]
Sent: 7/29/2019 12:15:37 PM
To: Kenny, Daniel [Kenny.Dan@epa.gov]
CC: Schmid, Emily [Schmid.Emily@epa.gov]; BCSReg_Archive [esepamailbox@bayer.com]
Subject: FW: CDX PSP Package Transmitted to OPP
Attachments: Indaziflam-264-1129-Data Use Exclusivity Petition-07262019.pdf; 8570-1_264-1129_IndaziflamTech-DateExclusivityExtension_072619.pdf; Transmittal Doc-Indaziflam Technical_264-1129_Data Exclusivity Petition_07262019.pdf; CoverLetter_IndaziflamTech_264-1129_DataExclusivityExtension_072619.pdf

Good morning, Dan.

Bayer recently submitted a petition to extend the period of exclusive data use for Indaziflam for three additional years. As the PM 25 lead role is currently vacant, I am forwarding the submitted documents to you (and including Emily Schmid) as an FYI. Please let me know if I need to do anything else.

Thank you.

Ian Murphy
Federal Registrations Manager

//////////////////

Bayer U.S. LLC
Registrations
2C-9, 2400 Ellis Road
Research Triangle Park NC, 27703

Tel: +1 919 549 2962
E-mail: ian.murphy@bayer.com
Web: http://www.bayer.com

From: Ian Murphy
Sent: Monday, July 29, 2019 7:54 AM
To: BCSReg_Archive <esepamailbox@bayer.com>
Subject: FW: CDX PSP Package Transmitted to OPP

-Ian
//////////////////

2C-9, 2400 Ellis Road
Research Triangle Park NC, 27703

Tel: +1 919 549 2962
E-mail: ian.murphy@bayer.com

From: helpdesk@epacdx.net <helpdesk@epacdx.net>
Sent: Friday, July 26, 2019 5:30 PM
To: Ian Murphy <ian.murphy@bayer.com>
Subject: CDX PSP Package Transmitted to OPP

Your PSP package (Indaziflam (264-1129) Petition for Extension of Exclusive Data Use) for BAYER CROPSCIENCE LP (264) has been successfully transmitted to OPP.

Below are the application(s) included in this package and their tracking number(s):
Indaziflam (264-1129) Petition for Extension of Exclusive Data Use: CDX_2019_006127

Company Name: BAYER CROPSCIENCE LP
Company Number: 264

If you have questions concerning this message, you may contact the CDX Help Desk by email at helpdesk@epacdx.net or by calling the CDX Technical Support Staff through our toll free telephone support on (888) 890-1995 between Monday through Friday from 8:00 am to 6:00 pm EST/EDT. For International callers, the CDX Help Desk can also be reached at (970) 494-5500.

CDX Homepage
https://cdx.epa.gov

United States Environmental Protection Agency - Central Data Exchange

The information contained in this e-mail is for the exclusive use of the intended recipient(s) and may be confidential, proprietary, and/or legally privileged. Inadvertent disclosure of this message does not constitute a waiver of any privilege. If you receive this message in error, please do not directly or indirectly use, print, copy, forward, or disclose any part of this message. Please also delete this e-mail and all copies and notify the sender. Thank you.

MRID: 50904801

TITLE

Indaziflam Minor Use Registrations Petition for 3 Years Extension of Exclusive Use Data Protection Provided Under FIFRA Section 3(c) (1) (F) (ii)

COMPANY PRODUCT CODE

Indaziflam

AUTHORS

Mike Schwarz
Ian Murphy
Annette Bloomberg
David Spak
Gerret Van Duyn
Jake Doskocil
Roland Maynard

GUIDELINE REFERENCE

None

COMPLETED ON

July 26, 2019

REPORT NUMBER:

US0771

SUBMITTED BY

Bayer CropScience
800 N. Lindbergh Blvd.
St. Louis, MO 63167 USA

Pages

154

The following statement is only intended and valid for submission which are subject to the United States- Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA)

STATEMENT OF NO DATA CONFIDENTIALITY CLAIMS

No claim of confidentiality, on any basis whatsoever, is made for any information contained in this document. I acknowledge that the information not designated as within the scope of FIFRA, Section 10(d)(1)(A)(B), or (C) in USA and which pertains to a registered or previously registered pesticide is not entitled to confidential treatment and may be released to the public, subject to the provisions regarding disclosure to multinational entities under FIFRA 10(g) in USA.

However, these data are the property of Bayer CropScience AG or one of its affiliates and, as such, are considered to be a trade secret and confidential for all purposes other than compliance with FIFRA 10 in USA. Submission of these data in compliance with FIFRA does not constitute a waiver of any right to confidentiality which may exist under any other statute or in any country other than the USA.

Submitter:
Signature _____ Date: 2019-07-26
(YYYY-MM-DD)

Typed Name of Submitter: Ian Murphy

Typed Name of Company Bayer CropScience

The above statement supersedes all other statements of confidentiality that may occur elsewhere in this report.

GOOD LABORATORY PRACTICE COMPLIANCE STATEMENT

This document is informational, and is not the result of a study as defined by 40 CFR 160.3. Since the document does not report a study, no GLP (40 CFR 160 *or* Current OECD Principles of Good Laboratory Practices) statement is required as per PR Notice 2011-3 (VI)(C)(3), p. 11.

Study Director: There is no study director for this document

Sponsor/Submitter: _____ Date: 2019-07-26
Signature (YYYY-MM-DD)

Typed Name of Signer: Ian Murphy

Typed Name of Company: Bayer CropScience

Table of Contents

1.0 Introduction 6

1.1 Indaziflam Registrations 6

1.2 Indaziflam Mode of Action and Weed Resistance and Implications for Weed Resistance Management 7

1.3 Weed Resistance Management Labeling for Indaziflam 8

2.0 Proposed Minor Use Crop Registrations for Indaziflam that Qualify for Exclusive Use Data Protection 9

2.1 Table 1: Minor Crop Registrations, Planted Acreage, Weeds Controlled by Indaziflam, PRIA Date and Exclusive Use Data Protection Criteria Satisfied by Indaziflam 10

3.0 Justification of the Need for Indaziflam to Control Key Weeds in **Cherries (Sweet)** 12

4.0 Justification of the Need for Indaziflam to Control Key Weeds in **Pistachios** 18

5.0 Justification of the Need for Indaziflam to Control Key Weeds in **Lemons** 22

6.0 Justification of the Need for Indaziflam to Control Key Weeds in **Pears** 26

7.0 Justification of the Need for Indaziflam to Control Key Weeds in **Olives** 33

8.0 Justification of the Need for Indaziflam to Control Key Weeds in **Blueberry (Highbush)** 37

9.0 Justification of the Need for Indaziflam to Control Key Weeds in **Raspberry** 39

10.0 Justification of the Need for Indaziflam to Control Key Weeds in **Hops** 44

11.0 Justification of the Need for Indaziflam to Control Key Weeds in **Coffee** 47

12.0 Justification of the Need for Indaziflam to Control Key Weeds in **Limes** 50

13.0 Justification of the Need for Indaziflam to Control Key Weeds in **Cherries (Tart)**..... 55

14.0 Justification of the Need for Indaziflam to Control Key Weeds in **Apricots** 60

15.0 Qualification for Extension of Exclusive Data Use 65

16.0 Conclusions 66

17.0 Appendices 67

1.0 Introduction

Bayer CropScience hereby respectfully petitions EPA to extend the period of exclusive data use for indaziflam herbicide by 3 years, by applying the provision of FIFRA Section 3(c)(1)(F)(ii).

FIFRA Section 3(c) (1) (F) (ii) states that:

> *The period of exclusive data use provided under clause (i) shall be extended 1 additional year for each 3 minor uses registered after the date of enactment of this clause and within 7 years of the commencement of the exclusive use period, up to a total of 3 additional years for all minor uses registered by the Administrator if the Administrator, in consultation with the Secretary of Agriculture, determines that, based on information provided by an applicant for registration or a registrant, that –*
>
> > *(I) there are insufficient efficacious alternative registered pesticides available for the use;*
> >
> > *(II) the alternatives to the minor use pesticide pose greater risks to the environment or human health;*
> >
> > *(III) the minor use pesticide plays or will play a significant part in managing pest (weed) resistance;*
> >
> > *(IV) the minor use pesticide plays or will play a significant part in an integrated pest (weed) management program.*

1.1 Indaziflam Registrations

Indaziflam technical (EPA Reg. No. 264-1129) was first registered by the U.S. EPA on July 26, 2010. The formulations of indaziflam - Alion® 200 SC (EPA Reg. No. 264-1106) containing 1.67 lbs indaziflam per gallon and Indaziflam 500SC Herbicide (Alion HL, **Appendix 2**), a suspension concentrate containing 4.16 lb ai per gallon (500 g ai/L)is registered and approved for use in a variety of crops including the following minor use crops detailed in this document: cherries (sweet), pistachios, lemons, pears, and olives. Alion 200 SC has the least restrictive "CAUTION" labeling, no restricted-entry interval for any uses, and the pre-harvest interval (PHI) is 7 days for citrus and 14 days for all other crops listed on the label.[1]

Bayer CropScience believes that indaziflam meets one or more of the four criteria above based on certain currently registered uses for crops originally listed above plus certain new "minor-use" label expansion uses recently granted by EPA as a joint review with Canada. The EPA minor-use crop uses were granted on July 5, 2017[2]. Label expansion uses for caneberries (raspberry), bushberries (blueberries, highbush), hops, and coffee were completed with IR-4 primarily due to the potential fit with the extension of exclusive use program. The current Alion 200 SC label with these new uses is included in the appendix.[3]

Indaziflam in its formulated products Alion 200 SC and Alion 500 SC has brought and will bring control of key broadleaf and grass weeds for which there are few or no effective alternatives due to overdependence and overuse of "at risk" herbicides such as glyphosate

(an EPSP synthase inhibitor herbicide) and rimsulfuron (an ALS-inhibitor herbicide). Fleabane, horseweed and Italian ryegrass have developed resistance to glyphosate in TNV crops in California, for example. To control glyphosate-resistant weed populations, growers have increased use of residual herbicides such as flumioxazin and rimsulfuron, as well as other non-glyphosate postemergence herbicides. Unfortunately, repeated use of any herbicide mode of action increases the risk of resistance development that deprives growers of effective herbicide alternatives for control. ALS-inhibiting herbicides, such as rimsulfuron, in particular, are at high risk for resistance development, and weeds resistant to ALS, protoporphyrinogen (PPO), photosystem II (PSII) inhibitor, and bipyridilium herbicides have been identified in other crops in the U.S. Effective new herbicides are needed to manage serious resistance issues in TNV crops. Indaziflam will improve long-term resistance management and protect the longevity of all herbicides used in established TNV crops by applying it in tank mix and alternative spray programs as outlined by HRAC / WSSA guidelines for herbicide resistance management.

Broad spectrum control, effectiveness, extended control, a novel mode-of-action with no known cross-resistance, and favorable human health and ecological profiles make indaziflam an excellent fit in Integrated Pest Management (IPM) and integrated weed resistance management (IWRM) programs. Indaziflam has become a welcome addition in the weed control arena and serves as a valuable tool for weed management on a variety of established TNV crops.

1. **ALION 200 SC label.** (Appendix 1).

2. **ALION 500 SC label.** (Appendix 2).

1.2 Indaziflam Mode of Action and Weed Resistance and Implications for Weed Resistance Management

Considering that criterion III emphasizes management of pest (weed) resistance, the following is a brief description of the mode of action of Indaziflam.

Indaziflam (BCS-AA10717, AE117437, Alion) is a relatively new alkylazine herbicide for preemergence control of grass and broadleaf weeds in established tree fruit, nut, grape, olive, caneberry, and bushberry crops, hops, and coffee. Indaziflam provides extended residual preemergence control of the most common and economically important annual grass and broadleaf weeds, including populations that are resistant to glyphosate, triazine and acetolactate synthase (ALS)-inhibiting herbicides. Indaziflam controls weeds by inhibiting cellulose biosynthesis and meristematic cell growth. Indaziflam controls weeds prior to emergence from the soil, has limited postemergence (foliar) activity and may be mixed with postemergence herbicides such as glufosinate and glyphosate to control existing vegetation.

Indaziflam is formulated as Indaziflam 200SC Herbicide (Alion®, **Appendix 1**), a suspension concentrate containing 1.67 lb ai per gallon (200 g ai/L) and as Indaziflam 500SC Herbicide (Alion® HL, **Appendix 2**), a suspension concentrate containing 4.16 lb ai per gallon (500 g ai/L). Bayer CropScience has obtained the registration of Alion on citrus, pome fruit, stone fruit, grapes, tree nuts, olives, caneberries, bushberries, hops, and coffee. Indaziflam 200 SC will be applied at rates between 3.5 to 6.5 fl oz/ac (51 and 95 g ai/ha) for broad spectrum annual grass and broadleaf weed control including hard-to-control weeds like hairy fleabane,

horseweed, pigweed species, filaree, annual sow-thistle, foxtail species and Italian ryegrass, glyphosate-resistant populations of fleabane, horseweed and Italian ryegrass, triazine resistant common groundsel, and other resistant weed populations.

Indaziflam controls weeds by inhibiting cellulose biosynthesis (CBI). Its primary sites of action are inhibition of seed emergence and inhibition of root development. The roots of young seedlings that come in contact with the herbicide following germination are killed. In some cases, necrosis or yellowing may be observed if the herbicide is applied to herbaceous tissue such as leaves and green stems.

Indaziflam (provides preemergence, residual control of a broad spectrum of grass and broadleaf weeds when applied prior to germination. Best weed control is obtained when indaziflam is applied prior to seed germination and adequate rain or irrigation is received soon after application and prior to weed germination. It may be applied anytime when the ground is not frozen or covered with snow. Weed seeds and seedlings must come into contact with Indaziflam (Alion) 200 SC Herbicide prior to emergence to be controlled.

The herbicide needs to be activated prior to weed germination for most effective control. For maximum weed control, indaziflam requires rainfall or irrigation (minimum of about 0.25 inches) after application to activate the herbicide. Indaziflam will generally not control weeds that have emerged.

Indaziflam is currently classified as the only Group 29 Herbicide, "Inhibitor of cell wall synthesis site C" by the Weed Science Society of America (WSSA)[1]. No known resistance to indaziflam herbicide exists, and there are no known instances of cross resistance between indaziflam (Alion) herbicide and any other classes of herbicides or modes of action. Performance of indaziflam herbicide is not affected by the presence of biotypes resistant to glyphosate, triazines, ALS-inhibiting, growth regulant, or other herbicide modes of action. Indaziflam is currently an important and integral component in IWRM programs where widespread resistance to other herbicides is documented. The use of herbicides with different modes of action in the tank mixture, rotation, or in conjunction with alternate cultural practices can help prevent the development and spread of resistant weed populations.[2]

Bayer is commited to stewarding indaziflam to ensure its availability to manage problem weeds for the long term. The benefit and value of indaziflam is endorsed by the grower community as demonstrated by the letters of support (**Appendix 3**).

1. WSSA Herbicide Site of Action Classification List (updated 2018). (**Appendix 4**).

2. HRAC webpage. http://hracglobal.com/tools/classification-lookup

1.3 Weed Resistance Management Labeling for Indaziflam

The Indaziflam 200 SC and Indaziflam 500 SC labels include voluntary weed resistance management language concerning the use of the product to encourage proper usage by growers. The label displays on the front page the WSSA box designator symbol "**Group 29 Herbicide**" so growers know what other products have the same mode of action and are not ideal rotational partners with Indaziflam 200 SC. The following text is also included on the Indaziflam 200 SC label which provides tactics to avoid resistance development.

"Resistance Management
Indaziflam, the active ingredient in this product, is a Group 29 herbicide based on the mode of action classification system of the Weed Science Society of America. A given weed population may contain plants naturally resistant to Group 29 herbicides. Such resistant weed plants may not be effectively managed using Group 29 herbicides but may be effectively managed using another herbicide alone or in mixtures from a different Group and/or by using cultural or mechanical practices. However, a herbicide mode of action classification by itself may not adequately address specific weeds that are resistant to specific herbicides. Consult your local company representative, state cooperative extension service, professional consultants, or other qualified authorities to determine appropriate actions for treating specific resistant weeds."

2.0 Proposed Minor Use Crop Registrations for Indaziflam that Qualify for Exclusive Use Data Protection

Table 1 lists the minor use crop registrations detailed in this petition including crop planted acres, corresponding MRID number and PRIA dates, qualifying weeds, and the exclusive use data protection criteria satisfied by indaziflam. All of the minor use crop candidates were registered within the requisite seven years period after July 26th, 2010, the date of first registration of the active ingredient indaziflam. All of the crop candidates are grown on less than 300,000 acres per year, as reported by the USDA-NASS or University experts.

Table 1: Minor Crop Registrations, Planted Acreage, Weed Groups Controlled by Indaziflam, PRIA Date and Exclusive Use Data Protection Criteria Satisfied by Indaziflam

MINOR CROP REGISTRATION	BEARING ACRES (YEAR)	APPROVAL DATE (MRID#)	WEED GROUPS CONTROLLED BY INDAZIFLAM	CRITERIA SATISFIED[A]
Cherry, sweet (*Prunus avium L. ssp./var. aviu*)	93,866[B] (2017)	04-07-2011 (47743403)	Grasses and Broadleaves	*III, IV*
Pistachio (*Pistacia vera L.*)	247,872[B] (2017)	04-07-2011 (47743404)	Grasses and Broadleaves	*III, IV*
Lemon (*Citrus limon L.*)	59,001[B] (2017)	04-07-2011 (47743405)	Grasses and Broadleaves	*III, IV*
Pear (*Pyrus communis L.*)	51,435[B] (2017)	04-07-2011 (47743402)	Grasses and Broadleaves	*III, IV*
Olive (*Olea europaea L.*)	40,915 [B] (2017)	04-07-2011 (47743407)	Grasses and Broadleaves	*III, IV*
Blueberry, highbush[C] (*Vaccinium corymbosum L.*)	97,515 [B] (2017)	7/5/2017 (49752802)	Grasses and Broadleaves	*III, IV*

Table 1: Minor Crop Registrations, Planted Acreage, Weed Groups Controlled by Indaziflam, PRIA Date and Exclusive Use Data Protection Criteria Satisfied by Indaziflam (continued)

Raspberry (*Rubus idaeus L.*)	20,646[B] (2017)	7/5/2017 (49752803)	Grasses and Broadleaves	*III, IV*
Hop, common[D] (*Humulus lupulus L.*)	59,429 [B] (2017)	7/5/2017 (49752804)	Grasses and Broadleaves	*III, IV*
Coffee, Arabic (*Coffea arabica*)	8,441[B] (2017)	7/5/2017 (49752801)	Grasses and Broadleaves	*III, IV*
Lime (*Citrus aurantifolia)*	1051[B] (2017)	04-07-2011 (47743405)	Grasses and Broadleaves	*III, IV*
Cherry, tart (*Prunus cerasus L.*)	35,944[B] (2017)	04-07-2011 (47743403)	Grasses and Broadleaves	*III, IV*
Apricots (*Prunus armeniaca L.*)	12179 [B] (2017)	04-07-2011 (47743403)	Grasses and Broadleaves	*III, IV*

[A.] Criterion *(III): the minor use pesticide plays or will play a significant part in managing pest resistance. (IV) the minor use pesticide plays or will play a significant part in anintegrated pest (weed) management program.*

[B.] Harvested/Bearing Acres available through USDA – National Agricultural Statistics Service. https://www.nass.usda.gov/Statistics_by_Subject/index.php?sector=CROPS; and
Fruits and Nuts Table:
https://www.nass.usda.gov/Publications/AgCensus/2017/Full_Report/Volume_1,_Chapter_2_US_State_Level/st99_2_0031_0031.pdf;
Berries Table:
https://www.nass.usda.gov/Publications/AgCensus/2017/Full_Report/Volume_1,_Chapter_2_US_State_Level/st99_2_0033_0033.pdf
Other Crops Table (for Hops):
https://www.nass.usda.gov/Publications/AgCensus/2017/Full_Report/Volume_1,_Chapter_2_US_State_Level/st99_2_0027_0027.pdf

[C.] Tame Blueberries.

[D.] Harvested Acres.

2.1 Notes:

Details of how Indaziflam meets the exclusivity criteria for each minor use are provided in the following sections using the following format (x = section number).

x.0) Justification of the Need for Indaziflam to Control Key Weeds in the Minor crop(s)

x.1) Minor crop(s) acreage

x.2) Exclusive Use Data Protection Criteria Indaziflam Satisfies in the Minor Crop(s)

x.3) Section References

When the reference is attached within a separate appendix, the file is indicated by: "(Appendix #)."

Some references to websites may be accessed when online by clicking the underlined link and the Ctrl key at the same time. APS, CDMS, and Agrian databases may require log in or new user registration to access the search functions.

3.0 Justification of the Need for Indaziflam to Control Key Weeds in Cherry (Sweet)

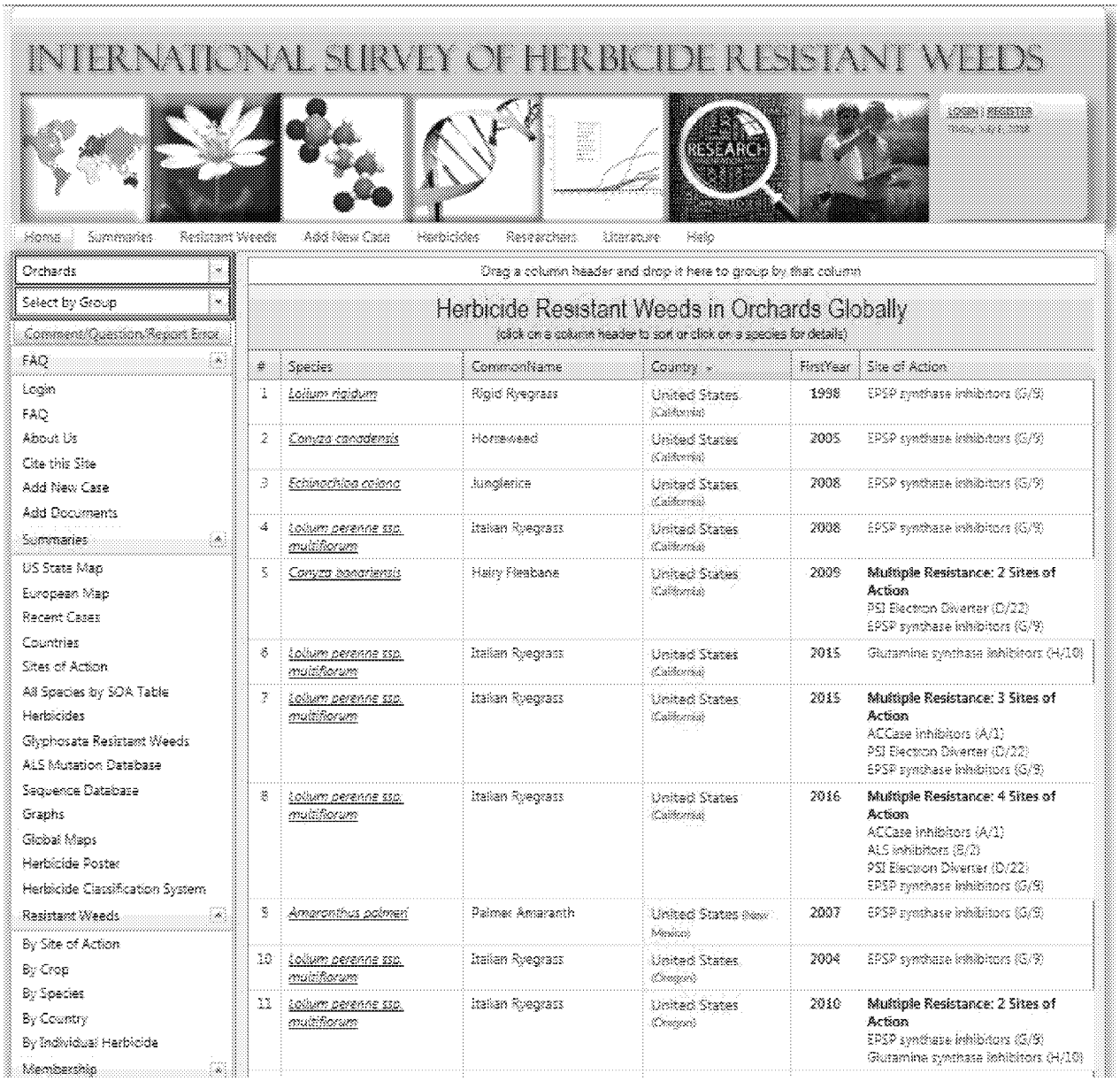
3.1 Cherry (Sweet) Acreage

Sweet cherries are an important commercial U.S. crop. Most sweet cherries are grown in the states of **Washington** (37,784 acres of bearing), **California** (32,483 acres), **Oregon** (13,273 acres), and **Michigan** (6,701 acres). Important sweet cherry cultivars include Bing, Ulster, Rainier, Brooks, Tulare, King, and Sweetheart (Wikipedia). In 2017, the total planted bearing acreage was reported by the USDA to be 93,866 acres (Table 1)[1]. Sweet cherry acreage is less than 300,000 per year and qualifies as a minor use crop.

3.2 Exclusive Use Data Protection Criteria Indaziflam Satisfies in Cherry (Sweet)

3.2.1 Indaziflam use in cherry (sweet) for the control of weed biotypes resistant to glyphosate, triazines, ALS-inhibiting, growth regulant, or other herbicide modes of action satisfies *Criterion III: The minor use pesticide plays or will play a significant part in managing pest (weed) resistance.*

The table below, copied from the Weed Science Society of America (WSSA) website for "International Survey of Herbicide Resistant Weeds"[2] shows the listings for the United States of weed species, common name, states of occurrence (California and Oregon), year reported, and herbicide site of action for weeds located in **orchards**, such as sweet cherry orchards, in California and Oregon. California accounts for over 32,000 acres and Oregon 13,000 acres of sweet cherries, roughly one-half of all sweet cherries produced in the United States. The additional listing below for "Herbicide Resistant Weeds in Washington, United States" (~38,000 acres of bearing cherries, sweet) shows that resistance of selected weed species also occurs to most herbicide modes-of-action commonly used in orchards in that state, with the exception of indaziflam.



#	Species	CommonName	Country	FirstYear	Site of Action
1	*Lolium rigidum*	Rigid Ryegrass	United States (California)	1998	EPSP synthase inhibitors (G/9)
2	*Conyza canadensis*	Horseweed	United States (California)	2005	EPSP synthase inhibitors (G/9)
3	*Echinochloa colona*	Junglerice	United States (California)	2008	EPSP synthase inhibitors (G/9)
4	*Lolium perenne ssp. multiflorum*	Italian Ryegrass	United States (California)	2008	EPSP synthase inhibitors (G/9)
5	*Conyza bonariensis*	Hairy Fleabane	United States (California)	2009	**Multiple Resistance: 2 Sites of Action** PSI Electron Diverter (D/22) EPSP synthase inhibitors (G/9)
6	*Lolium perenne ssp. multiflorum*	Italian Ryegrass	United States (California)	2015	Glutamine synthase inhibitors (H/10)
7	*Lolium perenne ssp. multiflorum*	Italian Ryegrass	United States (California)	2015	**Multiple Resistance: 3 Sites of Action** ACCase inhibitors (A/1) PSI Electron Diverter (D/22) EPSP synthase inhibitors (G/9)
8	*Lolium perenne ssp. multiflorum*	Italian Ryegrass	United States (California)	2016	**Multiple Resistance: 4 Sites of Action** ACCase inhibitors (A/1) ALS inhibitors (B/2) PSI Electron Diverter (D/22) EPSP synthase inhibitors (G/9)
9	*Amaranthus palmeri*	Palmer Amaranth	United States (New Mexico)	2007	EPSP synthase inhibitors (G/9)
10	*Lolium perenne ssp. multiflorum*	Italian Ryegrass	United States (Oregon)	2004	EPSP synthase inhibitors (G/9)
11	*Lolium perenne ssp. multiflorum*	Italian Ryegrass	United States (Oregon)	2010	**Multiple Resistance: 2 Sites of Action** EPSP synthase inhibitors (G/9) Glutamine synthase inhibitors (H/10)

Herbicide Resistant Weeds in Washington, United States.					
#	Year	Species	Site of Action	Actives	Contacts
1	1970	*Senecio vulgaris* Common Groundsel	Photosystem II inhibitors (C1/5)	simazine	Rick Boydston
2	1987	*Salsola tragus* Russian-thistle	ALS inhibitors (B/2)	chlorsulfuron	Doug Thill
3	1988	*Centaurea solstitialis* Yellow Starthistle	Synthetic Auxins (O/4)	picloram	Steven Seefeldt
4	1989	*Kochia scoparia* Kochia	ALS inhibitors (B/2)	chlorsulfuron	Steven Seefeldt
5	1991	*Avena fatua* Wild Oat	ACCase inhibitors (A/1)	diclofop-methyl, fenoxaprop-P-ethyl, pinoxaden, quizalofop-P-ethyl, sethoxydim	Steven Seefeldt, Ahmet Uludag
6	1992	*Amaranthus powellii* Powell Amaranth	Photosystem II inhibitors (C1/5)	terbacil	Kassim Al-Khatib, Rick Boydston
7	1993	*Lactuca serriola* Prickly Lettuce	ALS inhibitors (B/2)	chlorsulfuron	Steven Seefeldt
8	2000	*Sonchus asper* Spiny Sowthistle	ALS inhibitors (B/2)	imazamox, thifensulfuron-methyl	Kee-Woong Park
9	2007	*Lactuca serriola* Prickly Lettuce	Synthetic Auxins (O/4)	2,4-D, dicamba, MCPA	Ian Burke
10	2010	*Amaranthus retroflexus* Redroot Pigweed	Photosystem II inhibitors (C1/5)	metribuzin, terbacil	Rick Boydston
11	2010	*Chenopodium album* Common Lambsquarters	Photosystem II inhibitors (C1/5)	metribuzin, terbacil	Rick Boydston
12	2010	*Anthemis cotula* Mayweed Chamomile	ALS inhibitors (B/2)	cloransulam-methyl, imazethapyr, thifensulfuron-methyl, tribenuron-methyl	Alejandro Perez-Jones, Carol Mallory-Smith
13	2015	*Salsola tragus* Russian-thistle	EPSP synthase inhibitors (G/9)	glyphosate	Ian Burke, Prashant Jha, Vipan Kumar, Drew Lyon
14	2018	*Lolium perenne ssp. multiflorum* Italian Ryegrass	Long chain fatty acid inhibitors (K3/15)	flufenacet	Alberto Collavo, Roland Beffa

To date, there have yet to be any reported cases of weed species that have evolved field resistance to group 29 CBIs such as indaziflam.[2] There are also currently limited approved herbicides of other modes of activity that are still fully effective for weed control in sweet cherries and other orchard crops due to resistance verified for Rigid Ryegrass, Horseweed, Junglerice, and Amaranth species to glyphosate (herbicide mode of activity group G/9). In addition, multiple herbicide resistance has been recorded by WSSA in Hairy Fleabane to glyphosate and paraquat (groups G/9, D/22, respectively) and in Italian Ryegrass to commonly used herbicides such as glyphosate, sethoxydim, paraquat, rimsulfuron, and glufosinate (groups G/9, A/1, D/22, B/2, and H/10, respectively). All these weed species are commonly found within and adjacent to orchards, vineyards and citrus groves in California and/or Oregon. Indaziflam is commonly applied in tank mixtures and/or rotations with all of the above listed herbicides, or in conjunction with alternate cultural practices to help improve weed control efficacy and prevent the development and spread of resistant weed populations.

"As a CBI, for which there is little evidence of evolved weed resistance, indaziflam represents an important addition to the action mechanisms available for weed management". – Brabham et. al.[3]

"Overall, indaziflam and oxadiazon provided good (80 to 89%) to excellent control of dna-resistant goosegrass in both years, but dimethenamid and sulfentrazone were inconsistent." – McCullough et. al.[4]

"It is concluded that saflufenacil can be tank mixed with glufosinate for control of broadleaf and grass weeds; however, addition of indaziflam in tank mixture provided long-term, broad-spectrum weed control in Florida citrus compared with other treatments." – Jhala et. al.[5]

"Soil organic matter (SOM) explained the highest proportion of variability in predicting the herbicide dose required for 80% *Kochia* growth reduction (GR80) for flumioxazin and indaziflam (R2 =0.72 and 0.79 respectively)." – Sebastian et.al.[6]

"All three biotypes (of Goosegrass (*Eleusine indica*) Biotypes Resistant to Preemergence-Applied Oxadiazon) were completely controlled by preemergence applied labeled rates of prodiamine and indaziflam. This is the first peer-reviewed report of evolved weed resistance to oxadiazon." – McElroy et. al.[7]

"New herbicide products today tend to be premixed formulations of existing actives with known modes of action, new salts and esters or new actives with minor chemical modifications that claim to improve weed efficacy and spectrum, crop safety, reduced rates and/or soil residual activity. Recent examples of such advancements include the synthetic auxins aminocyclopyrachlor and halauxifen-methyl, the ACCase inhibitor pinoxaden, the PPO inhibitor saflufenacil, the HPPD inhibitors bicyclopyrone, tembotrione and pyrasulfotole, the ALS inhibitor trifamone, the cellulose biosynthesis inhibitor (CBI) indaziflam and very-long-chain fatty acid (VLCFA) inhibitors pyroxasulfone and fenoxasulfone." – Green.[8]

"Glyphosate is considered the world's most important herbicide because it provides broad-spectrum weed control and has favorable environmental characteristics and low mammalian toxicity (Baylis 2000; Woodburn 2000). These characteristics, combined with its cost-effectiveness, have led to frequent applications of glyphosate in perennial cropping systems and non-crop areas in California (Shrestha et al. 2007). However, reliance on herbicides with the same mode of action for extended periods can contribute to weed shifts and the selection of biotypes with resistance to herbicides (Christoffers 1999; Holt 1992) (see page 86). As a result of this selection pressure, cases of glyphosate-resistant rigid rye-grass (*Lolium rigidum*) (Heap 2008; Simarmata et al. 2005) and horse-weed (Shrestha et al. 2007) have been reported in California orchards and non-crop areas, respectively." – Shrestha et.al.[9]

An accession of *Camelina microcarpa* suspected to be resistant to sulfonylurea herbicides was identified in Oregon in 1998 field experiments. Greenhouse research confirmed that the putative resistant biotype was resistant to chlorsulfuron and metsulfuron on a whole plant level. Compared with the resistant (R) biotype, the susceptible (S) biotype was 1000 and 10,000-fold more sensitive to metsulfuron and chlorsulfuron respectively. The R biotype was also resistant to other sulfonylurea,

sulfonylaminocarbonyl-triazolinone, imidazolinone and triazolopyrimidine herbicides. – Hanson et.al.[10]

3.2.2 Indaziflam use in cherry (sweet) for the control of weed biotypes resistant to glyphosate, triazines, ALS-inhibiting, growth regulant, or other herbicide modes of action satisfies *Criterion IV: The minor use pesticide plays or will play a significant part in an integrated pest (weed) management program.*

Indaziflam can be used as an important component of Integrated Pest Management. In addition to key IPM program components such as weed scouting, weed identification, mowing, tillage, and other cultural practices, chemical controls can provide an efficient and effective option to boost the productivity of their crop.(ref Appendix 7) As a pre-emergent weed management tool, it offers growers an additional option for weed management practices on their farm. Due to the limited effective herbicide options available in this minor crop, the availability of indaziflam is a critical component of the success of IPM programs for growers. An example of an IPM program that includes indaziflam is shown in Appendix 7 for citrus crops, however similar practices are implemented by growers of cherry (sweet).

3.3 References

[1.] United States Department of Agriculture – National Agricultural statistics Service. 2017. https://www.nass.usda.gov/Statistics_by_Subject/index.php?sector=CROPS

[2.] Heap I (2014) The international survey of herbicide resistant weeds. May 5, 2014. http://www.weedscience.org, http://weedscience.org/Summary/Country.aspx?CountryID=45

[3.] Indaziflam Herbicidal Action: A Potent Cellulose Biosynthesis Inhibitor. C. Brabham, Lei Lei, Ying Gu, J. Stork, M. Barrett, S. DeBolt. 2014. Plant Physiol. 166, pp. 1177-1185.

[4.] Efficacy of Preemergence Herbicides for Controlling a Dinitroaniline-Resistant Goosegrass (Eleusine indica) in Georgia. Patrick E. McCullough, Jialin Yu, and Diego G´omez de Barreda. 2013. Weed Technology 27:639–644.

[5.] Tank Mixing Saflufenacil, Glufosinate, and Indaziflam Improved Burndown and Residual Weed Control. Amit J. Jhala, Analiza H. M. Ramirez, and Megh Singh. 2013. Weed Technology 27:422–429

[6.] Influence of soil properties and soil moisture on the efficacy of indaziflam and flumioxazin on *Kocia scoparia* L. D. Sebastian, S. Nissen, P. Westra, D. Shaner, G. Butters. 2017. Pest Manag Sci; 73: 444–451.

[7.] Identification of Goosegrass (Eleusine indica) Biotypes Resistant to Preemergence-Applied Oxadiazon. J. Scott McElroy, William B. Head, Glenn R. Wehtje, and David Spak. 2017. Weed Technology 31:675–681.

[8.] Current state of herbicides in herbicide-resistant crops. Green, J.M. 2014. Pest Manag Sci 2014; 70: 1351–1357.

[9] Glyphosate-resistant hairy fleabane documented in the Central Valley. 2008. A. Shrestha, B. Hanson and K. Hembree. http://CaliforniaAgriculture.ucop.edu • July–September 2008

[10] Resistance of Camelina microcarpa to acetolactate synthase inhibiting herbicides. 2004. B. Hanson, K. Park, C Mallory-Smith and D. Thill. Weed Research 44: 187-194.

4.0 Justification of the Need for Indaziflam to Control Key Weeds in Pistachios

4.1 Pistachio Acreage

The USDA National Agricultural Statistics Service indicates pistachios are an important U.S. crop with production exclusively centered in the state of California. In 2017, the U.S acreage for bearing pistachios in California was reported by the USDA to be 247,872 acres (Table 1)[1]. Pistachio acreage is less than 300,000 per year and qualifies as a minor use crop.

4.2 Exclusive Use Data Protection Criteria Indaziflam Satisfies in Pistachios

4.2.1 The Indaziflam use in pistachios for the control of weed biotypes resistant to glyphosate, triazines, ALS-inhibiting, growth regulant, or other herbicide modes of action satisfies *Criterion III: The minor use pesticide plays or will play a significant part in managing pest (weed) resistance.*

Status of Herbicide Resistance in California – Brad Hanson : January, 2014

Herbicide resistance in California is currently dominated by two patterns of resistance that differ somewhat from the rest of the United States. The first major category is multiple-resistance in a number of sedge and grass weeds of the rice production region of the Sacramento Valley. Rice in these areas is typically grown under flooded conditions and is often in long-term rice monoculture due to soil and water conditions in the area which makes them heavily reliant on herbicides for weed control. These cases tend to be due to non-target site mechanisms or, in some cases, combinations of target site and non-target site mechanisms of resistance, and present a serious challenge to growers. The second broad category is glyphosate-resistant weeds in orchards, vineyards, and associated non-crop areas such as roadsides, canal banks, and field margins. Glyphosate has been the most important herbicide in these areas for several years due to efficacy, economical cost, and a favorable environmental and toxicological profile. In the past decade, several new cases of glyphosate resistance have been documented. The most widespread of these appears to be hairy fleabane which can be found nearly anywhere in the agricultural areas of the state. One important distinction between California and other regions of the US is that our cases of glyphosate-resistance are not primarily associated with Roundup Ready cropping systems but instead with non-crop uses or directed spray applications in woody perennial crops. Roundup Ready crops (cotton, maize, and recently alfalfa) are grown in California and do have some challenges with glyphosate-resistant weeds; however, tillage and irrigation practices seem to have reduced or delayed this problem in comparison to the reduced tillage row crop systems in other parts of the country.

Herbicide Resistant Weeds in California, United States.

#	Year	Species	Site of Action	Actives	Contacts
1	1981	*Senecio vulgaris* Common Groundsel	Photosystem II inhibitors (C1/5)	atrazine	Jodie Holt
2	1989	*Lolium perenne* Perennial Ryegrass	ALS inhibitors (B/2)	sulfometuron-methyl	Leonard Saari, Josephine Cotterman
3	1993	*Sagittaria montevidensis* California Arrowhead	ALS inhibitors (B/2)	bensulfuron-methyl	Michael Carriere
4	1993	*Cyperus difformis* Smallflower Umbrella Sedge	ALS inhibitors (B/2)	bensulfuron-methyl	Michael Carriere
5	1994	*Salsola tragus* Russian-thistle	ALS inhibitors (B/2)	chlorsulfuron, sulfometuron-methyl	Timothy Prather, Jodie Holt
6	1996	*Avena fatua* Wild Oat	Cell elongation inhibitors (Z/8)	diflenzoquat	Steve Orloff, Jodie Holt
7	1997	*Ammannia auriculata* Eared Redstem	ALS inhibitors (B/2)	bensulfuron-methyl	Jim Hill
8	1997	*Schoenoplectus mucronatus (=Scirpus mucronatus)* Ricefield Bulrush	ALS inhibitors (B/2)	bensulfuron-methyl	Jim Hill
9	1998	*Echinochloa phyllopogon (=E. oryzicola)* Late Watergrass	ACCase inhibitors (A/1)	fenoxaprop-P-ethyl	Albert Fischer
10	1998	*Lolium rigidum* Rigid Ryegrass	EPSP synthase inhibitors (G/9)	glyphosate	Thomas Lanini : retired, Brad Hanson, Marie Jasieniuk
11	1998	*Echinochloa phyllopogon (=E. oryzicola)* Late Watergrass	Lipid inhibitors (N/8)	thiobencarb = benthiocarb	Albert Fischer
12	2000	*Echinochloa oryzoides* Early Watergrass	Lipid inhibitors (N/8)	molinate, thiobencarb = benthiocarb	Albert Fischer
13	2000	*Ammannia coccinea* Redstem	ALS inhibitors (B/2)	bensulfuron-methyl	Jim Hill

14	2000	*Echinochloa crus-galli var. crus-galli* Barnyardgrass	**Multiple Resistance: 2 Sites of Action** ACCase inhibitors (A/1) Lipid Inhibitors (N/8)	cyhalofop-butyl, fenoxaprop-P-ethyl, molinate, thiobencarb = benthiocarb	Albert Fischer
15	2000	*Echinochloa phyllopogon (=E. oryzicola)* Late Watergrass	**Multiple Resistance: 2 Sites of Action** ACCase inhibitors (A/1) Lipid Inhibitors (N/8)	cyhalofop-butyl, fenoxaprop-P-ethyl, molinate, thiobencarb = benthiocarb	Albert Fischer
16	2001	*Phalaris minor* Little seed Canary grass	ACCase inhibitors (A/1)	clethodim, fenoxaprop-P-ethyl, fluazifop-P-butyl, sethoxydim	Joseph Di Tomaso
17	2002	*Digitaria ischaemum* Smooth Crabgrass	Synthetic Auxins (O/4)	quinclorac	Albert Fischer
18	2005	*Conyza canadensis* Horseweed	EPSP synthase inhibitors (G/9)	glyphosate	Brad Hanson, Anil Shrestha, Kurt Hembree, Steve Wright
19	2007	*Conyza bonariensis* Hairy Fleabane	EPSP synthase inhibitors (G/9)	glyphosate	Brad Hanson, Anil Shrestha, Kurt Hembree, Marcelo L. Moretti
20	2008	*Echinochloa colona* Junglerice	EPSP synthase inhibitors (G/9)	glyphosate	Albert Fischer, Thomas Lanini : retired, Brad Hanson, Steve Wright
21	2008	*Lolium perenne ssp. multiflorum* Italian Ryegrass	EPSP synthase inhibitors (G/9)	glyphosate	Marie Jasieniuk
22	2009	*Conyza bonariensis* Hairy Fleabane	**Multiple Resistance: 2 Sites of Action** EPSP synthase inhibitors (G/9) PSI Electron Diverter (D/22)	glyphosate, paraquat	Brad Hanson, Anil Shrestha, Kurt Hembree, Steve Wright, Marcelo L. Moretti
23	2013	*Cyperus difformis* Smallflower Umbrella Sedge	PSII inhibitor (Ureas and amides) (C2/7)	propanil	Albert Fischer, Rafael Pedroso
24	2013	*Poa annua* Annual Bluegrass	EPSP synthase inhibitors (G/9)	glyphosate	Brad Hanson, Marcelo L. Moretti
25	2014	*Schoenoplectus mucronatus (=Scirpus mucronatus)* Ricefield Bulrush	PSII inhibitor (Ureas and amides) (C2/7)	propanil	Albert Fischer, Rafael Pedroso
26	2014	*Conyza canadensis* Horseweed	**Multiple Resistance: 2 Sites of Action** EPSP synthase inhibitors (G/9) PSI Electron Diverter (D/22)	glyphosate, paraquat	Brad Hanson, Marcelo L. Moretti
27	2015	*Amaranthus palmeri* Palmer Amaranth	EPSP synthase inhibitors (G/9)	glyphosate	Brad Hanson, Anil Shrestha, Steve Wright, Jorge Angeles, Samikshya Budhathoki , Mala To, Sonia Rios
28	2015	*Lolium perenne ssp. multiflorum* Italian Ryegrass	Glutamine synthase inhibitors (H/10)	glufosinate-ammonium	Marie Jasieniuk, Parsa Tehranchian
29	2015	*Lolium perenne ssp. multiflorum* Italian Ryegrass	**Multiple Resistance: 3 Sites of Action** ACCase inhibitors (A/1) EPSP synthase inhibitors (G/9) PSI Electron Diverter (D/22)	glyphosate, paraquat, sethoxydim	Brad Hanson, Marie Jasieniuk, Caio Brunharo, Parsa Tehranchian
30	2016	*Lolium perenne ssp. multiflorum* Italian Ryegrass	**Multiple Resistance: 4 Sites of Action** ACCase inhibitors (A/1) ALS inhibitors (B/2) EPSP synthase inhibitors (G/9) PSI Electron Diverter (D/22)	clethodim, cyhalofop-butyl, fenoxaprop-P-ethyl, fluazifop-P-butyl, glyphosate, imazamox, mesosulfuron-methyl, paraquat, sethoxydim	Marie Jasieniuk, Maor Matzrafi, Parsa Tehranchian

The table above shows the herbicide resistant weeds in California listed by weed species, common name, year reported, herbicide site of action and contact. California accounts for 247,872 acres of pistachios, essentially 100% of all pistachios produced in the United States. The table shows that resistance of selected weed species also occurs to most herbicide modes-of-action commonly used in orchards in California, with the exception of indaziflam.

The following comment was also noted as an introduction to this listing by Dr. Brad Hanson, Weed Scientist, UC-Davis, in 2014:

"The second broad category is glyphosate-resistant weeds in orchards, vineyards, and associated non-crop areas such as roadsides, canal banks, and field margins. Glyphosate has been the most important herbicide in these areas for several years due to efficacy, economical cost, and a favorable environmental and toxicological profile. In the past decade, several new cases of glyphosate resistance have been documented. The most widespread of these appears to be hairy fleabane which can be found nearly anywhere in the agricultural areas of the state. One important distinction between California and other regions of the US is that our cases of glyphosate-resistance are not primarily associated with Roundup Ready cropping systems but instead with non-crop uses or directed spray applications in woody perennial crops." – Hanson 2014

To date, there have yet to be any reported cases of weed species that have evolved field resistance to group 29 CBIs such as indaziflam.[2] There are currently, however, limited approved herbicides of other modes of activity that are still fully effective for weed control in pistachios and other orchard crops due to resistance verified for Rigid Ryegrass, Horseweed, Junglerice, and Amaranth species to glyphosate (herbicide mode of activity group G/9). In addition, multiple herbicide resistance has been recorded by WSSA in Hairy Fleabane to glyphosate and paraquat (groups G/9, D/22, respectively) and in Italian Ryegrass to commonly used herbicides such as glyphosate, sethoxydim, paraquat, rimsulfuron, and glufosinate (groups G/9, A/1, D/22, B/2, and H/10, respectively). All these weed species are commonly found within and adjacent to orchards, vineyards and citrus groves in California. Indaziflam is commonly applied in tank mixtures and/or rotations with all of the above listed herbicides, or in conjunction with alternate cultural practices to help improve weed control efficacy and prevent the development and spread of resistant weed populations.

> "Glyphosate is considered the world's most important herbicide because it provides broad-spectrum weed control and has favorable environmental characteristics and low mammalian toxicity (Baylis 2000; Woodburn 2000). These characteristics, combined with its cost-effectiveness, have led to frequent applications of glyphosate in perennial cropping systems and non-crop areas in California (Shrestha et al. 2007). However, reliance on herbicides with the same mode of action for extended periods can contribute to weed shifts and the selection of biotypes with resistance to herbicides (Christoffers 1999; Holt 1992) (see page 86). As a result of this selection pressure, cases of glyphosate-resistant rigid rye-grass (*Lolium rigidum*) (Heap 2008; Simarmata et al. 2005) and horse-weed (Shrestha et al. 2007) have been reported in California orchards and non-crop areas, respectively." – Shrestha et.al.[3]

4.2.2 Indaziflam use in pistachio for the control of weed biotypes resistant to glyphosate, triazines, ALS-inhibiting, growth regulant, or other herbicide modes of action satisfies *Criterion IV: The minor use pesticide plays or will play a significant part in an integrated pest (weed) management program.*

Indaziflam can be used as an important component of Integrated Pest Management. In addition to key IPM program components such as weed scouting, weed identification, mowing, tillage, and other cultural practices, chemical controls can provide an efficient and effective option to boost the productivity of their crop.(ref Appendix 7) As a pre-emergent weed management tool, it offers growers an additional option for weed management practices on their farm. Due to the limited effective herbicide options available in this minor crop, the availability of indaziflam is a critical component of the success of IPM programs for growers. An example of an IPM program that includes indaziflam is shown in Appendix 7 for citrus crops, however similar practices are implemented by growers of pistachio.

4.3 References

[1] United States Department of Agriculture – National Agricultural statistics Service. 2017. https://www.nass.usda.gov/Statistics_by_Subject/index.php?sector=CROPS

[2] Heap I (2014) The international survey of herbicide resistant weeds. May 5, 2014. http://www.weedscience.org, http://weedscience.org/Summary/Country.aspx?CountryID=45

[3]Glyphosate-resistant hairy fleabane documented in the Central Valley. 2008. A. Shrestha, B. Hanson and K. Hembree. http://CaliforniaAgriculture.ucop.edu • July–September 2008

5.0 Justification of the Need for Indaziflam to Control Key Weeds in Lemons

5.1 Lemon Acreage

The USDA National Agricultural Statistics Service indicates lemons are an important U.S. crop with production in the states of Arizona, California, Florida, Hawaii, Louisiana, and Texas. In 2012 the U.S acreage for bearing lemons was reported by the USDA to be 7,117 acres in Arizona, 51,472 acres in California, 124 acres in Florida, 113 acres in Hawaii, 17 acres in Louisiana, and 148 acres in Texas. The 59,001 bearing acres of lemons reported in 2017 is lower than 300,000 acres per year (Table 1).[1]

5.2 Exclusive Use Data Protection Criteria Indaziflam Satisfies in Lemons

5.2.1 The Indaziflam use in lemons for the control of weed biotypes resistant to glyphosate, triazines, ALS-inhibiting, growth regulant, or other herbicide modes of action satisfies *Criterion III: The minor use pesticide plays or will play a significant part in managing pest resistance.*

Herbicide Resistant Weeds in California, United States.					
#	Year	Species	Site of Action	Actives	Contacts
1	1981	*Senecio vulgaris* Common Groundsel	Photosystem II inhibitors (C1/5)	atrazine	Jodie Holt
2	1989	*Lolium perenne* Perennial Ryegrass	ALS inhibitors (B/2)	sulfometuron-methyl	Leonard Saari, Josephine Cotterman
3	1993	*Sagittaria montevidensis* California Arrowhead	ALS inhibitors (B/2)	bensulfuron-methyl	Michael Carriere
4	1993	*Cyperus difformis* Smallflower Umbrella Sedge	ALS inhibitors (B/2)	bensulfuron-methyl	Michael Carriere
5	1994	*Salsola tragus* Russian-thistle	ALS inhibitors (B/2)	chlorsulfuron, sulfometuron-methyl	Timothy Prather, Jodie Holt
6	1996	*Avena fatua* Wild Oat	Cell elongation inhibitors (Z/8)	difenzoquat	Steve Orloff, Jodie Holt
7	1997	*Ammannia auriculata* Eared Redstem	ALS inhibitors (B/2)	bensulfuron-methyl	Jim Hill
8	1997	*Schoenoplectus mucronatus (=Scirpus mucronatus)* Ricefield Bulrush	ALS inhibitors (B/2)	bensulfuron-methyl	Jim Hill
9	1998	*Echinochloa phyllopogon (=E. oryzicola)* Late Watergrass	ACCase inhibitors (A/1)	fenoxaprop-P-ethyl	Albert Fischer
10	1998	*Lolium rigidum* Rigid Ryegrass	EPSP synthase inhibitors (G/9)	glyphosate	Thomas Lanini : retired, Brad Hanson, Marie Jasieniuk
11	1998	*Echinochloa phyllopogon (=E. oryzicola)* Late Watergrass	Lipid Inhibitors (N/8)	thiobencarb = benthiocarb	Albert Fischer
12	2000	*Echinochloa oryzoides* Early Watergrass	Lipid Inhibitors (N/8)	molinate, thiobencarb = benthiocarb	Albert Fischer
13	2000	*Ammannia coccinea* Redstem	ALS inhibitors (B/2)	bensulfuron-methyl	Jim Hill
14	2000	*Echinochloa crus-galli var. crus-galli* Barnyardgrass	**Multiple Resistance: 2 Sites of Action** ACCase inhibitors (A/1) Lipid Inhibitors (N/8)	cyhalofop-butyl, fenoxaprop-P-ethyl, molinate, thiobencarb = benthiocarb	Albert Fischer
15	2000	*Echinochloa phyllopogon (=E. oryzicola)* Late Watergrass	**Multiple Resistance: 2 Sites of Action** ACCase inhibitors (A/1) Lipid Inhibitors (N/8)	cyhalofop-butyl, fenoxaprop-P-ethyl, molinate, thiobencarb = benthiocarb	Albert Fischer
16	2001	*Phalaris minor* Little seed Canary grass	ACCase inhibitors (A/1)	clethodim, fenoxaprop-P-ethyl, fluazifop-P-butyl, sethoxydim	Joseph Di Tomaso

17	2002	*Digitaria ischaemum* Smooth Crabgrass	Synthetic Auxins (O/4)	quinclorac	Albert Fischer
18	2005	*Conyza canadensis* Horseweed	EPSP synthase inhibitors (G/9)	glyphosate	Brad Hanson, Anil Shrestha, Kurt Hembree, Steve Wright
19	2007	*Conyza bonariensis* Hairy Fleabane	EPSP synthase inhibitors (G/9)	glyphosate	Brad Hanson, Anil Shrestha, Kurt Hembree, Marcelo L. Moretti
20	2008	*Echinochloa colona* Junglerice	EPSP synthase inhibitors (G/9)	glyphosate	Albert Fischer, Thomas Lanini : retired, Brad Hanson, Steve Wright
21	2008	*Lolium perenne ssp. multiflorum* Italian Ryegrass	EPSP synthase inhibitors (G/9)	glyphosate	Marie Jasieniuk
22	2009	*Conyza bonariensis* Hairy Fleabane	**Multiple Resistance: 2 Sites of Action** EPSP synthase inhibitors (G/9) PSI Electron Diverter (D/22)	glyphosate, paraquat	Brad Hanson, Anil Shrestha, Kurt Hembree, Steve Wright, Marcelo L. Moretti
23	2013	*Cyperus difformis* Smallflower Umbrella Sedge	PSII inhibitor (Ureas and amides) (C2/7)	propanil	Albert Fischer, Rafael Pedroso
24	2013	*Poa annua* Annual Bluegrass	EPSP synthase inhibitors (G/9)	glyphosate	Brad Hanson, Marcelo L. Moretti
25	2014	*Schoenoplectus mucronatus (=Scirpus mucronatus)* Ricefield Bulrush	PSII inhibitor (Ureas and amides) (C2/7)	propanil	Albert Fischer, Rafael Pedroso
26	2014	*Conyza canadensis* Horseweed	**Multiple Resistance: 2 Sites of Action** EPSP synthase inhibitors (G/9) PSI Electron Diverter (D/22)	glyphosate, paraquat	Brad Hanson, Marcelo L. Moretti
27	2015	*Amaranthus palmeri* Palmer Amaranth	EPSP synthase inhibitors (G/9)	glyphosate	Brad Hanson, Anil Shrestha, Steve Wright, Jorge Angeles, Samikshya Budhathoki , Mala To, Sonia Rios
28	2015	*Lolium perenne ssp. multiflorum* Italian Ryegrass	Glutamine synthase inhibitors (H/10)	glufosinate-ammonium	Marie Jasieniuk, Parsa Tehranchian
29	2015	*Lolium perenne ssp. multiflorum* Italian Ryegrass	**Multiple Resistance: 3 Sites of Action** ACCase inhibitors (A/1) EPSP synthase inhibitors (G/9) PSI Electron Diverter (D/22)	glyphosate, paraquat, sethoxydim	Brad Hanson, Marie Jasieniuk, Caio Brunharo, Parsa Tehranchian
30	2016	*Lolium perenne ssp. multiflorum* Italian Ryegrass	**Multiple Resistance: 4 Sites of Action** ACCase inhibitors (A/1) ALS inhibitors (B/2) EPSP synthase inhibitors (G/9) PSI Electron Diverter (D/22)	clethodim, cyhalofop-butyl, fenoxaprop-P-ethyl, fluazifop-P-butyl, glyphosate, imazamox, mesosulfuron-methyl, paraquat, sethoxydim	Marie Jasieniuk, Maor Matzrafi, Parsa Tehranchian

The table above, copied from the Weed Science Society of America (WSSA) website for "International Survey of Herbicide Resistance Weeds" [2] shows the herbicide weeds in California listed by weed species, common name, year reported, herbicide site of action and contact. California accounts for 87% of the lemons produced in the United States.
The table also shows that resistance of selected weed species occurs to most herbicide modes-of-action commonly used in California, with the exception of indaziflam.

The following comment was also noted as an introduction to this listing by Dr. Brad Hanson, Weed Scientist, UC-Davis, in 2014:

"The second broad category is glyphosate-resistant weeds in orchards, vineyards, and associated non-crop areas such as roadsides, canal banks, and field margins. Glyphosate has been the most important herbicide in these areas for several years due to efficacy, economical cost, and a favorable environmental and toxicological profile. In the past decade, several new cases of glyphosate resistance have been documented. The most widespread of these

appears to be hairy fleabane which can be found nearly anywhere in the agricultural areas of the state. One important distinction between California and other regions of the US is that our cases of glyphosate-resistance are not primarily associated with Roundup Ready cropping systems but instead with non-crop uses or directed spray applications in woody perennial crops." – Hanson 2014

To date, there have yet to be any reported cases of weed species that have evolved field resistance to CBIs (Cellulose Biosynthesis Inhibitor) such as indaziflam.[2] There are currently, however, limited approved herbicides of other modes of activity that are still fully effective for weed control in lemon orchards and other orchard crops due to resistance verified for Rigid Ryegrass, Horseweed, Junglerice, and Amaranth species to glyphosate (herbicide mode of activity group G/9). In addition, multiple herbicide resistance has been recorded by WSSA in Hairy Fleabane to glyphosate and paraquat (groups G/9, D/22, respectively) and in Italian Ryegrass to commonly used herbicides such as glyphosate, sethoxydim, paraquat, rimsulfuron, and glufosinate (groups G/9, A/1, D/22, B/2, and H/10, respectively). All these weed species are commonly found within and adjacent to orchards, vineyards and citrus groves in California. Indaziflam is commonly applied in tank mixtures and/or rotations with all of the above listed herbicides, or in conjunction with alternate cultural practices to help improve weed control efficacy and prevent the development and spread of resistant weed populations.

> "As a CBI, for which there is little evidence of evolved weed resistance, indaziflam represents an important addition to the action mechanisms available for weed management". – Brabham et. al.[3]
>
> "Overall, indaziflam and oxadiazon provided good (80 to 89%) to excellent control of dna-resistant goosegrass in both years, but dimethenamid and sulfentrazone were inconsistent." – McCullough et. al.[4]
>
> "It is concluded that saflufenacil can be tank mixed with glufosinate for control of broadleaf and grass weeds; however, addition of indaziflam in tank mixture provided long-term, broad-spectrum weed control in Florida citrus compared with other treatments." – Jhala et. al.[5]
>
> "Soil organic matter (SOM) explained the highest proportion of variability in predicting the herbicide dose required for 80% *Kochia* growth reduction (GR80) for flumioxazin and indaziflam (R2 =0.72 and 0.79 respectively)." – Sebastian et.al.[6]
>
> "All three biotypes (of Goosegrass (*Eleusine indica*) Biotypes Resistant to Preemergence-Applied Oxadiazon) were completely controlled by preemergence applied labeled rates of prodiamine and indaziflam. This is the first peer-reviewed report of evolved weed resistance to oxadiazon." – McElroy et. al.[7]
>
> "Glyphosate is considered the world's most important herbicide because it provides broad-spectrum weed control and has favorable environmental characteristics and low mammalian toxicity (Baylis 2000; Woodburn 2000). These characteristics, combined with its cost-effectiveness, have led to frequent applications of glyphosate in perennial cropping systems and non-crop areas in California (Shrestha et al. 2007). However, reliance on herbicides with the same mode of action for extended periods can contribute to weed shifts and the selection of biotypes with resistance to herbicides

(Christoffers 1999; Holt 1992) (see page 86). As a result of this selection pressure, cases of glyphosate-resistant rigid rye-grass (*Lolium rigidum*) (Heap 2008; Simarmata et al. 2005) and horse-weed (Shrestha et al. 2007) have been reported in California orchards and non-crop areas, respectively." – Shrestha et.al.[8]

5.2.2 Indaziflam use in lemons for the control of weed biotypes resistant to glyphosate, triazines, ALS-inhibiting, growth regulant, or other herbicide modes of action satisfies *Criterion IV: The minor use pesticide plays or will play a significant part in an integrated pest (weed) management program.*

Indaziflam can be used as an important component of Integrated Pest Management. In addition to key IPM program components such as weed scouting, weed identification, mowing, tillage, and other cultural practices, chemical controls can provide an efficient and effective option to boost the productivity of their crop.(ref Appendix 7) As a pre-emergent weed management tool, it offers growers an additional option for weed management practices on their farm. Due to the limited effective herbicide options available in this minor crop, the availability of indaziflam is a critical component of the success of IPM programs for growers. An example of an IPM program that includes indaziflam is shown in Appendix 7 for citrus crops.

5.3 References

[1.] United States Department of Agriculture – National Agricultural statistics Service. 2017. https://www.nass.usda.gov/Statistics_by_Subject/index.php?sector=CROPS

[2.] Heap I (2014) The international survey of herbicide resistant weeds. May 5, 2014. http://www.weedscience.org, http://weedscience.org/Summary/Country.aspx?CountryID=45

[3.] Indaziflam Herbicidal Action: A Potent Cellulose Biosynthesis Inhibitor. C. Brabham, Lei Lei, Ying Gu, J. Stork, M. Barrett, S. DeBolt. 2014. Plant Physiol. 166, pp. 1177-1185.

[4.] Efficacy of Preemergence Herbicides for Controlling a Dinitroaniline-Resistant Goosegrass (Eleusine indica) in Georgia. Patrick E. McCullough, Jialin Yu, and Diego G´omez de Barreda. 2013. Weed Technology 27:639–644.

[5] Tank Mixing Saflufenacil, Glufosinate, and Indaziflam Improved Burndown and Residual Weed Control. Amit J. Jhala, Analiza H. M. Ramirez, and Megh Singh. 2013. Weed Technology 27:422–429

[6.] Influence of soil properties and soil moisture on the efficacy of indaziflam and flumioxazin on *Kocia scoparia* L. D. Sebastian, S. Nissen, P. Westra, D. Shaner, G. Butters. 2017. Pest Manag Sci; 73: 444–451.

[7.] Identification of Goosegrass (Eleusine indica) Biotypes Resistant to Preemergence-Applied Oxadiazon. J. Scott McElroy, William B. Head, Glenn R. Wehtje, and David Spak. 2017. Weed Technology 31:675–681.

[8] Glyphosate-resistant hairy fleabane documented in the Central Valley. 2008. A. Shrestha, B. Hanson and K. Hembree. http://CaliforniaAgriculture.ucop.edu • July–September 2008

6.0 Justification of the Need for Indaziflam to Control Key weeds in Pears

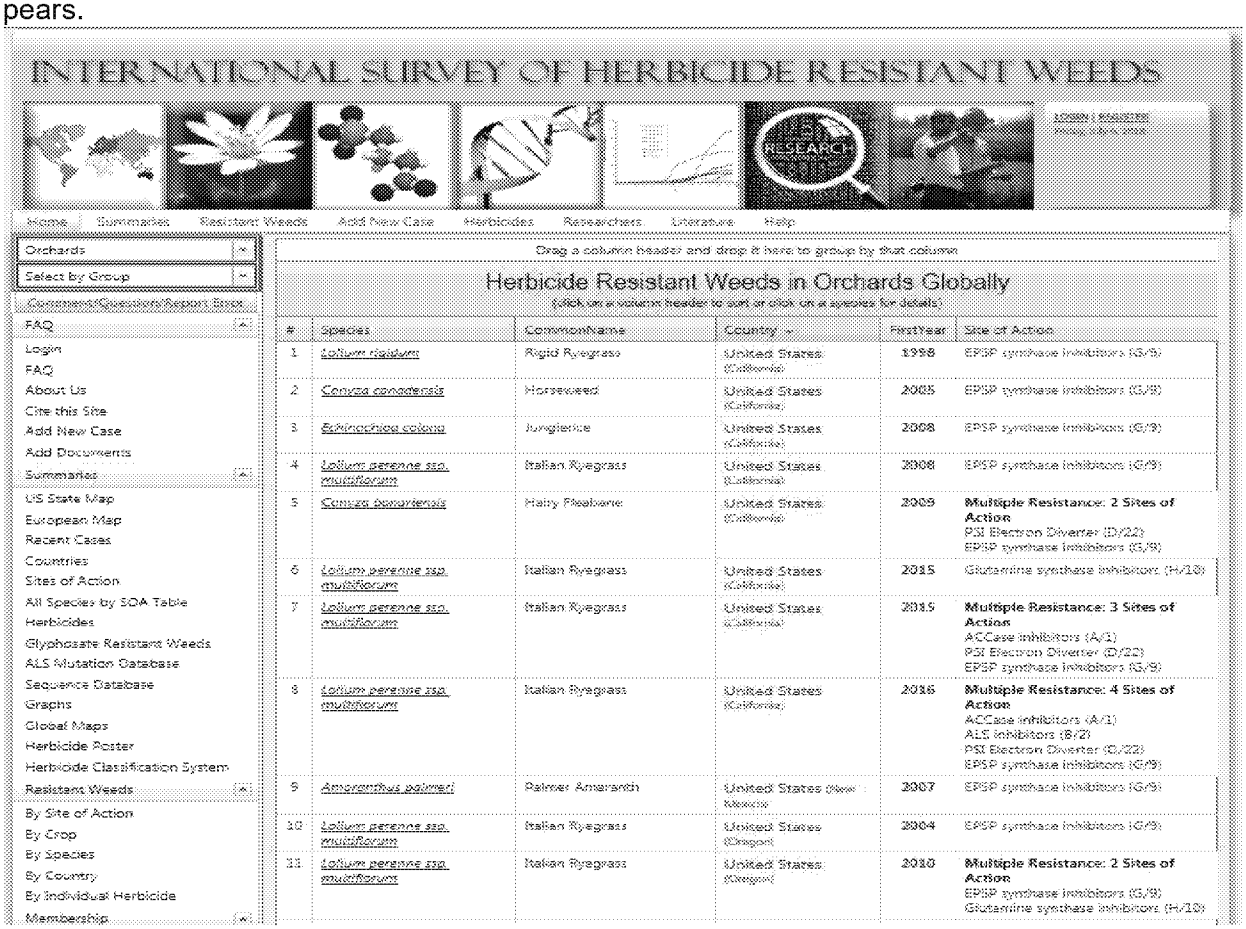
6.1 Pear Acreage

The USDA National Agricultural Statistics Service indicates pears are an important U.S. crop in the states of California, Michigan, New York, Oregon, Pennsylvania, and Washington. In 2015 the U.S acreage for bearing pears was reported by the USDA to be 10,377 acres in California, 584 acres in Michigan, 710 acres in New York, 15,702 acres in Oregon, 757 acres in Pennsylvania, and 20,033 acres in Washington. The total of 51,435 bearing acres of pears reported in 2017 is lower than 300,000 acres per year (Table 1).[1]

6.2 Exclusive Use Data Protection Criteria Indaziflam Satisfies in Pears

6.2.1 The Indaziflam use in pears for the control of weed biotypes resistant to glyphosate, triazines, ALS-inhibiting, growth regulant, or other herbicide modes of action satisfies *Criterion III: The minor use pesticide plays or will play a significant part in managing pest resistance.*

The table below, copied from the Weed Science Society of America (WSSA) website for "International Survey of Herbicide Resistant Weeds"[2] shows the listings for the United States of weed species, common name, states of occurrence (California and Oregon), year reported, and herbicide site of action for weeds located in **orchards**, such as pear orchards, in California and Oregon. California accounts for 10,377 acres and Oregon 15,702 acres of pears.



The additional listing below for “Herbicide Resistant Weeds in Washington, United States” (46,300 acres of bearing pears) shows that resistance of selected weed species also occurs to most herbicide modes-of-action commonly used in orchards in that state, with the exception of indaziflam. The resistant weeds in this list have the potential to develop in Washington pear orchards.

Herbicide Resistant Weeds in Washington, United States.					
#	Year	Species	Site of Action	Actives	Contacts
1	1970	*Senecio vulgaris* Common Groundsel	Photosystem II inhibitors (C1/5)	simazine	Rick Boydston
2	1987	*Salsola tragus* Russian-thistle	ALS inhibitors (B/2)	chlorsulfuron	Donn Thill
3	1988	*Centaurea solstitialis* Yellow Starthistle	Synthetic Auxins (O/4)	picloram	Steven Seefeldt
4	1989	*Kochia scoparia* Kochia	ALS inhibitors (B/2)	chlorsulfuron	Steven Seefeldt
5	1991	*Avena fatua* Wild Oat	ACCase inhibitors (A/1)	diclofop-methyl, fenoxaprop-P-ethyl, pinoxaden, quizalofop-P-ethyl, sethoxydim	Steven Seefeldt, Ahmet Uludag
6	1992	*Amaranthus powellii* Powell Amaranth	Photosystem II inhibitors (C1/5)	terbacil	Kassim Al-Khatib, Rick Boydston
7	1993	*Lactuca serriola* Prickly Lettuce	ALS inhibitors (B/2)	chlorsulfuron	Steven Seefeldt
8	2000	*Sonchus asper* Spiny Sowthistle	ALS inhibitors (B/2)	imazamox, thifensulfuron-methyl	Kee-Woong Park
9	2007	*Lactuca serriola* Prickly Lettuce	Synthetic Auxins (O/4)	2,4-D, dicamba, MCPA	Ian Burke
10	2010	*Amaranthus retroflexus* Redroot Pigweed	Photosystem II inhibitors (C1/5)	metribuzin, terbacil	Rick Boydston
11	2010	*Chenopodium album* Common Lambsquarters	Photosystem II inhibitors (C1/5)	metribuzin, terbacil	Rick Boydston
12	2010	*Anthemis cotula* Mayweed Chamomile	ALS inhibitors (B/2)	cloransulam-methyl, imazethapyr, thifensulfuron-methyl, tribenuron-methyl	Alejandro Perez-Jones, Carol Mallory-Smith
13	2015	*Salsola tragus* Russian-thistle	EPSP synthase inhibitors (G/9)	glyphosate	Ian Burke, Prashant Jha, Vipan Kumar, Drew Lyon
14	2018	*Lolium perenne ssp. multiflorum* Italian Ryegrass	Long chain fatty acid inhibitors (K3/15)	flufenacet	Alberto Collavo, Roland Beffa

The tables below show the herbicide resistant weeds found in New York, Pennsylvania and Michigan. Since herbicides with the modes of action shown in the list are commonly used in pear orchards, the resistant weeds have the potential to develop in pear orchards.

Herbicide Resistant Weeds in New York, United States.

#	Year	Species	Site of Action	Actives	Contacts
1	1977	*Chenopodium album* Common Lambsquarters	Photosystem II inhibitors (C1/5)	atrazine, cyanazine, simazine	Russell Hahn
2	1980	*Amaranthus hybridus (syn: quitensis)* Smooth Pigweed	Photosystem II inhibitors (C1/5)	atrazine, metribuzin, simazine	Russell Hahn
3	1991	*Senecio vulgaris* Common Groundsel	Photosystem II inhibitors (C1/5)	atrazine, simazine	Russell Hahn
4	1993	*Ambrosia artemisiifolia* Common Ragweed	Photosystem II inhibitors (C1/5)	atrazine, cyanazine, simazine	Russell Hahn

Herbicide Resistant Weeds in Pennsylvania, United States.

#	Year	Species	Site of Action	Actives	Contacts
1	1980	*Chenopodium album* Common Lambsquarters	Photosystem II inhibitors (C1/5)	atrazine	William Curran
2	1980	*Amaranthus hybridus (syn: quitensis)* Smooth Pigweed	Photosystem II inhibitors (C1/5)	atrazine	William Curran
3	1998	*Amaranthus retroflexus* Redroot Pigweed	**Multiple Resistance: 2 Sites of Action** ALS inhibitors (B/2) Photosystem II inhibitors (C1/5)	atrazine, chlorimuron-ethyl, cloransulam-methyl, imazamox, imazaquin, imazethapyr, primisulfuron-methyl, thifensulfuron-methyl	William Curran, Dwight Lingenfelter
4	2001	*Sorghum bicolor* Shattercane	ALS inhibitors (B/2)	imazamox, imazethapyr, nicosulfuron, oxasulfuron, primisulfuron-methyl	William Curran
5	2003	*Conyza canadensis* Horseweed	EPSP synthase inhibitors (G/9)	glyphosate	William Curran
6	2004	*Setaria faberi* Giant Foxtail	ALS inhibitors (B/2)	foramsulfuron, imazamox, nicosulfuron	William Curran
7	2008	*Ambrosia artemisiifolia* Common Ragweed	EPSP synthase inhibitors (G/9)	glyphosate	William Curran, Dwight Lingenfelter
8	2010	*Stellaria media* Common Chickweed	ALS inhibitors (B/2)	pyroxsulam, thifensulfuron-methyl, tribenuron-methyl	William Curran
9	2013	*Amaranthus palmeri* Palmer Amaranth	EPSP synthase inhibitors (G/9)	glyphosate	William Curran, Dwight Lingenfelter

Herbicide Resistant Weeds in Michigan, United States.

#	Year	Species	Site of Action	Actives	Contacts
1	1975	*Chenopodium album* Common Lambsquarters	Photosystem II inhibitors (C1/5)	atrazine, metribuzin, simazine	James Kells, Chad Lee, Steven Gower
2	1990	*Senecio vulgaris* Common Groundsel	Photosystem II inhibitors (C1/5)	atrazine	Donald Penner, Steven Gower
3	1990	*Ambrosia artemisiifolia* Common Ragweed	Photosystem II inhibitors (C1/5)	atrazine	Donald Penner, Steven Gower
4	1991	*Portulaca oleracea* Common Purslane	**Multiple Resistance: 2 Sites of Action** Photosystem II inhibitors (C1/5) PSII inhibitor (Ureas and amides) (C2/7)	atrazine, linuron	Bernard Zandstra, Joseph G. Masabni, Steven Gower
5	1993	*Daucus carota* Wild Carrot	Synthetic Auxins (O/4)	2,4-D	James Kells, Jeff Stachler
6	1998	*Ambrosia artemisiifolia* Common Ragweed	ALS inhibitors (B/2)	cloransulam-methyl, imazamox, imazethapyr	Paul Schmitzer, Steven Gower
7	2000	*Amaranthus tuberculatus (=A. rudis)* Tall Waterhemp	ALS inhibitors (B/2)	chlorimuron-ethyl, imazethapyr, thifensulfuron-methyl	Steven Gower
8	2001	*Amaranthus powellii* Powell Amaranth	**Multiple Resistance: 2 Sites of Action** Photosystem II inhibitors (C1/5) PSII inhibitor (Ureas and amides) (C2/7)	atrazine, diuron	Steven Gower
9	2001	*Amaranthus retroflexus* Redroot Pigweed	**Multiple Resistance: 2 Sites of Action** Photosystem II inhibitors (C1/5) PSII inhibitor (Ureas and amides) (C2/7)	atrazine, diuron	Steven Gower
10	2001	*Polygonum persicaria* Ladysthumb	Photosystem II inhibitors (C1/5)	atrazine, simazine	Steven Gower
11	2001	*Chenopodium album* Common Lambsquarters	ALS inhibitors (B/2)	imazamox, thifensulfuron-methyl	Donald Penner, Steven Gower
12	2002	*Amaranthus hybridus (syn: quitensis)* Smooth Pigweed	ALS inhibitors (B/2)	chlorimuron-ethyl, imazamox, thifensulfuron-methyl	Steven Gower
13	2002	*Conyza canadensis* Horseweed	ALS inhibitors (B/2)	chlorimuron-ethyl, cloransulam-methyl	Steven Gower
14	2002	*Conyza canadensis* Horseweed	**Multiple Resistance: 2 Sites of Action** Photosystem II inhibitors (C1/5) PSII inhibitor (Ureas and amides) (C2/7)	atrazine, diuron, simazine	Steven Gower
15	2002	*Conyza canadensis* Horseweed	PSII inhibitor (Ureas and amides) (C2/7)	diuron	Steven Gower
16	2003	*Atriplex patula* Halberdleaf Orach	Photosystem II inhibitors (C1/5)	atrazine	Steven Gower
17	2004	*Solanum ptycanthum* Eastern Black Nightshade	Photosystem II inhibitors (C1/5)	atrazine	Steven Gower

18	2004	*Chenopodium album var. striatum (=C. strictum var. glaucophyllum)* Lateflowering Goosefoot	Photosystem II inhibitors (C1/5)	atrazine	Steven Gower
19	2004	*Abutilon theophrasti* Velvetleaf	Photosystem II inhibitors (C1/5)	atrazine	Steven Gower
20	2005	*Kochia scoparia* Kochia	ALS inhibitors (B/2)	imazamox, trifloxsulfuron-methyl	Steven Gower
21	2006	*Setaria faberi* Giant Foxtail	ALS inhibitors (B/2)	foramsulfuron, imazethapyr, nicosulfuron	Steven Gower
22	2007	*Conyza canadensis* Horseweed	EPSP synthase inhibitors (G/9)	glyphosate	Steven Gower
23	2011	*Amaranthus palmeri* Palmer Amaranth	EPSP synthase inhibitors (G/9)	glyphosate	Christy Sprague
24	2012	*Amaranthus blitoides* Prostrate Pigweed	Photosystem II inhibitors (C1/5)	terbacil	Bernard Zandstra, Rick Boydston
25	2016	*Ambrosia artemisiifolia* Common Ragweed	**Multiple Resistance: 2 Sites of Action** ALS inhibitors (B/2) PPO inhibitors (E/14)	cloransulam-methyl, fomesafen	Erin Hill

To date, there have yet to be any reported cases of weed species that have evolved field resistance to group 29 CBIs such as indaziflam.[2] There are currently, however, limited approved herbicides of other modes of activity that are still fully effective for weed control in pears and other orchard crops due to resistance verified for Rigid Ryegrass, Horseweed, Junglerice, and Amaranth species to glyphosate (herbicide mode of activity group G/9). In addition, multiple herbicide resistance has been recorded by WSSA in Hairy Fleabane to glyphosate and paraquat (groups G/9, D/22, respectively) and in Italian Ryegrass to commonly used herbicides such as glyphosate, sethoxydim, paraquat, rimsulfuron, and glufosinate (groups G/9, A/1, D/22, B/2, and H/10, respectively). All these weed species are commonly found within and adjacent to orchards, vineyards and citrus groves in the states where pears are grown. Indaziflam is commonly applied in tank mixtures and/or rotations with all of the above listed herbicides, or in conjunction with alternate cultural practices to help improve weed control efficacy and prevent the development and spread of resistant weed populations.

> "As a CBI, for which there is little evidence of evolved weed resistance, indaziflam represents an important addition to the action mechanisms available for weed management". – Brabham et. al.[3]

> "Overall, indaziflam and oxadiazon provided good (80 to 89%) to excellent control of dna-resistant goosegrass in both years, but dimethenamid and sulfentrazone were inconsistent." – McCullough et. al.[4]

> "It is concluded that saflufenacil can be tank mixed with glufosinate for control of broadleaf and grass weeds; however, addition of indaziflam in tank mixture provided long-term, broad-spectrum weed control in Florida citrus compared with other treatments." – Jhala et. al.[5]

"Soil organic matter (SOM) explained the highest proportion of variability in predicting the herbicide dose required for 80% *Kochia* growth reduction (GR80) for flumioxazin and indaziflam (R2 =0.72 and 0.79 respectively)." – Sebastian et.al.[6]

"All three biotypes (of Goosegrass (*Eleusine indica*) Biotypes Resistant to Preemergence-Applied Oxadiazon) were completely controlled by preemergence applied labeled rates of prodiamine and indaziflam. This is the first peer-reviewed report of evolved weed resistance to oxadiazon." – McElroy et. al.[7]

"New herbicide products today tend to be premixed formulations of existing actives with known modes of action, new salts and esters or new actives with minor chemical modifications that claim to improve weed efficacy and spectrum, crop safety, reduced rates and/or soil residual activity. Recent examples of such advancements include the synthetic auxins aminocylcopyrachlor and halauxifen-methyl, the ACCase inhibitor pinoxaden, the PPO inhibitor saflufenacil, the HPPD inhibitors bicyclopyrone, tembotrione and pyrasulfotole, the ALS inhibitor trifamone, the cellulose biosynthesis inhibitor (CBI) indaziflam and very-long-chain fatty acid (VLCFA) inhibitors pyroxasulfone and fenoxasulfone." – Green.[8]

"Glyphosate is considered the world's most important herbicide because it provides broad-spectrum weed control and has favorable environmental characteristics and low mammalian toxicity (Baylis 2000; Woodburn 2000). These characteristics, combined with its cost-effectiveness, have led to frequent applications of glyphosate in perennial cropping systems and non-crop areas in California (Shrestha et al. 2007). However, reliance on herbicides with the same mode of action for extended periods can contribute to weed shifts and the selection of biotypes with resistance to herbicides (Christoffers 1999; Holt 1992) (see page 86). As a result of this selection pressure, cases of glyphosate-resistant rigid rye-grass (*Lolium rigidum*) (Heap 2008; Simarmata et al. 2005) and horse-weed (Shrestha et al. 2007) have been reported in California orchards and non-crop areas, respectively." – Shrestha et.al.[9]

An accession of *Camelina microcarpa* suspected to be resistant to sulfonylurea herbicides was identified in Oregon in 1998 field experiments. Greenhouse research confirmed that the putative resistant biotype was resistant to chlorsulfuron and metsulfuron on a whole plant level. Compared with the resistant (R) biotype, the susceptible (S) biotype was 1000 and 10,000-fold more sensitive to metsulfuron and chlorsulfuron respectively. The R biotype was also resistant to other sulfonylurea, sulfonylaminocarbonyl-triazolinone, imidazolinone and triazolopyrimidine herbicides. – Hanson et.al.[10]

6.2.2 Indaziflam use in pears for the control of weed biotypes resistant to glyphosate, triazines, ALS-inhibiting, growth regulant, or other herbicide modes of action satisfies *Criterion IV: The minor use pesticide plays or will play a significant part in an integrated pest (weed) management program.*

Indaziflam can be used as an important component of Integrated Pest Management. In addition to key IPM program components such as weed scouting, weed identification, mowing, tillage, and other cultural practices, chemical controls can provide an efficient and effective option to boost the productivity of their crop.(ref Appendix 7) As a pre-emergent weed management tool, it offers growers an additional option for weed management practices on

their farm. Due to the limited effective herbicide options available in this minor crop, the availability of indaziflam is a critical component of the success of IPM programs for growers. An example of an IPM program that includes indaziflam is shown in Appendix 7 for citrus crops, however similar practices are implemented by growers of pears.

6.3 References

[1.] United States Department of Agriculture – National Agricultural statistics Service. 2017. https://www.nass.usda.gov/Statistics_by_Subject/index.php?sector=CROPS

[2.] Heap I (2014) The international survey of herbicide resistant weeds. May 5, 2014. http://www.weedscience.org, http://weedscience.org/Summary/Country.aspx?CountryID=45

[3.] Indaziflam Herbicidal Action: A Potent Cellulose Biosynthesis Inhibitor. C. Brabham, Lei Lei, Ying Gu, J. Stork, M. Barrett, S. DeBolt. 2014. Plant Physiol. 166, pp. 1177-1185.

[4.] Efficacy of Preemergence Herbicides for Controlling a Dinitroaniline-Resistant Goosegrass (Eleusine indica) in Georgia. Patrick E. McCullough, Jialin Yu, and Diego G´omez de Barreda. 2013. Weed Technology 27:639–644.

[5.] Tank Mixing Saflufenacil, Glufosinate, and Indaziflam Improved Burndown and Residual Weed Control. Amit J. Jhala, Analiza H. M. Ramirez, and Megh Singh. 2013. Weed Technology 27:422–429

[6.] Influence of soil properties and soil moisture on the efficacy of indaziflam and flumioxazin on *Kocia scoparia* L. D. Sebastian, S. Nissen, P. Westra, D. Shaner, G. Butters. 2017. Pest Manag Sci; 73: 444–451.

[7.] Identification of Goosegrass (Eleusine indica) Biotypes Resistant to Preemergence-Applied Oxadiazon. J. Scott McElroy, William B. Head, Glenn R. Wehtje, and David Spak. 2017. Weed Technology 31:675–681.

[8.] Current state of herbicides in herbicide-resistant crops. Green, J.M. 2014. Pest Manag Sci 2014; 70: 1351–1357.

[9.] Glyphosate-resistant hairy fleabane documented in the Central Valley. 2008. A. Shrestha, B. Hanson and K. Hembree. http://CaliforniaAgriculture.ucop.edu • July–September 2008

[10.] Resistance of Camelina microcarpa to acetolactate synthase inhibiting herbicides. 2004. B. Hanson, K. Park, C Mallory-Smith and D. Thill. Weed Research 44: 187-194.

7.0 Justification of the Need for Indaziflam to Control Key Weeds in Olives

7.1 Olive Acreage

The USDA National Agricultural Statistics Service indicates olives are an important U.S. crop with production almost exclusively centered in the state of California. In 2017 the U.S acreage for bearing olives was reported by the USDA to be 40,915 acres (39,563 in California) which is lower than 300,000 acres per year (Table 1).[1]

7.2 Exclusive Use Data Protection Criteria Indaziflam Satisfies in Olives

7.2.1 The Indaziflam use in olives for the control of weed biotypes resistant to glyphosate, triazines, ALS-inhibiting, growth regulant, or other herbicide modes of action satisfies *Criterion III: The minor use pesticide plays or will play a significant part in managing pest resistance.*

The table below shows the herbicide resistant weeds in California listed by weed species, common name, year reported, herbicide site of action and contact. California accounts for 39,563 acres of olives, essentially 97% of all olives produced in the United States. The table shows that resistance of selected weed species also occurs to most herbicide modes-of-action commonly used in orchards in California, with the exception of indaziflam.

The following comment was also noted as an introduction to this listing by Dr. Brad Hanson, Weed Scientist, UC-Davis, in 2014:

"The second broad category is glyphosate-resistant weeds in orchards, vineyards, and associated non-crop areas such as roadsides, canal banks, and field margins. Glyphosate has been the most important herbicide in these areas for several years due to efficacy, economical cost, and a favorable environmental and toxicological profile. In the past decade, several new cases of glyphosate resistance have been documented. The most widespread of these appears to be hairy fleabane which can be found nearly anywhere in the agricultural areas of the state. One important distinction between California and other regions of the US is that our cases of glyphosate-resistance are not primarily associated with Roundup Ready cropping systems but instead with non-crop uses or directed spray applications in woody perennial crops." – Hanson 2014

Status of Herbicide Resistance in California - Brad Hanson : January, 2014

Herbicide resistance in California is currently dominated by two patterns of resistance that differ somewhat from the rest of the United States. The first major category is multiple-resistance in a number of sedge and grass weeds of the rice production region of the Sacramento Valley. Rice in these areas is typically grown under flooded conditions and is often in long-term rice monoculture due to soil and water conditions in the area which makes them heavily reliant on herbicides for weed control. These cases tend to be due to non-target site mechanisms or, in some cases, combinations of target site and non-target site mechanisms of resistance, and present a serious challenge to growers. The second broad category is glyphosate-resistant weeds in orchards, vineyards, and associated non-crop areas such as roadsides, canal banks, and field margins. Glyphosate has been the most important herbicide in these areas for several years due to efficacy, economical cost, and a favorable environmental and toxicological profile. In the past decade, several new cases of glyphosate resistance have been documented. The most widespread of these appears to be hairy fleabane which can be found nearly anywhere in the agricultural areas of the state. One important distinction between California and other regions of the US is that our cases of glyphosate-resistance are not primarily associated with Roundup Ready cropping systems but instead with non-crop uses or directed spray applications in woody perennial crops. Roundup Ready crops (cotton, maize, and recently alfalfa) are grown in California and do have some challenges with glyphosate-resistant weeds; however, tillage and irrigation practices seem to have reduced or delayed this problem in comparison to the reduced tillage row crop systems in other parts of the country.

Herbicide Resistant Weeds in California, United States

#	Year	Species	Site of Action	Actives	Contacts
1	1981	*Senecio vulgaris* Common Groundsel	Photosystem II inhibitors (C1/5)	atrazine	Jodie Holt
2	1989	*Lolium perenne* Perennial Ryegrass	ALS inhibitors (B/2)	sulfometuron-methyl	Leonard Saari, Josephine Cotterman
3	1993	*Sagittaria montevidensis* California Arrowhead	ALS inhibitors (B/2)	bensulfuron-methyl	Michael Carriere
4	1993	*Cyperus difformis* Smallflower Umbrella Sedge	ALS inhibitors (B/2)	bensulfuron-methyl	Michael Carriere
5	1994	*Salsola tragus* Russian-thistle	ALS inhibitors (B/2)	chlorsulfuron, sulfometuron-methyl	Timothy Prather, Jodie Holt
6	1996	*Avena fatua* Wild Oat	Cell elongation inhibitors (Z/8)	diflenzoquat	Steve Orloff, Jodie Holt
7	1997	*Ammannia auriculata* Eared Redstem	ALS inhibitors (B/2)	bensulfuron-methyl	Jim Hill
8	1997	*Schoenoplectus mucronatus (=Scirpus mucronatus)* Ricefield Bulrush	ALS inhibitors (B/2)	bensulfuron-methyl	Jim Hill
9	1998	*Echinochloa phyllopogon (=E. oryzicola)* Late Watergrass	ACCase inhibitors (A/1)	fenoxaprop-P-ethyl	Albert Fischer
10	1998	*Lolium rigidum* Rigid Ryegrass	EPSP synthase inhibitors (G/9)	glyphosate	Thomas Lanini : retired, Brad Hanson, Marie Jasieniuk
11	1998	*Echinochloa phyllopogon (=E. oryzicola)* Late Watergrass	Lipid inhibitors (N/8)	thiobencarb = benthiocarb	Albert Fischer
12	2000	*Echinochloa oryzoides* Early Watergrass	Lipid inhibitors (N/8)	molinate, thiobencarb = benthiocarb	Albert Fischer
13	2000	*Ammannia coccinea* Redstem	ALS inhibitors (B/2)	bensulfuron-methyl	Jim Hill

14	2000	*Echinochloa crus-galli var. crus-galli* Barnyardgrass	**Multiple Resistance: 2 Sites of Action** ACCase inhibitors (A/1) Lipid inhibitors (N/8)	cyhalofop-butyl, fenoxaprop-P-ethyl, molinate, thiobencarb = benthiocarb	Albert Fischer
15	2000	*Echinochloa phyllopogon (=E. oryzicola)* Late Watergrass	**Multiple Resistance: 2 Sites of Action** ACCase inhibitors (A/1) Lipid inhibitors (N/8)	cyhalofop-butyl, fenoxaprop-P-ethyl, molinate, thiobencarb = benthiocarb	Albert Fischer
16	2001	*Phalaris minor* Little seed Canary grass	ACCase inhibitors (A/1)	clethodim, fenoxaprop-P-ethyl, fluazifop-P-butyl, sethoxydim	Joseph Di Tomaso
17	2002	*Digitaria ischaemum* Smooth Crabgrass	Synthetic Auxins (O/4)	quinclorac	Albert Fischer
18	2005	*Conyza canadensis* Horseweed	EPSP synthase inhibitors (G/9)	glyphosate	Brad Hanson, Anil Shrestha, Kurt Hembree, Steve Wright
19	2007	*Conyza bonariensis* Hairy Fleabane	EPSP synthase inhibitors (G/9)	glyphosate	Brad Hanson, Anil Shrestha, Kurt Hembree, Marcelo L. Moretti
20	2008	*Echinochloa colona* Junglerice	EPSP synthase inhibitors (G/9)	glyphosate	Albert Fischer, Thomas Lanini : retired, Brad Hanson, Steve Wright
21	2008	*Lolium perenne ssp. multiflorum* Italian Ryegrass	EPSP synthase inhibitors (G/9)	glyphosate	Marie Jasieniuk
22	2009	*Conyza bonariensis* Hairy Fleabane	**Multiple Resistance: 2 Sites of Action** EPSP synthase inhibitors (G/9) PSI Electron Diverter (D/22)	glyphosate, paraquat	Brad Hanson, Anil Shrestha, Kurt Hembree, Steve Wright, Marcelo L. Moretti
23	2013	*Cyperus difformis* Smallflower Umbrella Sedge	PSII inhibitor (Ureas and amides) (C2/7)	propanil	Albert Fischer, Rafael Pedroso
24	2013	*Poa annua* Annual Bluegrass	EPSP synthase inhibitors (G/9)	glyphosate	Brad Hanson, Marcelo L. Moretti
25	2014	*Schoenoplectus mucronatus (=Scirpus mucronatus)* Ricefield Bulrush	PSII inhibitor (Ureas and amides) (C2/7)	propanil	Albert Fischer, Rafael Pedroso
26	2014	*Conyza canadensis* Horseweed	**Multiple Resistance: 2 Sites of Action** EPSP synthase inhibitors (G/9) PSI Electron Diverter (D/22)	glyphosate, paraquat	Brad Hanson, Marcelo L. Moretti
27	2015	*Amaranthus palmeri* Palmer Amaranth	EPSP synthase inhibitors (G/9)	glyphosate	Brad Hanson, Anil Shrestha, Steve Wright, Jorge Angales, Samikshya Budhathoki , Maia Tio, Sonia Rios
28	2015	*Lolium perenne ssp. multiflorum* Italian Ryegrass	Glutamine synthase inhibitors (H/10)	glufosinate-ammonium	Marie Jasieniuk, Parsa Tehranchian
29	2015	*Lolium perenne ssp. multiflorum* Italian Ryegrass	**Multiple Resistance: 3 Sites of Action** ACCase inhibitors (A/1) EPSP synthase inhibitors (G/9) PSI Electron Diverter (D/22)	glyphosate, paraquat, sethoxydim	Brad Hanson, Marie Jasieniuk, Caio Brunharo, Parsa Tehranchian
30	2016	*Lolium perenne ssp. multiflorum* Italian Ryegrass	**Multiple Resistance: 4 Sites of Action** ACCase inhibitors (A/1) ALS inhibitors (B/2) EPSP synthase inhibitors (G/9) PSI Electron Diverter (D/22)	clethodim, cyhalofop-butyl, fenoxaprop-P-ethyl, fluazifop-P-butyl, glyphosate, imazamox, mesosulfuron-methyl, paraquat, sethoxydim	Marie Jasieniuk, Maor Matzrafi, Parsa Tehranchian

To date, there have yet to be any reported cases of weed species that have evolved field resistance to CBIs such as indaziflam[2]. There are currently, however, limited approved herbicides of other modes of activity that are still fully effective for weed control in olives and

other orchard crops due to resistance verified for Rigid Ryegrass, Horseweed, Junglerice, and Amaranth species to glyphosate (herbicide mode of activity group G/9). In addition, multiple herbicide resistance has been recorded by WSSA in Hairy Fleabane to glyphosate and paraquat (groups G/9, D/22, respectively) and in Italian Ryegrass to commonly used herbicides such as glyphosate, sethoxydim, paraquat, rimsulfuron, and glufosinate (groups G/9, A/1, D/22, B/2, and H/10, respectively). All these weed species are commonly found within and adjacent to orchards, vineyards and citrus groves in California. Indaziflam is commonly applied in tank mixtures and/or rotations with all of the above listed herbicides, or in conjunction with alternate cultural practices to help improve weed control efficacy and prevent the development and spread of resistant weed populations.

> "Glyphosate is considered the world's most important herbicide because it provides broad-spectrum weed control and has favorable environmental characteristics and low mammalian toxicity (Baylis 2000; Woodburn 2000). These characteristics, combined with its cost-effectiveness, have led to frequent applications of glyphosate in perennial cropping systems and non-crop areas in California (Shrestha et al. 2007). However, reliance on herbicides with the same mode of action for extended periods can contribute to weed shifts and the selection of biotypes with resistance to herbicides (Christoffers 1999; Holt 1992) (see page 86). As a result of this selection pressure, cases of glyphosate-resistant rigid rye-grass (*Lolium rigidum*) (Heap 2008; Simarmata et al. 2005) and horse-weed (Shrestha et al. 2007) have been reported in California orchards and non-crop areas, respectively." – Shrestha et.al.[3]

7.2.2 Indaziflam use in olives for the control of weed biotypes resistant to glyphosate, triazines, ALS-inhibiting, growth regulant, or other herbicide modes of action satisfies *Criterion IV: The minor use pesticide plays or will play a significant part in an integrated pest (weed) management program.*

Indaziflam can be used as an important component of Integrated Pest Management. In addition to key IPM program components such as weed scouting, weed identification, mowing, tillage, and other cultural practices, chemical controls can provide an efficient and effective option to boost the productivity of their crop.(ref Appendix 7) As a pre-emergent weed management tool, it offers growers an additional option for weed management practices on their farm. Due to the limited effective herbicide options available in this minor crop, the availability of indaziflam is a critical component of the success of IPM programs for growers. An example of an IPM program that includes indaziflam is shown in Appendix 7 for citrus crops, however similar practices are implemented by growers of olives.

7.3 References

[1.] United States Department of Agriculture – National Agricultural statistics Service. 2017. https://www.nass.usda.gov/Statistics_by_Subject/index.php?sector=CROPS

[2.] Heap I (2014) The international survey of herbicide resistant weeds. May 5, 2014. http://www.weedscience.org, http://weedscience.org/Summary/Country.aspx?CountryID=45

[3]Glyphosate-resistant hairy fleabane documented in the Central Valley. 2008. A. Shrestha, B. Hanson and K. Hembree. http://CaliforniaAgriculture.ucop.edu • July–September 200

8.0 Justification of the Need for Indaziflam to Control Key Weeds in Highbush Blueberry

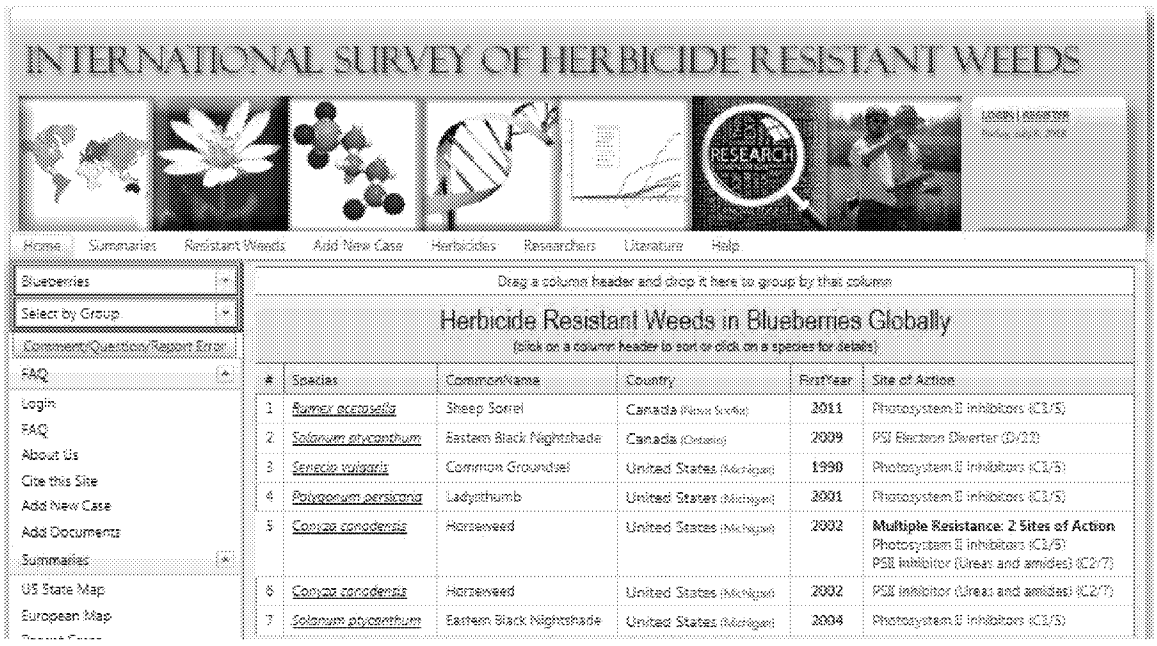
8.1 Highbush Blueberry Acreage

Highbush blueberries (also referred to as "tame" blueberries) are grown in a number of states such as Florida with 5,903 acres, Georgia with 15,680 acres, Michigan with 20,180 acres, New Jersey with 8,229 acres, and North Carolina with 8,424 acres harvested in 2017. In 2017, USDA NASS reports 97,515 bearing acres for highbush blueberry, which is lower than 300,000 acres per year (Table 1).[1]

8.2 Exclusive Use Data Protection Criteria Indaziflam Satisfies in Highbush Blueberry

8.2.1 The Indaziflam use in highbush blueberry for the control of existing herbicide resistant weeds satisfies *Criterion III. The minor use pesticide plays or will play a significant part in managing pest resistance.*

The table below, copied from the Weed Science Society of America (WSSA) website for "International Survey of Herbicide Resistant Weeds"[2] shows the listings for the United States of weed species, common name, states of occurrence (Michigan), year reported, and herbicide site of action for weeds of blueberries.



#	Species	CommonName	Country	FirstYear	Site of Action
1	Rumex acetosella	Sheep Sorrel	Canada (Nova Scotia)	2011	Photosystem II inhibitors (C1/5)
2	Solanum ptycanthum	Eastern Black Nightshade	Canada (Ontario)	2009	PSI Electron Diverter (D/22)
3	Senecio vulgaris	Common Groundsel	United States (Michigan)	1990	Photosystem II inhibitors (C1/5)
4	Polygonum persicaria	Ladysthumb	United States (Michigan)	2001	Photosystem II inhibitors (C1/5)
5	Conyza canadensis	Horseweed	United States (Michigan)	2002	**Multiple Resistance: 2 Sites of Action** Photosystem II inhibitors (C1/5) PSII inhibitor (Ureas and amides) (C2/7)
6	Conyza canadensis	Horseweed	United States (Michigan)	2002	PSII inhibitor (Ureas and amides) (C2/7)
7	Solanum ptycanthum	Eastern Black Nightshade	United States (Michigan)	2004	Photosystem II inhibitors (C1/5)

To date, there have yet to be any reported cases of weed species that have evolved field resistance to group 29 CBIs such as indaziflam.[2] There are currently, however, limited approved herbicides of other modes of activity that are still fully effective for weed control in blueberry for Common groundsel (*Senecio vulgaris*) and horseweed (*Conyza canadensis*) that is resistant to photosystem II inhibitors (herbicide mode of activity group C1/5). These weed species are commonly found within and adjacent to blueberry fields in Michigan. These and other resistant weeds are also found in other states where blueberries are grown. Indaziflam is commonly applied in tank mixtures and/or rotations with other herbicides, or in conjunction with alternate cultural practices to help improve weed control efficacy and prevent the development and spread of resistant weed populations.

The comments below come from peer reviewed scientific publication noting the development of herbicide resistance in their publication on herbicide resistance development in red sorrel which is related to sheep sorrel in blueberry fields:

> "It is concluded that red sorrel is hexazinone-resistant in some wild blueberry fields. A portion of the psbA gene was sequenced and it was determined that resistant plants had a Phe to Val substitution at position 255 in the D1 protein. This is the first recorded instance of hexazinone resistance in a perennial broadleaf weed in blueberry fields." – Li et al.3

Conversely, recent publications support the lack of known resistance to indaziflam in field applications:

> "As a CBI, for which there is little evidence of evolved weed resistance, indaziflam represents an important addition to the action mechanisms available for weed management". – Brabham et. al.[4]

8.2.2 Indaziflam use in blueberries for the control of weed biotypes resistant to glyphosate, triazines, ALS-inhibiting, growth regulant, or other herbicide modes of action satisfies *Criterion IV: The minor use pesticide plays or will play a significant part in an integrated pest (weed) management program.*

Indaziflam can be used as an important component of Integrated Pest Management. In addition to key IPM program components such as weed scouting, weed identification, mowing, tillage, and other cultural practices, chemical controls can provide an efficient and effective option to boost the productivity of their crop.(ref Appendix 7) As a pre-emergent weed management tool, it offers growers an additional option for weed management practices on their farm. Due to the limited effective herbicide options available in this minor crop, the availability of indaziflam is a critical component of the success of IPM programs for growers. An example of an IPM program that includes indaziflam is shown in Appendix 7 for citrus crops, however similar practices are implemented by growers of blueberries.

8.3 References

[1.] United States Department of Agriculture – National Agricultural statistics Service. 2017. https://www.nass.usda.gov/Statistics_by_Subject/index.php?sector=CROPS

[2.] Heap I (2014) The international survey of herbicide resistant weeds. May 5, 2014. http://www.weedscience.org, http://weedscience.org/Summary/Country.aspx?CountryID=45

[3.] Li, Z., Boyd, N., McLean, N., & Rutherford, K. (2014). Hexazinone Resistance in Red Sorrel (Rumex acetosella). Weed Science, 62(3), 532-537. doi:10.1614/WS-D-13-00173.1

[4.] Indaziflam Herbicidal Action: A Potent Cellulose Biosynthesis Inhibitor. C. Brabham, Lei Lei, Ying Gu, J. Stork, M. Barrett, S. DeBolt. 2014. Plant Physiol. 166, pp. 1177-1185.

9.0 Justification of the Need for Indaziflam to Control Key Weeds in Raspberry

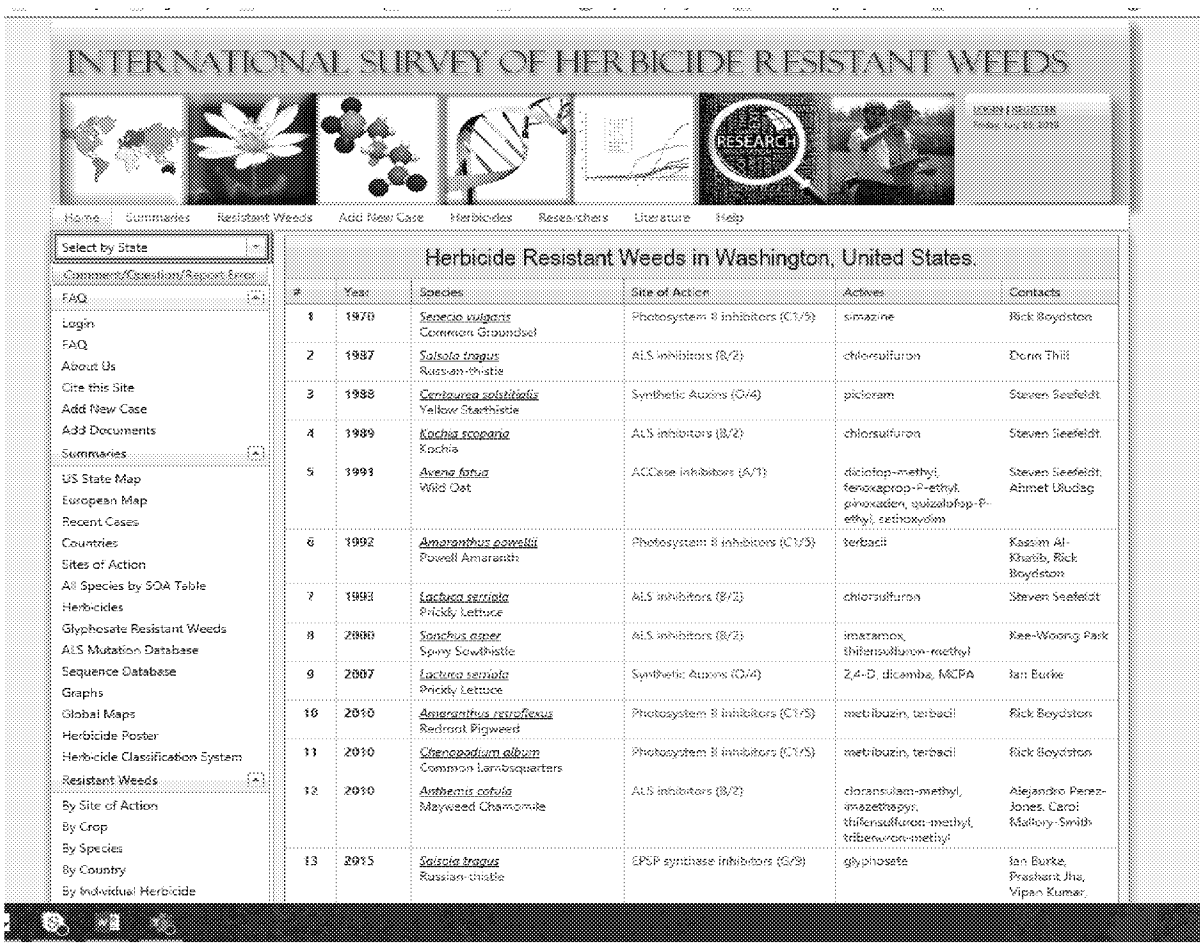
9.1 Raspberry Acreage

Raspberries (red and black) are grown in a number of states but the main production areas include California with 5,761 acres harvested, Oregon with 2,548 acres, and Washington with 9,034 acres harvested in 2017. In 2017, USDA NASS reports 20,646 harvested acres for raspberries which is lower than 300,000 acres per year (Table 1).[1]

9.2 Exclusive Use Data Protection Criteria Indaziflam Satisfies in Raspberry

9.2.1 The Indaziflam use in raspberry for the control of weed biotypes resistant to glyphosate, triazines, ALS-inhibiting, growth regulant, or other herbicide modes of action satisfies *Criterion III: The minor use pesticide plays or will play a significant part in managing pest resistance.*

The table below, copied from the Weed Science Society of America (WSSA) website for "International Survey of Herbicide Resistant Weeds"[2] shows the listings for the United States of weed species, common name, states of occurrence (Washington and California), year reported, and herbicide site of action. In 2017 the State of Washington accounted for 44% and California accounted for 28% of all raspberry production in the United States.



Herbicide Resistant Weeds in Washington, United States

#	Year	Species	Site of Action	Actives	Contacts
1	1970	Senecio vulgaris Common Groundsel	Photosystem II inhibitors (C1/5)	simazine	Rick Boydston
2	1987	Salsola tragus Russian-thistle	ALS inhibitors (B/2)	chlorsulfuron	Dorin Thill
3	1988	Centaurea solstitialis Yellow Starthistle	Synthetic Auxins (O/4)	picloram	Steven Seefeldt
4	1989	Kochia scoparia Kochia	ALS inhibitors (B/2)	chlorsulfuron	Steven Seefeldt
5	1991	Avena fatua Wild Oat	ACCase inhibitors (A/1)	diclofop-methyl, fenoxaprop-P-ethyl, pinoxaden, quizalofop-P-ethyl, cetinoxydim	Steven Seefeldt, Ahmet Uludag
6	1992	Amaranthus powellii Powell Amaranth	Photosystem II inhibitors (C1/5)	terbacil	Kassim Al-Khatib, Rick Boydston
7	1993	Lactuca serriola Prickly Lettuce	ALS inhibitors (B/2)	chlorsulfuron	Steven Seefeldt
8	2000	Sonchus asper Spiny Sowthistle	ALS inhibitors (B/2)	imazamox, thifensulfuron-methyl	Kee-Woong Park
9	2007	Lactuca serriola Prickly Lettuce	Synthetic Auxins (O/4)	2,4-D, dicamba, MCPA	Ian Burke
10	2010	Amaranthus retroflexus Redroot Pigweed	Photosystem II inhibitors (C1/5)	metribuzin, terbacil	Rick Boydston
11	2010	Chenopodium album Common Lambsquarters	Photosystem II inhibitors (C1/5)	metribuzin, terbacil	Rick Boydston
12	2010	Anthemis cotula Mayweed Chamomile	ALS inhibitors (B/2)	cloransulam-methyl, imazethapyr, thifensulfuron-methyl, tribenuron-methyl	Alejandro Perez-Jones, Carol Mallory-Smith
13	2015	Salsola tragus Russian-thistle	EPSP synthase inhibitors (G/9)	glyphosate	Ian Burke, Prashant Jha, Vipan Kumar

Status of Herbicide Resistance in California - Brad Hanson : January, 2014

Herbicide resistance in California is currently dominated by two patterns of resistance that differ somewhat from the rest of the United States. The first major category is multiple-resistance in a number of sedge and grass weeds of the rice production region of the Sacramento Valley. Rice in these areas is typically grown under flooded conditions and is often in long-term rice monoculture due to soil and water conditions in the area which makes them heavily reliant on herbicides for weed control. These cases tend to be due to non-target site mechanisms or, in some cases, combinations of target site and non-target site mechanisms of resistance, and present a serious challenge to growers. The second broad category is glyphosate-resistant weeds in orchards, vineyards, and associated non-crop areas such as roadsides, canal banks, and field margins. Glyphosate has been the most important herbicide in these areas for several years due to efficacy, economical cost and a favorable environmental and toxicological profile. In the past decade, several new cases of glyphosate resistance have been documented. The most widespread of these appears to be hairy fleabane which can be found nearly anywhere in the agricultural areas of the state. One important distinction between California and other regions of the US is that our cases of glyphosate-resistance are not primarily associated with Roundup Ready cropping systems but instead with non-crop uses or directed spray applications in woody perennial crops. Roundup Ready crops (cotton, maize, and recently alfalfa) are grown in California and do have some challenges with glyphosate-resistant weeds; however, tillage and irrigation practices seem to have reduced or delayed this problem in comparison to the reduced tillage row crop systems in other parts of the country.

Herbicide Resistant Weeds in California, United States.

#	Year	Species	Site of Action	Actives	Contacts
1	1981	*Senecio vulgaris* Common Groundsel	Photosystem II inhibitors (C1/5)	atrazine	Jodie Holt
2	1989	*Lolium perenne* Perennial Ryegrass	ALS inhibitors (B/2)	sulfometuron-methyl	Leonard Saari, Josephine Cotterman
3	1993	*Sagittaria montevidensis* California Arrowhead	ALS inhibitors (B/2)	bensulfuron-methyl	Michael Carriere
4	1993	*Cyperus difformis* Smallflower Umbrella Sedge	ALS inhibitors (B/2)	bensulfuron-methyl	Michael Carriere
5	1994	*Salsola tragus* Russian-thistle	ALS inhibitors (B/2)	chlorsulfuron, sulfometuron-methyl	Timothy Prather, Jodie Holt
6	1996	*Avena fatua* Wild Oat	Cell elongation inhibitors (Z/8)	diflenzoquat	Steve Orloff, Jodie Holt
7	1997	*Ammannia auriculata* Eared Redstem	ALS inhibitors (B/2)	bensulfuron-methyl	Jim Hill
8	1997	*Schoenoplectus mucronatus (=Scirpus mucronatus)* Ricefield Bulrush	ALS inhibitors (B/2)	bensulfuron-methyl	Jim Hill
9	1998	*Echinochloa phyllopogon (=E. oryzicola)* Late Watergrass	ACCase inhibitors (A/1)	fenoxaprop-P-ethyl	Albert Fischer
10	1998	*Lolium rigidum* Rigid Ryegrass	EPSP synthase inhibitors (G/9)	glyphosate	Thomas Lanini : retired, Brad Hanson, Marie Jasieniuk
11	1998	*Echinochloa phyllopogon (=E. oryzicola)* Late Watergrass	Lipid inhibitors (N/8)	thiobencarb = benthiocarb	Albert Fischer
12	2000	*Echinochloa oryzoides* Early Watergrass	Lipid inhibitors (N/8)	molinate, thiobencarb = benthiocarb	Albert Fischer
13	2000	*Ammannia coccinea* Redstem	ALS inhibitors (B/2)	bensulfuron-methyl	Jim Hill

14	2000	*Echinochloa crus-galli var. crus-galli* Barnyardgrass	**Multiple Resistance: 2 Sites of Action** ACCase inhibitors (A/1) Lipid inhibitors (N/8)	cyhalofop-butyl, fenoxaprop-P-ethyl, molinate, thiobencarb = benthiocarb	Albert Fischer
15	2000	*Echinochloa phyllopogon (=E. oryzicola)* Late Watergrass	**Multiple Resistance: 2 Sites of Action** ACCase inhibitors (A/1) Lipid inhibitors (N/8)	cyhalofop-butyl, fenoxaprop-P-ethyl, molinate, thiobencarb = benthiocarb	Albert Fischer
16	2001	*Phalaris minor* Little seed Canary grass	ACCase inhibitors (A/1)	clethodim, fenoxaprop-P-ethyl, fluazifop-P-butyl, sethoxydim	Joseph Di Tomaso
17	2002	*Digitaria ischaemum* Smooth Crabgrass	Synthetic Auxins (O/4)	quinclorac	Albert Fischer
18	2005	*Conyza canadensis* Horseweed	EPSP synthase inhibitors (G/9)	glyphosate	Brad Hanson, Anil Shrestha, Kurt Hembree, Steve Wright
19	2007	*Conyza bonariensis* Hairy Fleabane	EPSP synthase inhibitors (G/9)	glyphosate	Brad Hanson, Anil Shrestha, Kurt Hembree, Marcelo L. Moretti
20	2008	*Echinochloa colona* Junglerice	EPSP synthase inhibitors (G/9)	glyphosate	Albert Fischer, Thomas Lanini : retired, Brad Hanson, Steve Wright
21	2008	*Lolium perenne ssp. multiflorum* Italian Ryegrass	EPSP synthase inhibitors (G/9)	glyphosate	Marie Jasieniuk
22	2009	*Conyza bonariensis* Hairy Fleabane	**Multiple Resistance: 2 Sites of Action** EPSP synthase inhibitors (G/9) PSI Electron Diverter (D/22)	glyphosate, paraquat	Brad Hanson, Anil Shrestha, Kurt Hembree, Steve Wright, Marcelo L. Moretti
23	2013	*Cyperus difformis* Smallflower Umbrella Sedge	PSII inhibitor (Ureas and amides) (C2/7)	propanil	Albert Fischer, Rafael Pedroso
24	2013	*Poa annua* Annual Bluegrass	EPSP synthase inhibitors (G/9)	glyphosate	Brad Hanson, Marcelo L. Moretti
25	2014	*Schoenoplectus mucronatus (=Scirpus mucronatus)* Ricefield Bulrush	PSII inhibitor (Ureas and amides) (C2/7)	propanil	Albert Fischer, Rafael Pedroso
26	2014	*Conyza canadensis* Horseweed	**Multiple Resistance: 2 Sites of Action** EPSP synthase inhibitors (G/9) PSI Electron Diverter (D/22)	glyphosate, paraquat	Brad Hanson, Marcelo L. Moretti
27	2015	*Amaranthus palmeri* Palmer Amaranth	EPSP synthase inhibitors (G/9)	glyphosate	Brad Hanson, Anil Shrestha, Steve Wright, Jorge Angeles, Samikshya Budhathoki , Maia To, Sonia Rios
28	2015	*Lolium perenne ssp. multiflorum* Italian Ryegrass	Glutamine synthase inhibitors (H/10)	glufosinate-ammonium	Marie Jasieniuk, Parsa Tehranchian
29	2015	*Lolium perenne ssp. multiflorum* Italian Ryegrass	**Multiple Resistance: 3 Sites of Action** ACCase inhibitors (A/1) EPSP synthase inhibitors (G/9) PSI Electron Diverter (D/22)	glyphosate, paraquat, sethoxydim	Brad Hanson, Marie Jasieniuk, Caio Brunharo, Parsa Tehranchian
30	2016	*Lolium perenne ssp. multiflorum* Italian Ryegrass	**Multiple Resistance: 4 Sites of Action** ACCase inhibitors (A/1) ALS inhibitors (B/2) EPSP synthase inhibitors (G/9) PSI Electron Diverter (D/22)	clethodim, cyhalofop-butyl, fenoxaprop-P-ethyl, fluazifop-P-butyl, glyphosate, imazamox, mesosulfuron-methyl, paraquat, sethoxydim	Marie Jasieniuk, Maor Matzrafi, Parsa Tehranchian

To date, there have yet to be any reported cases of weed species that have evolved field resistance to group 29 CBIs such as indaziflam.[2] There are currently, however, limited approved herbicides of other modes of activity that are still fully effective for weed control in raspberries and other cane crops due to resistance verified for Rigid Ryegrass, Horseweed, Junglerice, and Amaranth species to glyphosate (herbicide mode of activity group G/9). In addition, multiple herbicide resistance has been recorded by WSSA in Hairy Fleabane to glyphosate and paraquat (groups G/9, D/22, respectively) and in Italian Ryegrass to commonly used herbicides such as glyphosate, sethoxydim, paraquat, rimsulfuron, and glufosinate (groups G/9, A/1, D/22, B/2, and H/10, respectively). All these weed species are commonly found within and adjacent to cane berry production in Washington and California. Indaziflam is commonly applied in tank mixtures and/or rotations with all of the above listed herbicides, or in conjunction with alternate cultural practices to help improve weed control efficacy and prevent the development and spread of resistant weed populations.

> "As a CBI, for which there is little evidence of evolved weed resistance, indaziflam represents an important addition to the action mechanisms available for weed management". – Brabham et. al.[3]

> "New herbicide products today tend to be premixed formulations of existing actives with known modes of action, new salts and esters or new actives with minor chemical modifications that claim to improve weed efficacy and spectrum, crop safety, reduced rates and/or soil residual activity. Recent examples of such advancements include the synthetic auxins aminocylcopyrachlor and halauxifen-methyl, the ACCase inhibitor pinoxaden, the PPO inhibitor saflufenacil, the HPPD inhibitors bicyclopyrone, tembotrione and pyrasulfotole, the ALS inhibitor trifamone, the cellulose biosynthesis inhibitor (CBI) indaziflam and very-long-chain fatty acid (VLCFA) inhibitors pyroxasulfone and fenoxasulfone." – Green.[4]

> "Glyphosate is considered the world's most important herbicide because it provides broad-spectrum weed control and has favorable environmental characteristics and low mammalian toxicity (Baylis 2000; Woodburn 2000). These characteristics, combined with its cost-effectiveness, have led to frequent applications of glyphosate in perennial cropping systems and non-crop areas in California (Shrestha et al. 2007). However, reliance on herbicides with the same mode of action for extended periods can contribute to weed shifts and the selection of biotypes with resistance to herbicides (Christoffers 1999; Holt 1992) (see page 86). As a result of this selection pressure, cases of glyphosate-resistant rigid rye-grass (*Lolium rigidum*) (Heap 2008; Simarmata et al. 2005) and horse-weed (Shrestha et al. 2007) have been reported in California orchards and non-crop areas, respectively." – Shrestha et.al.[5]

9.2.2 Indaziflam use in raspberries for the control of weed biotypes resistant to glyphosate, triazines, ALS-inhibiting, growth regulant, or other herbicide modes of action satisfies *Criterion IV: The minor use pesticide plays or will play a significant part in an integrated pest (weed) management program.*

Indaziflam can be used as an important component of Integrated Pest Management. In addition to key IPM program components such as weed scouting, weed identification, mowing, tillage, and other cultural practices, chemical controls can provide an efficient and effective option to boost the productivity of their crop.(ref Appendix 7) As a pre-emergent weed management tool, it offers growers an additional option for weed management practices on

their farm. Due to the limited effective herbicide options available in this minor crop, the availability of indaziflam is a critical component of the success of IPM programs for growers. An example of an IPM program that includes indaziflam is shown in Appendix 7 for citrus crops, however similar practices are implemented by growers of raspberries.

9.3 References

[1.] United States Department of Agriculture – National Agricultural statistics Service. 2017. https://www.nass.usda.gov/Statistics_by_Subject/index.php?sector=CROPS

[2.] Heap I (2014) The international survey of herbicide resistant weeds. May 5, 2014. http://www.weedscience.org, http://weedscience.org/Summary/Country.aspx?CountryID=45

[3.] Indaziflam Herbicidal Action: A Potent Cellulose Biosynthesis Inhibitor. C. Brabham, Lei Lei, Ying Gu, J. Stork, M. Barrett, S. DeBolt. 2014. Plant Physiol. 166, pp. 1177-1185.

[4.] Current state of herbicides in herbicide-resistant crops. Green, J.M. 2014. Pest Manag Sci 2014; 70: 1351–1357.

[5.] Glyphosate-resistant hairy fleabane documented in the Central Valley. 2008. A. Shrestha, B. Hanson and K. Hembree. http://CaliforniaAgriculture.ucop.edu • July–September 2008

10.0 Justification of the Need for Indaziflam to Control Key Weeds in Hops

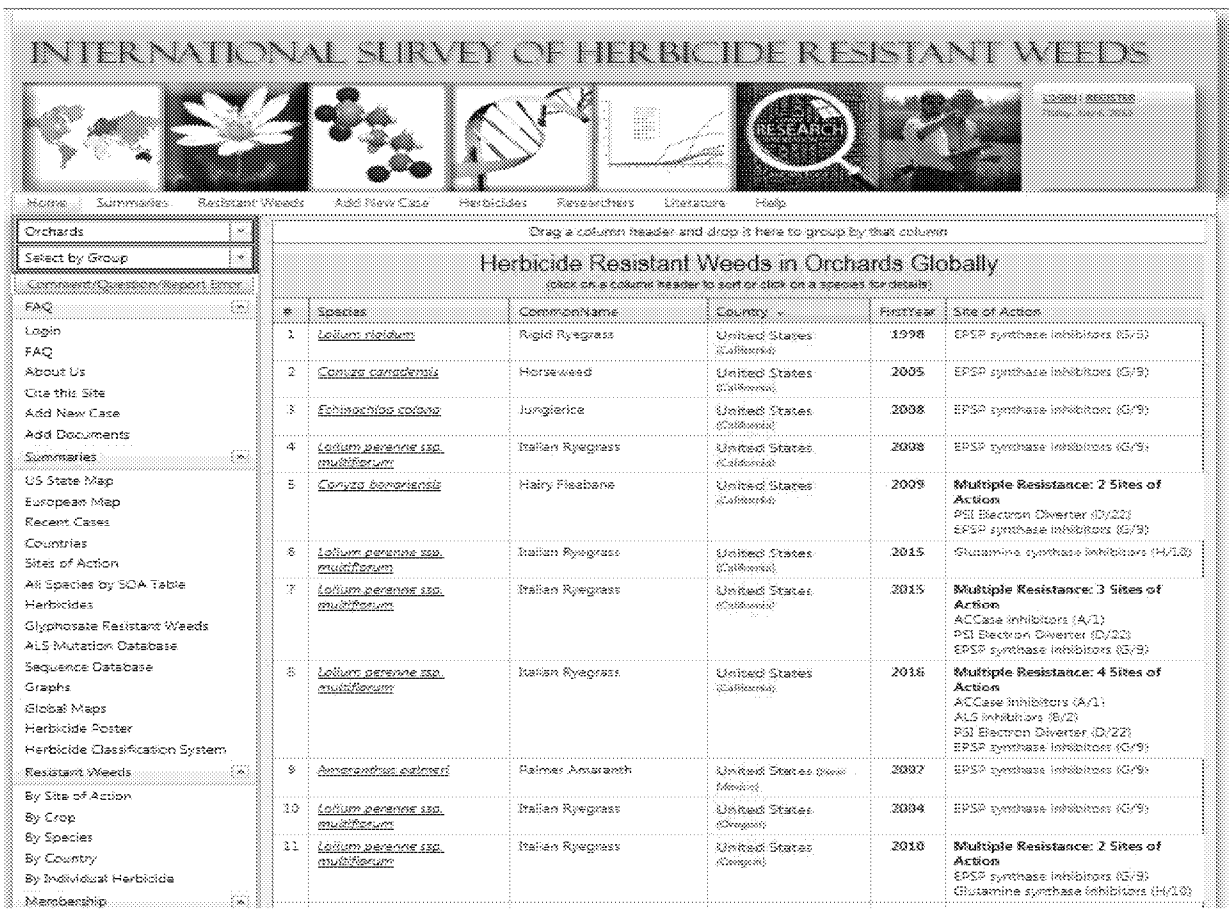
10.1 Hops Acreage

Hops are principally grown in Idaho with 9,641 acres harvested, Oregon with 8,292 acres, and Washington with 38,679 acres harvested in 2017. In 2017 USDA NASS reports 59,429 harvested acres of hops in the US which is lower than 300,000 acres per year (Table 1).[1]

10.2 Exclusive Use Data Protection Criteria Indaziflam Satisfies in Hops

10.2.1 The Indaziflam use in hops for the control of weed biotypes resistant to glyphosate, triazines, ALS-inhibiting, growth regulant, or other herbicide modes of action satisfies *Criterion III: The minor use pesticide plays or will play a significant part in managing pest resistance.*

The table below, copied from the Weed Science Society of America (WSSA) website for "International Survey of Herbicide Resistant Weeds"[2] shows the listings for the United States of weed species, common name, states of occurrence, year reported, and herbicide site of action for weeds located in **orchards**, such as hops. The additional listing below for "Herbicide Resistant Weeds in Washington, United States" (38,679 acres of hops) shows that resistance of selected weed species also occurs to most herbicide modes-of-action commonly used in orchards in that state, with the exception of indaziflam.



Herbicide Resistant Weeds in Washington, United States					
#	Year	Species	Site of Action	Actives	Contacts
1	1970	*Senecio vulgaris* Common Groundsel	Photosystem II inhibitors (C1/5)	simazine	Rick Boydston
2	1987	*Salsola tragus* Russian-thistle	ALS inhibitors (B/2)	chlorsulfuron	Donn Thill
3	1988	*Centaurea solstitialis* Yellow Starthistle	Synthetic Auxins (O/4)	picloram	Steven Seefeldt
4	1989	*Kochia scoparia* Kochia	ALS inhibitors (B/2)	chlorsulfuron	Steven Seefeldt
5	1991	*Avena fatua* Wild Oat	ACCase inhibitors (A/1)	diclofop-methyl, fenoxaprop-P-ethyl, pinoxaden, quizalofop-P-ethyl, sethoxydim	Steven Seefeldt, Ahmet Uludag
6	1992	*Amaranthus powellii* Powell Amaranth	Photosystem II inhibitors (C1/5)	terbacil	Kassim Al-Khatib, Rick Boydston
7	1993	*Lactuca serriola* Prickly Lettuce	ALS inhibitors (B/2)	chlorsulfuron	Steven Seefeldt
8	2000	*Sonchus asper* Spiny Sowthistle	ALS inhibitors (B/2)	imazamox, thifensulfuron-methyl	Kee-Woong Park
9	2007	*Lactuca serriola* Prickly Lettuce	Synthetic Auxins (O/4)	2,4-D, dicamba, MCPA	Ian Burke
10	2010	*Amaranthus retroflexus* Redroot Pigweed	Photosystem II inhibitors (C1/5)	metribuzin, terbacil	Rick Boydston
11	2010	*Chenopodium album* Common Lambsquarters	Photosystem II inhibitors (C1/5)	metribuzin, terbacil	Rick Boydston
12	2010	*Anthemis cotula* Mayweed Chamomile	ALS inhibitors (B/2)	diflorasulam-methyl, imazethapyr, thifensulfuron-methyl, tribenuron-methyl	Alejandro Perez-Jones, Carol Mallory-Smith
13	2015	*Salsola tragus* Russian-thistle	EPSP synthase inhibitors (G/9)	glyphosate	Ian Burke, Prashant Jha, Vipan Kumar, Drew Lyon
14	2018	*Lolium perenne ssp. multiflorum* Italian Ryegrass	Long chain fatty acid inhibitors (K3/15)	flufenacet	Alberto Collavo, Roland Beffa

To date, there have yet to be any reported cases of weed species that have evolved field resistance to group 29 CBIs such as indaziflam.[2] There are currently, however, limited approved herbicides of other modes of activity that are still fully effective for weed control in hops and other orchard crops due to resistance verified for Rigid Ryegrass, Horseweed, Junglerice, and Amaranth species to glyphosate (herbicide mode of activity group G/9). In addition, multiple herbicide resistance has been recorded by WSSA in Hairy Fleabane to glyphosate and paraquat (groups G/9, D/22, respectively) and in Italian Ryegrass to commonly used herbicides such as glyphosate, sethoxydim, paraquat, rimsulfuron, and glufosinate (groups G/9, A/1, D/22, B/2, and H/10, respectively). All these weed species are commonly found within and adjacent to orchards. Indaziflam is commonly applied in tank mixtures and/or rotations with all of the above listed herbicides, or in conjunction with alternate cultural practices to help improve weed control efficacy and prevent the development and spread of resistant weed populations.

"As a CBI, for which there is little evidence of evolved weed resistance, indaziflam represents an important addition to the action mechanisms available for weed management". – Brabham et. al.[3]

"Glyphosate is considered the world's most important herbicide because it provides broad-spectrum weed control and has favorable environmental characteristics and low mammalian toxicity (Baylis 2000; Woodburn 2000). These characteristics, combined with its cost-effectiveness, have led to frequent applications of glyphosate in perennial cropping systems and non-crop areas in California (Shrestha et al. 2007). However, reliance on herbicides with the same mode of action for extended periods can contribute to weed shifts and the selection of biotypes with resistance to herbicides (Christoffers 1999; Holt 1992) (see page 86). As a result of this selection pressure, cases of glyphosate-resistant rigid rye-grass (*Lolium rigidum*) (Heap 2008; Simarmata et al. 2005) and horse-weed (Shrestha et al. 2007) have been reported in California orchards and non-crop areas, respectively." – Shrestha et.al.[4]

10.2.2 Indaziflam use in hops for the control of weed biotypes resistant to glyphosate, triazines, ALS-inhibiting, growth regulant, or other herbicide modes of action satisfies *Criterion IV: The minor use pesticide plays or will play a significant part in an integrated pest (weed) management program.*

Indaziflam can be used as an important component of Integrated Pest Management. In addition to key IPM program components such as weed scouting, weed identification, mowing, tillage, and other cultural practices, chemical controls can provide an efficient and effective option to boost the productivity of their crop.(ref Appendix 7) As a pre-emergent weed management tool, it offers growers an additional option for weed management practices on their farm. Due to the limited effective herbicide options available in this minor crop, the availability of indaziflam is a critical component of the success of IPM programs for growers. An example of an IPM program that includes indaziflam is shown in Appendix 7 for citrus crops, however similar practices are implemented by growers of hops.

10.3 References

1. United States Department of Agriculture – National Agricultural statistics Service. 2017. https://www.nass.usda.gov/Statistics_by_Subject/index.php?sector=CROPS

2. Heap I (2014) The international survey of herbicide resistant weeds. May 5, 2014. http://www.weedscience.org, http://weedscience.org/Summary/Country.aspx?CountryID=45

3. Indaziflam Herbicidal Action: A Potent Cellulose Biosynthesis Inhibitor. C. Brabham, Lei Lei, Ying Gu, J. Stork, M. Barrett, S. DeBolt. 2014. Plant Physiol. 166, pp. 1177-1185.

5. Glyphosate-resistant hairy fleabane documented in the Central Valley. 2008. A. Shrestha, B. Hanson and K. Hembree. http://CaliforniaAgriculture.ucop.edu • July–September 2008

11.0 Justification of the Need for Indaziflam to Control Key Weeds in Coffee

11.1 Coffee Acreage

USDA NASS reports 8,441 bearing acres of coffee grown in the US, mostly in Hawaii in 2017. Coffee production is lower than 300,000 acres per year (Table 1).[1]

11.2 Exclusive Use Data Protection Criteria Indaziflam Satisfies in Coffee

11.2.1 The Indaziflam use in coffee for the control of weed biotypes resistant to glyphosate, triazines, ALS-inhibiting, growth regulant, or other herbicide modes of action satisfies *Criterion III: The minor use pesticide plays or will play a significant part in managing pest resistance.*

The table below, copied from the Weed Science Society of America (WSSA) website for "International Survey of Herbicide Resistant Weeds"[2] shows the listings for the United States of weed species, common name, state of occurrence (Hawaii), year reported, and herbicide site of action. Hawaii accounts for 7,200 acres of coffee, which is the vast majority of all production in the United States (anecdotal reports of very small acreage of coffee grown in California exist – see: https://www.saveur.com/california-coffee-growing).

Herbicide Resistant Weeds in Hawaii, United States.

#	Year	Species	Site of Action	Actives	Contacts
1	1957	*Commelina diffusa* Spreading Dayflower	Synthetic Auxins (O/4)	2,4-D	
2	1987	*Chloris barbata = (C. inflata)* Swollen Fingergrass	Photosystem II inhibitors (C1/5)	ametryn	Lance Santo
3	1987	*Chloris barbata = (C. inflata)* Swollen Fingergrass	PSII inhibitor (Ureas and amides) (C2/7)	diuron	Lance Santo
4	2003	*Eleusine indica* Goosegrass	Photosystem II inhibitors (C1/5)	metribuzin	James Brosnan

Contributing Weed Scientists

Lance Santo

Hawaii Agriculture Research Center
Agronomist/Field Coordinator
Pesticide And Residue
94-340 Kunia Road
Waipahu Hawaii 96797
United States
Email: lsanto@harc-hnoa.com
URL: Website

To date, there have yet to be any reported cases of weed species that have evolved field resistance to group 29 CBIs such as indaziflam.[2] There are currently, however, limited approved herbicides of other modes of activity that are still fully effective for weed control in coffee for goosegrass (*elusine indica*) that is resistant to metribuzin (herbicide mode of activity group C1/5 – photosystem II inhibitors). This weed species is commonly found within and

adjacent to orchards, vineyards and citrus groves in Hawaii. Indaziflam is commonly applied in tank mixtures and/or rotations with other herbicides, or in conjunction with alternate cultural practices to help improve weed control efficacy and prevent the development and spread of resistant weed populations.

> "As a CBI, for which there is little evidence of evolved weed resistance, indaziflam represents an important addition to the action mechanisms available for weed management". – Brabham et. al.[3]
>
> "Overall, indaziflam and oxadiazon provided good (80 to 89%) to excellent control of dna-resistant goosegrass in both years, but dimethenamid and sulfentrazone were inconsistent." – McCullough et. al.[4]
>
> "It is concluded that saflufenacil can be tank mixed with glufosinate for control of broadleaf and grass weeds; however, addition of indaziflam in tank mixture provided long-term, broad-spectrum weed control in Florida citrus compared with other treatments." – Jhala et. al.[5]
>
> "Soil organic matter (SOM) explained the highest proportion of variability in predicting the herbicide dose required for 80% *Kochia* growth reduction (GR80) for flumioxazin and indaziflam (R2 =0.72 and 0.79 respectively)." – Sebastian et.al.[6]
>
> "All three biotypes (of Goosegrass (*Eleusine indica*) Biotypes Resistant to Preemergence-Applied Oxadiazon) were completely controlled by preemergence applied labeled rates of prodiamine and indaziflam. This is the first peer-reviewed report of evolved weed resistance to oxadiazon." – McElroy et. al.[7]
>
> "New herbicide products today tend to be premixed formulations of existing actives with known modes of action, new salts and esters or new actives with minor chemical modifications that claim to improve weed efficacy and spectrum, crop safety, reduced rates and/or soil residual activity. Recent examples of such advancements include the synthetic auxins aminocylcopyrachlor and halauxifen-methyl, the ACCase inhibitor pinoxaden, the PPO inhibitor saflufenacil, the HPPD inhibitors bicyclopyrone, tembotrione and pyrasulfotole, the ALS inhibitor trifamone, the cellulose biosynthesis inhibitor (CBI) indaziflam and very-long-chain fatty acid (VLCFA) inhibitors pyroxasulfone and fenoxasulfone." – Green.[8]
>
> "In 2003, two goosegrass biotypes on the island of Kauai, Hawaii were found to be resistant to applications of metribuzin plus MSMA. Metribuzin plus MSMA applied at rates of 0.28 kg ai/ha plus 2.2 kg/ha, respectively, followed by MSMA at 2.2 kg/ha 7 d later, provided 100% control of two susceptible goosegrass biotypes, but no control of two resistant biotypes…. The two biotypes that were resistant to metribuzin plus MSMA were also resistant to applications of simazine plus MSMA."[9]

11.2.2 Indaziflam use in coffee for the control of weed biotypes resistant to glyphosate, triazines, ALS-inhibiting, growth regulant, or other herbicide modes of action satisfies *Criterion IV: The minor use pesticide plays or will play a significant part in an integrated pest (weed) management program.*

Indaziflam can be used as an important component of Integrated Pest Management. In addition to key IPM program components such as weed scouting, weed identification, mowing, tillage, and other cultural practices, chemical controls can provide an efficient and effective option to boost the productivity of their crop.(ref Appendix 7) As a pre-emergent weed management tool, it offers growers an additional option for weed management practices on their farm. Due to the limited effective herbicide options available in this minor crop, the availability of indaziflam is a critical component of the success of IPM programs for growers. An example of an IPM program that includes indaziflam is shown in Appendix 7 for citrus crops, however similar practices are implemented by growers of coffee.

11.3 References

[1] United States Department of Agriculture – National Agricultural statistics Service. 2017. https://www.nass.usda.gov/Statistics_by_Subject/index.php?sector=CROPS

[2] Heap I (2014) The international survey of herbicide resistant weeds. May 5, 2014. http://www.weedscience.org, http://weedscience.org/Summary/Country.aspx?CountryID=45

[3] Indaziflam Herbicidal Action: A Potent Cellulose Biosynthesis Inhibitor. C. Brabham, Lei Lei, Ying Gu, J. Stork, M. Barrett, S. DeBolt. 2014. Plant Physiol. 166, pp. 1177-1185.

[4] Efficacy of Preemergence Herbicides for Controlling a Dinitroaniline-Resistant Goosegrass (Eleusine indica) in Georgia. Patrick E. McCullough, Jialin Yu, and Diego G´omez de Barreda. 2013. Weed Technology 27:639–644.

[5] Tank Mixing Saflufenacil, Glufosinate, and Indaziflam Improved Burndown and Residual Weed Control. Amit J. Jhala, Analiza H. M. Ramirez, and Megh Singh. 2013. Weed Technology 27:422–429

[6] Influence of soil properties and soil moisture on the efficacy of indaziflam and flumioxazin on *Kocia scoparia* L. D. Sebastian, S. Nissen, P. Westra, D. Shaner, G. Butters. 2017. Pest Manag Sci; 73: 444–451.

[7] Identification of Goosegrass (Eleusine indica) Biotypes Resistant to Preemergence-Applied Oxadiazon. J. Scott McElroy, William B. Head, Glenn R. Wehtje, and David Spak. 2017. Weed Technology 31:675–681.

[8] Current state of herbicides in herbicide-resistant crops. Green, J.M. 2014. Pest Manag Sci 2014; 70: 1351–1357.

[9] Metribuzin-Resistant Goosegrass (Eleusine indica) in Bermudagrass Turf,James T. Brosnan, Roy K. Nishimoto, and Joseph DeFrank. Weed Technology 22(4), 675-678, (1 October 2008)

12.0 Justification of the Need for Indaziflam to Control Key Weeds in Limes

12.1 Lime Acreage

The USDA National Agricultural Statistics Service indicates limes are an important U.S. crop with production in the states of California, Florida, Hawaii, and Texas. In 2017, the U.S acreage for bearing limes was reported by the USDA to be 816 acres in California, 59 acres in Florida, 114 acres in Hawaii, and 50 acres in Texas. The total of 1,051 bearing acres of limes reported in 2017 is lower than 300,000 acres per year (Table 1).[1]

12.2 Exclusive Use Data Protection Criteria Indaziflam Satisfies in Limes

12.2.1 The Indaziflam use in limes for the control of weed biotypes resistant to glyphosate, triazines, ALS-inhibiting, growth regulant, or other herbicide modes of action satisfies *Criterion III: The minor use pesticide plays or will play a significant part in managing pest resistance.*

Herbicide Resistant Weeds in California, United States.					
#	Year	Species	Site of Action	Actives	Contacts
1	1981	*Senecio vulgaris* Common Groundsel	Photosystem II inhibitors (C1/5)	atrazine	Jodie Holt
2	1989	*Lolium perenne* Perennial Ryegrass	ALS inhibitors (B/2)	sulfometuron-methyl	Leonard Saari, Josephine Cotterman
3	1993	*Sagittaria montevidensis* California Arrowhead	ALS inhibitors (B/2)	bensulfuron-methyl	Michael Carriere
4	1993	*Cyperus difformis* Smallflower Umbrella Sedge	ALS inhibitors (B/2)	bensulfuron-methyl	Michael Carriere
5	1994	*Salsola tragus* Russian-thistle	ALS inhibitors (B/2)	chlorsulfuron, sulfometuron-methyl	Timothy Prather, Jodie Holt
6	1996	*Avena fatua* Wild Oat	Cell elongation inhibitors (Z/8)	diflenzoquat	Steve Orloff, Jodie Holt
7	1997	*Ammannia auriculata* Eared Redstem	ALS inhibitors (B/2)	bensulfuron-methyl	Jim Hill
8	1997	*Schoenoplectus mucronatus (=Scirpus mucronatus)* Ricefield Bulrush	ALS inhibitors (B/2)	bensulfuron-methyl	Jim Hill
9	1998	*Echinochloa phyllopogon (=E. oryzicola)* Late Watergrass	ACCase inhibitors (A/1)	fenoxaprop-P-ethyl	Albert Fischer
10	1998	*Lolium rigidum* Rigid Ryegrass	EPSP synthase inhibitors (G/9)	glyphosate	Thomas Lanini : retired, Brad Hanson, Marie Jasieniuk
11	1998	*Echinochloa phyllopogon (=E. oryzicola)* Late Watergrass	Lipid inhibitors (N/8)	thiobencarb = benthiocarb	Albert Fischer
12	2000	*Echinochloa oryzoides* Early Watergrass	Lipid inhibitors (N/8)	molinate, thiobencarb = benthiocarb	Albert Fischer
13	2000	*Ammannia coccinea* Redstem	ALS inhibitors (B/2)	bensulfuron-methyl	Jim Hill
14	2000	*Echinochloa crus-galli var. crus-galli* Barnyardgrass	**Multiple Resistance: 2 Sites of Action** ACCase inhibitors (A/1) Lipid inhibitors (N/8)	cyhalofop-butyl, fenoxaprop-P-ethyl, molinate, thiobencarb = benthiocarb	Albert Fischer
15	2000	*Echinochloa phyllopogon (=E. oryzicola)* Late Watergrass	**Multiple Resistance: 2 Sites of Action** ACCase inhibitors (A/1) Lipid inhibitors (N/8)	cyhalofop-butyl, fenoxaprop-P-ethyl, molinate, thiobencarb = benthiocarb	Albert Fischer
16	2001	*Phalaris minor* Little seed Canary grass	ACCase inhibitors (A/1)	clethodim, fenoxaprop-P-ethyl, fluazifop-P-butyl, sethoxydim	Joseph Di Tomaso

17	2002	*Digitaria ischaemum* Smooth Crabgrass	Synthetic Auxins (O/4)	quinclorac	Albert Fischer
18	2005	*Conyza canadensis* Horseweed	EPSP synthase inhibitors (G/9)	glyphosate	Brad Hanson, Anil Shrestha, Kurt Hembree, Steve Wright
19	2007	*Conyza bonariensis* Hairy Fleabane	EPSP synthase inhibitors (G/9)	glyphosate	Brad Hanson, Anil Shrestha, Kurt Hembree, Marcelo L. Moretti
20	2008	*Echinochloa colona* Junglerice	EPSP synthase inhibitors (G/9)	glyphosate	Albert Fischer, Thomas Lanini ; retired, Brad Hanson, Steve Wright
21	2008	*Lolium perenne ssp. multiflorum* Italian Ryegrass	EPSP synthase inhibitors (G/9)	glyphosate	Marie Jasieniuk
22	2009	*Conyza bonariensis* Hairy Fleabane	**Multiple Resistance: 2 Sites of Action** EPSP synthase inhibitors (G/9) PSI Electron Diverter (D/22)	glyphosate, paraquat	Brad Hanson, Anil Shrestha, Kurt Hembree, Steve Wright, Marcelo L. Moretti
23	2013	*Cyperus difformis* Smallflower Umbrella Sedge	PSII inhibitor (Ureas and amides) (C2/7)	propanil	Albert Fischer, Rafael Pedroso
24	2013	*Poa annua* Annual Bluegrass	EPSP synthase inhibitors (G/9)	glyphosate	Brad Hanson, Marcelo L. Moretti
25	2014	*Schoenoplectus mucronatus (=Scirpus mucronatus)* Ricefield Bulrush	PSII inhibitor (Ureas and amides) (C2/7)	propanil	Albert Fischer, Rafael Pedroso
26	2014	*Conyza canadensis* Horseweed	**Multiple Resistance: 2 Sites of Action** EPSP synthase inhibitors (G/9) PSI Electron Diverter (D/22)	glyphosate, paraquat	Brad Hanson, Marcelo L. Moretti
27	2015	*Amaranthus palmeri* Palmer Amaranth	EPSP synthase inhibitors (G/9)	glyphosate	Brad Hanson, Anil Shrestha, Steve Wright, Jorge Angeles, Samikshya Budhathoki , Mala To, Sonia Rios
28	2015	*Lolium perenne ssp. multiflorum* Italian Ryegrass	Glutamine synthase inhibitors (H/10)	glufosinate-ammonium	Marie Jasieniuk, Parsa Tehranchian
29	2015	*Lolium perenne ssp. multiflorum* Italian Ryegrass	**Multiple Resistance: 3 Sites of Action** ACCase inhibitors (A/1) EPSP synthase inhibitors (G/9) PSI Electron Diverter (D/22)	glyphosate, paraquat, sethoxydim	Brad Hanson, Marie Jasieniuk, Caio Brunharo, Parsa Tehranchian
30	2016	*Lolium perenne ssp. multiflorum* Italian Ryegrass	**Multiple Resistance: 4 Sites of Action** ACCase inhibitors (A/1) ALS inhibitors (B/2) EPSP synthase inhibitors (G/9) PSI Electron Diverter (D/22)	clethodim, cyhalofop-butyl, fenoxaprop-P-ethyl, fluazifop-P-butyl, glyphosate, imazamox, mesosulfuron-methyl, paraquat, sethoxydim	Marie Jasieniuk, Maor Matzrafi, Parsa Tehranchian

The table above, copied from the Weed Science Society of America (WSSA) website for "International Survey of Herbicide Resistance Weeds" [2] shows the herbicide weeds in California listed by weed species, common name, year reported, herbicide site of action and contact. California accounts for 77% of the limes produced in the United States.

The table also shows that resistance of selected weed species occurs to most herbicide modes-of-action commonly used in California, with the exception of indaziflam.

The following comment was also noted as an introduction to this listing by Dr. Brad Hanson, Weed Scientist, UC-Davis, in 2014:

"The second broad category is glyphosate-resistant weeds in orchards, vineyards, and associated non-crop areas such as roadsides, canal banks, and field margins. Glyphosate has

been the most important herbicide in these areas for several years due to efficacy, economical cost, and a favorable environmental and toxicological profile. In the past decade, several new cases of glyphosate resistance have been documented. The most widespread of these appears to be hairy fleabane which can be found nearly anywhere in the agricultural areas of the state. One important distinction between California and other regions of the US is that our cases of glyphosate-resistance are not primarily associated with Roundup Ready cropping systems but instead with non-crop uses or directed spray applications in woody perennial crops." – Hanson 2014

To date, there have yet to be any reported cases of weed species that have evolved field resistance to CBIs (Cellulose Biosynthesis Inhibitor) such as indaziflam.[2] There are currently, however, limited approved herbicides of other modes of activity that are still fully effective for weed control in lemon orchards and other orchard crops due to resistance verified for Rigid Ryegrass, Horseweed, Junglerice, and Amaranth species to glyphosate (herbicide mode of activity group G/9). In addition, multiple herbicide resistance has been recorded by WSSA in Hairy Fleabane to glyphosate and paraquat (groups G/9, D/22, respectively) and in Italian Ryegrass to commonly used herbicides such as glyphosate, sethoxydim, paraquat, rimsulfuron, and glufosinate (groups G/9, A/1, D/22, B/2, and H/10, respectively). All these weed species are commonly found within and adjacent to orchards, vineyards and citrus groves in California. Indaziflam is commonly applied in tank mixtures and/or rotations with all of the above listed herbicides, or in conjunction with alternate cultural practices to help improve weed control efficacy and prevent the development and spread of resistant weed populations.

> "As a CBI, for which there is little evidence of evolved weed resistance, indaziflam represents an important addition to the action mechanisms available for weed management". – Brabham et. al.[3]
>
> "Overall, indaziflam and oxadiazon provided good (80 to 89%) to excellent control of dna-resistant goosegrass in both years, but dimethenamid and sulfentrazone were inconsistent." – McCullough et. al.[4]
>
> "It is concluded that saflufenacil can be tank mixed with glufosinate for control of broadleaf and grass weeds; however, addition of indaziflam in tank mixture provided long-term, broad-spectrum weed control in Florida citrus compared with other treatments." – Jhala et. al.[5]
>
> "Soil organic matter (SOM) explained the highest proportion of variability in predicting the herbicide dose required for 80% *Kochia* growth reduction (GR80) for flumioxazin and indaziflam (R2 =0.72 and 0.79 respectively)." – Sebastian et.al.[6]
>
> "All three biotypes (of Goosegrass (*Eleusine indica*) Biotypes Resistant to Preemergence-Applied Oxadiazon) were completely controlled by preemergence applied labeled rates of prodiamine and indaziflam. This is the first peer-reviewed report of evolved weed resistance to oxadiazon." – McElroy et. al.[7]
>
> "New herbicide products today tend to be premixed formulations of existing actives with known modes of action, new salts and esters or new actives with minor chemical modifications that claim to improve weed efficacy and spectrum, crop safety, reduced rates and/or soil residual activity. Recent examples of such advancements include the

synthetic auxins aminocyclopyrachlor and halauxifen-methyl, the ACCase inhibitor pinoxaden, the PPO inhibitor saflufenacil, the HPPD inhibitors bicyclopyrone, tembotrione and pyrasulfotole, the ALS inhibitor trifamone, the cellulose biosynthesis inhibitor (CBI) indaziflam and very-long-chain fatty acid (VLCFA) inhibitors pyroxasulfone and fenoxasulfone." – Green.[8]

"Glyphosate is considered the world's most important herbicide because it provides broad-spectrum weed control and has favorable environmental characteristics and low mammalian toxicity (Baylis 2000; Woodburn 2000). These characteristics, combined with its cost-effectiveness, have led to frequent applications of glyphosate in perennial cropping systems and non-crop areas in California (Shrestha et al. 2007). However, reliance on herbicides with the same mode of action for extended periods can contribute to weed shifts and the selection of biotypes with resistance to herbicides (Christoffers 1999; Holt 1992) (see page 86). As a result of this selection pressure, cases of glyphosate-resistant rigid rye-grass (*Lolium rigidum*) (Heap 2008; Simarmata et al. 2005) and horse-weed (Shrestha et al. 2007) have been reported in California orchards and non-crop areas, respectively." – Shrestha et.al.[9]

12.2.2 Indaziflam use in limes for the control of weed biotypes resistant to glyphosate, triazines, ALS-inhibiting, growth regulant, or other herbicide modes of action satisfies *Criterion IV: The minor use pesticide plays or will play a significant part in an integrated pest (weed) management program.*

Indaziflam can be used as an important component of Integrated Pest Management. In addition to key IPM program components such as weed scouting, weed identification, mowing, tillage, and other cultural practices, chemical controls can provide an efficient and effective option to boost the productivity of their crop.(ref Appendix 7) As a pre-emergent weed management tool, it offers growers an additional option for weed management practices on their farm. Due to the limited effective herbicide options available in this minor crop, the availability of indaziflam is a critical component of the success of IPM programs for growers. An example of an IPM program that includes indaziflam is shown in Appendix 7 for citrus crops.

12.3 References

[1.] United States Department of Agriculture – National Agricultural statistics Service. 2017. https://www.nass.usda.gov/Statistics_by_Subject/index.php?sector=CROPS

[2.] Heap I (2014) The international survey of herbicide resistant weeds. May 5, 2014. http://www.weedscience.org, http://weedscience.org/Summary/Country.aspx?CountryID=45

[3.] Indaziflam Herbicidal Action: A Potent Cellulose Biosynthesis Inhibitor. C. Brabham, Lei Lei, Ying Gu, J. Stork, M. Barrett, S. DeBolt. 2014. Plant Physiol. 166, pp. 1177-1185.

[4.] Efficacy of Preemergence Herbicides for Controlling a Dinitroaniline-Resistant Goosegrass (Eleusine indica) in Georgia. Patrick E. McCullough, Jialin Yu, and Diego G´omez de Barreda. 2013. Weed Technology 27:639–644.

[5] Tank Mixing Saflufenacil, Glufosinate, and Indaziflam Improved Burndown and

Residual Weed Control. Amit J. Jhala, Analiza H. M. Ramirez, and Megh Singh. 2013. Weed Technology 27:422–429

[6.] Influence of soil properties and soil moisture on the efficacy of indaziflam and flumioxazin on *Kocia scoparia* L. D. Sebastian, S. Nissen, P. Westra, D. Shaner, G. Butters. 2017. Pest Manag Sci; 73: 444–451.

[7.] Identification of Goosegrass (Eleusine indica) Biotypes Resistant to Preemergence-Applied Oxadiazon. J. Scott McElroy, William B. Head, Glenn R. Wehtje, and David Spak. 2017. Weed Technology 31:675–681.

[8] Current state of herbicides in herbicide-resistant crops. Green, J.M. 2014. Pest Manag Sci 2014; 70: 1351–1357.

[9] Glyphosate-resistant hairy fleabane documented in the Central Valley. 2008. A. Shrestha, B. Hanson and K. Hembree. http://CaliforniaAgriculture.ucop.edu • July–September 2008

13.0 Justification of the Need for Indaziflam to Control Key Weeds in Tart Cherry

13.1 Tart Cherry Acreage

Tart cherries are an important commercial U.S. crop. Most tart cherries are grown in the states of Michigan (26,084 bearing acres), New York (1,564 bearing acres), Oregon (645 bearing acres), Pennsylvania (503 bearing acres), Utah (3,267 bearing acres), Washington (1,765 bearing acres), and Wisconsin (1,552 bearing acres). In 2017, the total planted bearing acreage was reported by the USDA to be 35,944 acres, which is less than 300,000 per year and qualifies as a minor use crop (Table 1).[1]

13.2 Exclusive Use Data Protection Criteria Indaziflam Satisfies in Tart Cherry

13.2.1 The Indaziflam use in tart cherry for the control of weed biotypes resistant to glyphosate, triazines, ALS-inhibiting, growth regulant, or other herbicide modes of action satisfies *Criterion III: The minor use pesticide plays or will play a significant part in managing pest resistance.*

The table below, copied from the Weed Science Society of America (WSSA) website for "International Survey of Herbicide Resistant Weeds"[2] shows the listings for the United States of weed species, common name, states of occurrence (Michigan), year reported, and herbicide site of action for weeds located in **orchards**, such as tart cherry orchards, in Michigan. Michigan accounts for 27,300 acres, roughly three-quarters of all tart cherries produced in the United States.

Herbicide Resistant Weeds in Orchard Globally
(click on a column header to sort or click on a species for details)

#	Species	CommonName	Country	FirstYear	Site of Action
Country: United States					
11	*Chenopodium album*	Common Lambsquarters	United States (Michigan)	1975	Photosystem II inhibitors (C1/5)
12	*Ambrosia artemisiifolia*	Common Ragweed	United States (Michigan)	1990	Photosystem II inhibitors (C1/5)
13	*Senecio vulgaris*	Common Groundsel	United States (Michigan)	1990	Photosystem II inhibitors (C1/5)
14	*Ambrosia artemisiifolia*	Common Ragweed	United States (Michigan)	1998	ALS inhibitors (B/2)
15	*Amaranthus powellii*	Powell Amaranth	United States (Michigan)	2001	**Multiple Resistance: 2 Sites of Action** Photosystem II inhibitors (C1/5) PSII inhibitor (Ureas and amides) (C2/7)
16	*Polygonum persicaria*	Ladysthumb	United States (Michigan)	2001	Photosystem II inhibitors (C1/5)
17	*Conyza canadensis*	Horseweed	United States (Michigan)	2002	**Multiple Resistance: 2 Sites of Action** Photosystem II inhibitors (C1/5) PSII inhibitor (Ureas and amides) (C2/7)
18	*Conyza canadensis*	Horseweed	United States (Michigan)	2002	PSII inhibitor (Ureas and amides) (C2/7)
19	*Abutilon theophrasti*	Velvetleaf	United States (Michigan)	2004	Photosystem II inhibitors (C1/5)
20	*Solanum ptycanthum*	Eastern Black Nightshade	United States (Michigan)	2004	Photosystem II inhibitors (C1/5)
21	*Conyza canadensis*	Horseweed	United States (Michigan)	2007	EPSP synthase inhibitors (G/9)

To date, there have yet to be any reported cases of weed species that have evolved field resistance to group 29 CBIs such as indaziflam.[2] There are currently, however, limited approved herbicides of other modes of activity that are still fully effective for weed control in tart cherries and other orchard crops in Michigan due to resistance verified for Horseweed, and Amaranth species to glyphosate (herbicide mode of activity group G/9). In addition, multiple herbicide resistance has been recorded by WSSA in Powell Amaranth to atrazine and diuron (groups C1/5, C2/7, respectively) and in Horseweed to commonly used herbicides such as glyphosate, atrazine, simazine and diuron (groups G/9, C1/5, C1/5, and C2/7, respectively). All these weed species are commonly found within and adjacent to orchards, vineyards and citrus groves in Michigan. Indaziflam is commonly applied in tank mixtures and/or rotations with all of the above listed herbicides, or in conjunction with alternate cultural practices to help improve weed control efficacy and prevent the development and spread of resistant weed populations.

Herbicide Resistant Weeds in Michigan, United States.					
#	Year	Species	Site of Action	Actives	Contacts
1	1975	*Chenopodium album* Common Lambsquarters	Photosystem II inhibitors (C1/5)	atrazine, metribuzin, simazine	James Kells, Chad Lee, Steven Gower
2	1990	*Senecio vulgaris* Common Groundsel	Photosystem II inhibitors (C1/5)	atrazine	Donald Penner, Steven Gower
3	1990	*Ambrosia artemisiifolia* Common Ragweed	Photosystem II inhibitors (C1/5)	atrazine	Donald Penner, Steven Gower
4	1991	*Portulaca oleracea* Common Purslane	**Multiple Resistance: 2 Sites of Action** Photosystem II inhibitors (C1/5) PSII inhibitor (Ureas and amides) (C2/7)	atrazine, linuron	Bernard Zandstra, Joseph G. Masabni, Steven Gower
5	1993	*Daucus carota* Wild Carrot	Synthetic Auxins (O/4)	2,4-D	James Kells, Jeff Stachler
6	1998	*Ambrosia artemisiifolia* Common Ragweed	ALS inhibitors (B/2)	cloransulam-methyl, imazamox, imazethapyr	Paul Schmitzer, Steven Gower
7	2000	*Amaranthus tuberculatus (=A. rudis)* Tall Waterhemp	ALS inhibitors (B/2)	chlorimuron-ethyl, imazethapyr, thifensulfuron-methyl	Steven Gower
8	2001	*Amaranthus powellii* Powell Amaranth	**Multiple Resistance: 2 Sites of Action** Photosystem II inhibitors (C1/5) PSII inhibitor (Ureas and amides) (C2/7)	atrazine, diuron	Steven Gower
9	2001	*Amaranthus retroflexus* Redroot Pigweed	**Multiple Resistance: 2 Sites of Action** Photosystem II inhibitors (C1/5) PSII inhibitor (Ureas and amides) (C2/7)	atrazine, diuron	Steven Gower
10	2001	*Polygonum persicaria* Ladysthumb	Photosystem II inhibitors (C1/5)	atrazine, simazine	Steven Gower
11	2001	*Chenopodium album* Common Lambsquarters	ALS inhibitors (B/2)	imazamox, thifensulfuron-methyl	Donald Penner, Steven Gower

12	2002	*Amaranthus hybridus (syn: quitensis)* Smooth Pigweed	ALS inhibitors (B/2)	chlorimuron-ethyl, imazamox, thifensulfuron-methyl	Steven Gower
13	2002	*Conyza canadensis* Horseweed	ALS inhibitors (B/2)	chlorimuron-ethyl, cloransulam-methyl	Steven Gower
14	2002	*Conyza canadensis* Horseweed	**Multiple Resistance: 2 Sites of Action** Photosystem II inhibitors (C1/5) PSII inhibitor (Ureas and amides) (C2/7)	atrazine, diuron, simazine	Steven Gower
15	2002	*Conyza canadensis* Horseweed	PSII inhibitor (Ureas and amides) (C2/7)	diuron	Steven Gower
16	2003	*Atriplex patula* Halberdleaf Orach	Photosystem II inhibitors (C1/5)	atrazine	Steven Gower
17	2004	*Solanum ptycanthum* Eastern Black Nightshade	Photosystem II inhibitors (C1/5)	atrazine	Steven Gower
18	2004	*Chenopodium album var. striatum (=C. strictum var. glaucophyllum)* Lateflowering Goosefoot	Photosystem II inhibitors (C1/5)	atrazine	Steven Gower
19	2004	*Abutilon theophrasti* Velvetleaf	Photosystem II inhibitors (C1/5)	atrazine	Steven Gower
20	2005	*Kochia scoparia* Kochia	ALS inhibitors (B/2)	imazamox, triflusulfuron-methyl	Steven Gower
21	2006	*Setaria faberi* Giant Foxtail	ALS inhibitors (B/2)	foramsulfuron, imazethapyr, nicosulfuron	Steven Gower
22	2007	*Conyza canadensis* Horseweed	EPSP synthase inhibitors (G/9)	glyphosate	Steven Gower
23	2011	*Amaranthus palmeri* Palmer Amaranth	EPSP synthase inhibitors (G/9)	glyphosate	Christy Sprague
24	2012	*Amaranthus blitoides* Prostrate Pigweed	Photosystem II inhibitors (C1/5)	terbacil	Bernard Zandstra, Rick Boydston
25	2016	*Ambrosia artemisiifolia* Common Ragweed	**Multiple Resistance: 2 Sites of Action** ALS inhibitors (B/2) PPO inhibitors (E/14)	cloransulam-methyl, fomesafen	Erin Hill

"As a CBI, for which there is little evidence of evolved weed resistance, indaziflam represents an important addition to the action mechanisms available for weed management". – Brabham et. al.[3]

"Overall, indaziflam and oxadiazon provided good (80 to 89%) to excellent control of dna-resistant goosegrass in both years, but dimethenamid and sulfentrazone were inconsistent." – McCullough et. al.[4]

"It is concluded that saflufenacil can be tank mixed with glufosinate for control of broadleaf and grass weeds; however, addition of indaziflam in tank mixture provided long-term, broad-spectrum weed control in Florida citrus compared with other treatments." – Jhala et. al.[5]

"Soil organic matter (SOM) explained the highest proportion of variability in predicting the herbicide dose required for 80% *Kochia* growth reduction (GR80) for flumioxazin and indaziflam (R2 =0.72 and 0.79 respectively)." – Sebastian et.al.[6]

"All three biotypes (of Goosegrass (*Eleusine indica*) Biotypes Resistant to Preemergence-Applied Oxadiazon) were completely controlled by preemergence applied labeled rates of prodiamine and indaziflam. This is the first peer-reviewed report of evolved weed resistance to oxadiazon." – McElroy et. al.[7]

"New herbicide products today tend to be premixed formulations of existing actives with known modes of action, new salts and esters or new actives with minor chemical modifications that claim to improve weed efficacy and spectrum, crop safety, reduced rates and/or soil residual activity. Recent examples of such advancements include the synthetic auxins aminocyclopyrachlor and halauxifen-methyl, the ACCase inhibitor pinoxaden, the PPO inhibitor saflufenacil, the HPPD inhibitors bicyclopyrone, tembotrione and pyrasulfotole, the ALS inhibitor trifamone, the cellulose biosynthesis inhibitor (CBI) indaziflam and very-long-chain fatty acid (VLCFA) inhibitors pyroxasulfone and fenoxasulfone." – Green.[8]

"Glyphosate is considered the world's most important herbicide because it provides broad-spectrum weed control and has favorable environmental characteristics and low mammalian toxicity (Baylis 2000; Woodburn 2000). These characteristics, combined with its cost-effectiveness, have led to frequent applications of glyphosate in perennial cropping systems and non-crop areas in California (Shrestha et al. 2007). However, reliance on herbicides with the same mode of action for extended periods can contribute to weed shifts and the selection of biotypes with resistance to herbicides (Christoffers 1999; Holt 1992) (see page 86). As a result of this selection pressure, cases of glyphosate-resistant rigid rye-grass (*Lolium rigidum*) (Heap 2008; Simarmata et al. 2005) and horse-weed (Shrestha et al. 2007) have been reported in California orchards and non-crop areas, respectively." – Shrestha et.al.[9]

An accession of *Camelina microcarpa* suspected to be resistant to sulfonylurea herbicides was identified in Oregon in 1998 field experiments. Greenhouse research confirmed that the putative resistant biotype was resistant to chlorsulfuron and metsulfuron on a whole plant level. Compared with the resistant (R) biotype, the susceptible (S) biotype was 1000 and 10,000-fold more sensitive to metsulfuron and chlorsulfuron respectively. The R biotype was also resistant to other sulfonylurea, sulfonylaminocarbonyl-triazolinone, imidazolinone and triazolopyrimidine herbicides. – Hanson et.al.[10]

13.2.2 Indaziflam use in tart cherry for the control of weed biotypes resistant to glyphosate, triazines, ALS-inhibiting, growth regulant, or other herbicide modes of action satisfies *Criterion IV: The minor use pesticide plays or will play a significant part in an integrated pest (weed) management program.*

Indaziflam can be used as an important component of Integrated Pest Management. In addition to key IPM program components such as weed scouting, weed identification, mowing, tillage, and other cultural practices, chemical controls can provide an efficient and effective option to boost the productivity of their crop.(ref Appendix 7) As a pre-emergent weed management tool, it offers growers an additional option for weed management practices on their farm. Due to the limited effective herbicide options available in this minor crop, the availability of indaziflam is a critical component of the success of IPM programs for growers.

An example of an IPM program that includes indaziflam is shown in Appendix 7 for citrus crops, however similar practices are implemented by growers of tart cherry.

13.3 References

[1.] United States Department of Agriculture – National Agricultural statistics Service. 2017. https://www.nass.usda.gov/Statistics_by_Subject/index.php?sector=CROPS

[2.] Heap I (2014) The international survey of herbicide resistant weeds. http://www.weedscience.org, http://weedscience.org/Summary/Country.aspx?CountryID=45

[3.] Indaziflam Herbicidal Action: A Potent Cellulose Biosynthesis Inhibitor. C. Brabham, Lei Lei, Ying Gu, J. Stork, M. Barrett, S. DeBolt. 2014. Plant Physiol. 166, pp. 1177-1185.

[4.] Efficacy of Preemergence Herbicides for Controlling a Dinitroaniline-Resistant Goosegrass (Eleusine indica) in Georgia. Patrick E. McCullough, Jialin Yu, and Diego G´omez de Barreda. 2013. Weed Technology 27:639–644.

[5.] Tank Mixing Saflufenacil, Glufosinate, and Indaziflam Improved Burndown and Residual Weed Control. Amit J. Jhala, Analiza H. M. Ramirez, and Megh Singh. 2013. Weed Technology 27:422–429

[6.] Influence of soil properties and soil moisture on the efficacy of indaziflam and flumioxazin on *Kocia scoparia* L. D. Sebastian, S. Nissen, P. Westra, D. Shaner, G. Butters. 2017. Pest Manag Sci; 73: 444–451.

[7.] Identification of Goosegrass (Eleusine indica) Biotypes Resistant to Preemergence-Applied Oxadiazon. J. Scott McElroy, William B. Head, Glenn R. Wehtje, and David Spak. 2017. Weed Technology 31:675–681.

[8.] Current state of herbicides in herbicide-resistant crops. Green, J.M. 2014. Pest Manag Sci 2014; 70: 1351–1357.

[9.] Glyphosate-resistant hairy fleabane documented in the Central Valley. 2008. A. Shrestha, B. Hanson and K. Hembree. http://CaliforniaAgriculture.ucop.edu • July–September 2008

[10.] Resistance of Camelina microcarpa to acetolactate synthase inhibiting herbicides. 2004. B. Hanson, K. Park, C Mallory-Smith and D. Thill. Weed Research 44: 187-194.

14.0 Justification of the Need for Indaziflam to Control Key Weeds in Apricots

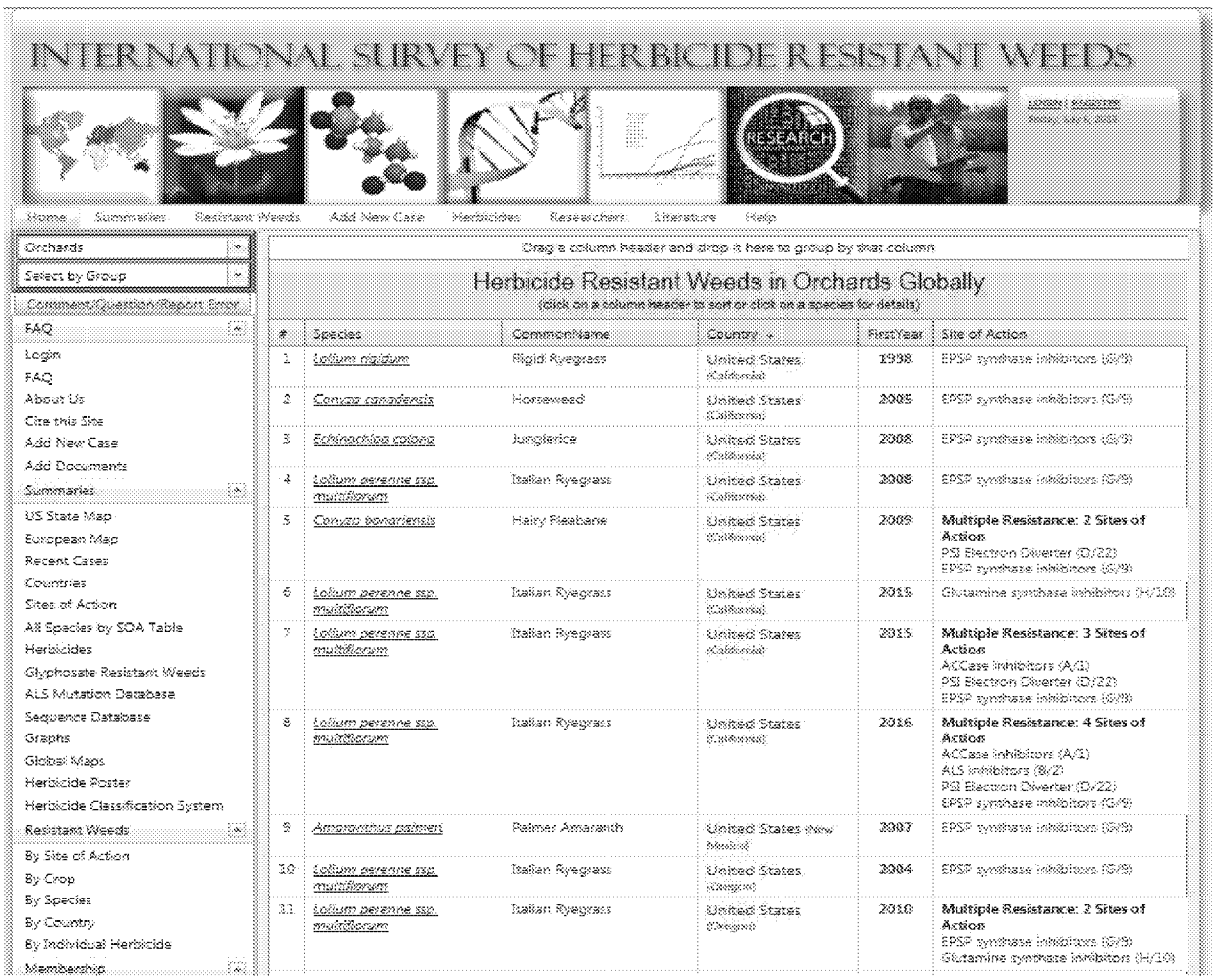
14.1 Apricot Acreage

Apricots are an important commercial U.S. crop with most apricots grown in **California** (10,532 bearing acres). In 2017 the total planted bearing acreage of apricots was reported by the USDA to be 12,179 acres, which is less than 300,000 per year and qualifies as a minor use crop (Table 1).[1]

14.2 Exclusive Use Data Protection Criteria Indaziflam Satisfies in Apricots

14.2.1 The Indaziflam use in apricots for the control of weed biotypes resistant to glyphosate, triazines, ALS-inhibiting, growth regulant, or other herbicide modes of action satisfies *Criterion III: The minor use pesticide plays or will play a significant part in managing pest resistance.*

The table below, copied from the Weed Science Society of America (WSSA) website for "International Survey of Herbicide Resistant Weeds"[2] shows the listings for the United States of weed species, common name, states of occurrence (California), year reported, and herbicide site of action for weeds located in **orchards**, such as apricot orchards, in California. California accounts for 10,500 acres, nearly 86% of all apricots produced in the United States.



#	Species	CommonName	Country	FirstYear	Site of Action
1	Lolium rigidum	Rigid Ryegrass	United States (California)	1998	EPSP synthase inhibitors (G/9)
2	Conyza canadensis	Horseweed	United States (California)	2005	EPSP synthase inhibitors (G/9)
3	Echinochloa colona	Junglerice	United States (California)	2008	EPSP synthase inhibitors (G/9)
4	Lolium perenne ssp. multiflorum	Italian Ryegrass	United States (California)	2008	EPSP synthase inhibitors (G/9)
5	Conyza bonariensis	Hairy Fleabane	United States (California)	2009	**Multiple Resistance: 2 Sites of Action** PSI Electron Diverter (D/22) EPSP synthase inhibitors (G/9)
6	Lolium perenne ssp. multiflorum	Italian Ryegrass	United States (California)	2015	Glutamine synthase inhibitors (H/10)
7	Lolium perenne ssp. multiflorum	Italian Ryegrass	United States (California)	2015	**Multiple Resistance: 3 Sites of Action** ACCase inhibitors (A/1) PSI Electron Diverter (D/22) EPSP synthase inhibitors (G/9)
8	Lolium perenne ssp. multiflorum	Italian Ryegrass	United States (California)	2016	**Multiple Resistance: 4 Sites of Action** ACCase inhibitors (A/1) ALS inhibitors (B/2) PSI Electron Diverter (D/22) EPSP synthase inhibitors (G/9)
9	Amaranthus palmeri	Palmer Amaranth	United States (New Mexico)	2007	EPSP synthase inhibitors (G/9)
10	Lolium perenne ssp. multiflorum	Italian Ryegrass	United States (Oregon)	2004	EPSP synthase inhibitors (G/9)
11	Lolium perenne ssp. multiflorum	Italian Ryegrass	United States (Oregon)	2010	**Multiple Resistance: 2 Sites of Action** EPSP synthase inhibitors (G/9) Glutamine synthase inhibitors (H/10)

The additional listings below for "Herbicide Resistant Weeds in California, United States" shows that resistance of selected weed species also occurs to most herbicide modes-of-action commonly used in orchards in that state, with the exception of indaziflam.

Herbicide Resistant Weeds in California, United States.					
#	Year	Species	Site of Action	Actives	Contacts
1	1981	*Senecio vulgaris* Common Groundsel	Photosystem II inhibitors (C1/5)	atrazine	Jodie Holt
2	1989	*Lolium perenne* Perennial Ryegrass	ALS inhibitors (B/2)	sulfometuron-methyl	Leonard Saari, Josephine Cotterman
3	1993	*Sagittaria montevidensis* California Arrowhead	ALS inhibitors (B/2)	bensulfuron-methyl	Michael Carriere
4	1993	*Cyperus difformis* Smallflower Umbrella Sedge	ALS inhibitors (B/2)	bensulfuron-methyl	Michael Carriere
5	1994	*Salsola tragus* Russian-thistle	ALS inhibitors (B/2)	chlorsulfuron, sulfometuron-methyl	Timothy Prather, Jodie Holt
6	1996	*Avena fatua* Wild Oat	Cell elongation inhibitors (Z/8)	diflenzoquat	Steve Orloff, Jodie Holt
7	1997	*Ammannia auriculata* Eared Redstem	ALS inhibitors (B/2)	bensulfuron-methyl	Jim Hill
8	1997	*Schoenoplectus mucronatus (=Scirpus mucronatus)* Ricefield Bulrush	ALS inhibitors (B/2)	bensulfuron-methyl	Jim Hill
9	1998	*Echinochloa phyllopogon (=E. oryzicola)* Late Watergrass	ACCase inhibitors (A/1)	fenoxaprop-P-ethyl	Albert Fischer
10	1998	*Lolium rigidum* Rigid Ryegrass	EPSP synthase inhibitors (G/9)	glyphosate	Thomas Lanini : retired, Brad Hanson, Marie Jasieniuk
11	1998	*Echinochloa phyllopogon (=E. oryzicola)* Late Watergrass	Lipid inhibitors (N/8)	thiobencarb = benthiocarb	Albert Fischer
12	2000	*Echinochloa oryzoides* Early Watergrass	Lipid inhibitors (N/8)	molinate, thiobencarb = benthiocarb	Albert Fischer
13	2000	*Ammannia coccinea* Redstem	ALS inhibitors (B/2)	bensulfuron-methyl	Jim Hill
14	2000	*Echinochloa crus-galli var. crus-galli* Barnyardgrass	**Multiple Resistance: 2 Sites of Action** ACCase inhibitors (A/1) Lipid inhibitors (N/8)	cyhalofop-butyl, fenoxaprop-P-ethyl, molinate, thiobencarb = benthiocarb	Albert Fischer
15	2000	*Echinochloa phyllopogon (=E. oryzicola)* Late Watergrass	**Multiple Resistance: 2 Sites of Action** ACCase inhibitors (A/1) Lipid inhibitors (N/8)	cyhalofop-butyl, fenoxaprop-P-ethyl, molinate, thiobencarb = benthiocarb	Albert Fischer
16	2001	*Phalaris minor* Little seed Canary grass	ACCase inhibitors (A/1)	clethodim, fenoxaprop-P-ethyl, fluazifop-P-butyl, sethoxydim	Joseph Di Tomaso
17	2002	*Digitaria ischaemum* Smooth Crabgrass	Synthetic Auxins (O/4)	quinclorac	Albert Fischer
18	2005	*Conyza canadensis* Horseweed	EPSP synthase inhibitors (G/9)	glyphosate	Brad Hanson, Anil Shrestha, Kurt Hembree, Steve Wright
19	2007	*Conyza bonariensis* Hairy Fleabane	EPSP synthase inhibitors (G/9)	glyphosate	Brad Hanson, Anil Shrestha, Kurt Hembree, Marcelo L. Moretti

20	2008	*Echinochloa colona* Junglerice	EPSP synthase inhibitors (G/9)	glyphosate	Albert Fischer, Thomas Lanini : retired, Brad Hanson, Steve Wright
21	2008	*Lolium perenne ssp. multiflorum* Italian Ryegrass	EPSP synthase inhibitors (G/9)	glyphosate	Marie Jasieniuk
22	2009	*Conyza bonariensis* Hairy Fleabane	**Multiple Resistance: 2 Sites of Action** EPSP synthase inhibitors (G/9) PSI Electron Diverter (D/22)	glyphosate, paraquat	Brad Hanson, Anil Shrestha, Kurt Hembree, Steve Wright, Marcelo L. Moretti
23	2013	*Cyperus difformis* Smallflower Umbrella Sedge	PSII inhibitor (Ureas and amides) (C2/7)	propanil	Albert Fischer, Rafael Pedroso
24	2013	*Poa annua* Annual Bluegrass	EPSP synthase inhibitors (G/9)	glyphosate	Brad Hanson, Marcelo L. Moretti
25	2014	*Schoenoplectus mucronatus (=Scirpus mucronatus)* Ricefield Bulrush	PSII inhibitor (Ureas and amides) (C2/7)	propanil	Albert Fischer, Rafael Pedroso
26	2014	*Conyza canadensis* Horseweed	**Multiple Resistance: 2 Sites of Action** EPSP synthase inhibitors (G/9) PSI Electron Diverter (D/22)	glyphosate, paraquat	Brad Hanson, Marcelo L. Moretti
27	2015	*Amaranthus palmeri* Palmer Amaranth	EPSP synthase inhibitors (G/9)	glyphosate	Brad Hanson, Anil Shrestha, Steve Wright, Jorge Angeles, Samikshya Budhathoki , Mala To, Sonia Rios
28	2015	*Lolium perenne ssp. multiflorum* Italian Ryegrass	Glutamine synthase inhibitors (H/10)	glufosinate-ammonium	Marie Jasieniuk, Parsa Tehranchian
29	2015	*Lolium perenne ssp. multiflorum* Italian Ryegrass	**Multiple Resistance: 3 Sites of Action** ACCase inhibitors (A/1) EPSP synthase inhibitors (G/9) PSI Electron Diverter (D/22)	glyphosate, paraquat, sethoxydim	Brad Hanson, Marie Jasieniuk, Caio Brunharo, Parsa Tehranchian
30	2016	*Lolium perenne ssp. multiflorum* Italian Ryegrass	**Multiple Resistance: 4 Sites of Action** ACCase inhibitors (A/1) ALS inhibitors (B/2) EPSP synthase inhibitors (G/9) PSI Electron Diverter (D/22)	clethodim, cyhalofop-butyl, fenoxaprop-P-ethyl, fluazifop-P-butyl, glyphosate, imazamox, mesosulfuron-methyl, paraquat, sethoxydim	Marie Jasieniuk, Maor Matzrafi, Parsa Tehranchian

To date, there have yet to be any reported cases of weed species that have evolved field resistance to group 29 CBIs such as indaziflam.[2] There are currently, however, limited approved herbicides of other modes of activity that are still fully effective for weed control in sweet cherries and other orchard crops due to resistance verified for Rigid Ryegrass, Horseweed, Junglerice, and Amaranth species to glyphosate (herbicide mode of activity group G/9). In addition, multiple herbicide resistance has been recorded by WSSA in Hairy Fleabane to glyphosate and paraquat (groups G/9, D/22, respectively) and in Italian Ryegrass to commonly used herbicides such as glyphosate, sethoxydim, paraquat, rimsulfuron, and glufosinate (groups G/9, A/1, D/22, B/2, and H/10, respectively). All these weed species are commonly found within and adjacent to orchards, vineyards and citrus groves in California and/or Oregon. Indaziflam is commonly applied in tank mixtures and/or rotations with all of the above listed herbicides, or in conjunction with alternate cultural practices to help improve weed control efficacy and prevent the development and spread of resistant weed populations.

"As a CBI, for which there is little evidence of evolved weed resistance, indaziflam represents an important addition to the action mechanisms available for weed management". – Brabham et. al.[3]

"Overall, indaziflam and oxadiazon provided good (80 to 89%) to excellent control of dna-resistant goosegrass in both years, but dimethenamid and sulfentrazone were inconsistent." – McCullough et. al.[4]

"It is concluded that saflufenacil can be tank mixed with glufosinate for control of broadleaf and grass weeds; however, addition of indaziflam in tank mixture provided long-term, broad-spectrum weed control in Florida citrus compared with other treatments." – Jhala et. al.[5]

"Soil organic matter (SOM) explained the highest proportion of variability in predicting the herbicide dose required for 80% *Kochia* growth reduction (GR80) for flumioxazin and indaziflam (R2 =0.72 and 0.79 respectively)." – Sebastian et.al.[6]

"All three biotypes (of Goosegrass (*Eleusine indica*) Biotypes Resistant to Preemergence-Applied Oxadiazon) were completely controlled by preemergence applied labeled rates of prodiamine and indaziflam. This is the first peer-reviewed report of evolved weed resistance to oxadiazon." – McElroy et. al.[7]

"New herbicide products today tend to be premixed formulations of existing actives with known modes of action, new salts and esters or new actives with minor chemical modifications that claim to improve weed efficacy and spectrum, crop safety, reduced rates and/or soil residual activity. Recent examples of such advancements include the synthetic auxins aminocyclopyrachlor and halauxifen-methyl, the ACCase inhibitor pinoxaden, the PPO inhibitor saflufenacil, the HPPD inhibitors bicyclopyrone, tembotrione and pyrasulfotole, the ALS inhibitor trifamone, the cellulose biosynthesis inhibitor (CBI) indaziflam and very-long-chain fatty acid (VLCFA) inhibitors pyroxasulfone and fenoxasulfone." – Green.[8]

"Glyphosate is considered the world's most important herbicide because it provides broad-spectrum weed control and has favorable environmental characteristics and low mammalian toxicity (Baylis 2000; Woodburn 2000). These characteristics, combined with its cost-effectiveness, have led to frequent applications of glyphosate in perennial cropping systems and non-crop areas in California (Shrestha et al. 2007). However, reliance on herbicides with the same mode of action for extended periods can contribute to weed shifts and the selection of biotypes with resistance to herbicides (Christoffers 1999; Holt 1992) (see page 86). As a result of this selection pressure, cases of glyphosate-resistant rigid rye-grass (*Lolium rigidum*) (Heap 2008; Simarmata et al. 2005) and horse-weed (Shrestha et al. 2007) have been reported in California orchards and non-crop areas, respectively." – Shrestha et.al.[9]

14.2.2 Indaziflam use in apricots for the control of weed biotypes resistant to glyphosate, triazines, ALS-inhibiting, growth regulant, or other herbicide modes of action satisfies *Criterion IV: The minor use pesticide plays or will play a significant part in an integrated pest (weed) management program.*

Indaziflam can be used as an important component of Integrated Pest Management. In addition to key IPM program components such as weed scouting, weed identification, mowing, tillage, and other cultural practices, chemical controls can provide an efficient and effective option to boost the productivity of their crop.(ref Appendix 7) As a pre-emergent weed management tool, it offers growers an additional option for weed management practices on their farm. Due to the limited effective herbicide options available in this minor crop, the availability of indaziflam is a critical component of the success of IPM programs for growers. An example of an IPM program that includes indaziflam is shown in Appendix 7 for citrus crops, however similar practices are implemented by growers of apricots.

14.3 References

[1] United States Department of Agriculture – National Agricultural statistics Service. 2017. https://www.nass.usda.gov/Statistics_by_Subject/index.php?sector=CROPS

[2] Heap I (2014) The international survey of herbicide resistant weeds. May 5, 2014. http://www.weedscience.org, http://weedscience.org/Summary/Country.aspx?CountryID=45

[3] Indaziflam Herbicidal Action: A Potent Cellulose Biosynthesis Inhibitor. C. Brabham, Lei Lei, Ying Gu, J. Stork, M. Barrett, S. DeBolt. 2014. Plant Physiol. 166, pp. 1177-1185.

[4] Efficacy of Preemergence Herbicides for Controlling a Dinitroaniline-Resistant Goosegrass (Eleusine indica) in Georgia. Patrick E. McCullough, Jialin Yu, and Diego G´omez de Barreda. 2013. Weed Technology 27:639–644.

[5] Tank Mixing Saflufenacil, Glufosinate, and Indaziflam Improved Burndown and Residual Weed Control. Amit J. Jhala, Analiza H. M. Ramirez, and Megh Singh. 2013. Weed Technology 27:422–429

[6] Influence of soil properties and soil moisture on the efficacy of indaziflam and flumioxazin on *Kocia scoparia* L. D. Sebastian, S. Nissen, P. Westra, D. Shaner, G. Butters. 2017. Pest Manag Sci; 73: 444–451.

[7] Identification of Goosegrass (Eleusine indica) Biotypes Resistant to Preemergence-Applied Oxadiazon. J. Scott McElroy, William B. Head, Glenn R. Wehtje, and David Spak. 2017. Weed Technology 31:675–681.

[8] Current state of herbicides in herbicide-resistant crops. Green, J.M. 2014. Pest Manag Sci 2014; 70: 1351–1357.

[9] Glyphosate-resistant hairy fleabane documented in the Central Valley. 2008. A. Shrestha, B. Hanson and K. Hembree. http://CaliforniaAgriculture.ucop.edu • July–September 2008

15.0 Qualification for Extension of Exclusive Data Use

FIFRA Section 3(c) (1) (F) (ii) allows for the extension of the period of exclusive data use by one additional year for each three minor uses registered within seven years of the initial registration up to a total of three additional years provided that:

> *(I) there are insufficient efficacious alternative registered pesticides available for the use;*
>
> *(II) the alternatives to the minor use pesticide pose greater risks to the environment or human health;*
>
> *(III) the minor use pesticide plays or will play a significant part in managing pest resistance;*
>
> *(IV) the minor use pesticide plays or will play a significant part in an integrated pest management program.*

Table 1 summarized the minor crops on which Indaziflam was registered during the first seven years after initial registration July 26, 2010 and are being used to justify the extension of the exclusive use of data.

(III) the minor use pesticide plays or will play a significant part in managing pest resistance.

> Many of the minor uses qualify in part because Indaziflam will play a significant part in managing pest / disease resistance, especially for resistance-prone pests. Indaziflam functions as significant resistance management tool when used correctly in rotation with the other classes. Indaziflam provides an alternative mode of action. There are numerous uses of Indaziflam that will result in better management of pest resistance. Therefore, these uses should qualify for extensions of exclusive data use.

(IV) the minor use pesticide plays or will play a significant part in an integrated pest management program.

> Many of the minor uses qualify in part because Indaziflam plays or will play a significant part in an integrated pest management program. Indaziflam can be used as an important component of Integrated Pest Management. In addition to key IPM program components such as weed scouting, weed identification, mowing, tillage, and other cultural practices, chemical controls can provide an efficient and effective option to boost the productivity of their crop.(ref Appendix 7) As a pre-emergent weed management tool, it offers growers an additional option for weed management practices on their farm. Due to the limited effective herbicide options available for these minor crops, the availability of indaziflam is a critical component of the success of IPM programs for growers. Therefore, these uses should qualify for extensions of exclusive data use.

16.0 Conclusions

In conclusion, the preceding demonstrates that the registration of Indaziflam on nine or more minor crops meets the criteria for granting a 3-year extension of the exclusive data use period. When the number of alternative modes of action are limited, the future effectiveness of those products and related products are at risk due to resistance, which follows overuse. Indaziflam can replace and/or complement some of these currently used high-risk products, some of which have already shown resistance development. Development of various minor uses were initiated by Bayer following external requests made to IR-4. IR-4 requests (which originate from growers, grower organizations and researchers) demonstrate that there are few or no effective alternatives for control of these weeds.

17.0 Appendices (separate document)

Appendix 1 Indaziflam 200 SC label 68
Appendix 2 Indaziflam 500 SC label 95
Appendix 3 Stakeholder Support for Alion Complete..... 123
Appendix 4 Weed Science Society of America - Herbicide Site of Action (SOA) Classification List 130
Appendix 5 IR-4 petition and support for minor crop addition (2016)..... 137
Appendix 6 IR-4 petition and support for minor crop addition (2018)..... 146
Appendix 7 Citrus IPM documentation 151

Appendix 1

GROUP	29	HERBICIDE

Indaziflam 200SC Herbicide

ABN: Alion® Herbicide

For Preemergent Weed Control in Blueberry (Highbush) and other Bushberry Subgroup Crops in 13-07B, except blueberry (Lowbush); Caneberry and other Caneberry Subgroup Crops in 13-07A; Citrus Groves; Coffee; Fruit, Small, Vine Climbing, Except Fuzzy Kiwifruit Subgroup 13-07F; Hops; Pome and Stone Fruit, Tree Nuts, Crops in the proposed Crop Subgroup 23A; Small fruit, edible peel subgroup, including Olive, Ornamentals, Christmas Trees, and Conifer Plantations.

ACTIVE INGREDIENT:
Indaziflam*.....19.05%

OTHER INGREDIENTS:.....80.95%
TOTAL: **100.00%**

Contains 1.67 pounds of indaziflam per gallon.
*(CAS No: 730979-19-8)

EPA Reg. No.: 264-1106 **EPA Est. No**

KEEP OUT OF REACH OF CHILDREN

CAUTION

For MEDICAL and TRANSPORTATION Emergencies ONLY Call 24 Hours A Day 1-800-334-7577
For PRODUCT USE Information Call 1-866-99BAYER (1-866-992-2937)

[See additional precautionary statements and directions for use on label.]

FIRST AID

If on skin or clothing:	∞ Take off contaminated clothing. ∞ Rinse skin immediately with plenty of water for 15-20 minutes. ∞ Call a poison control center or doctor for treatment advice.
If inhaled:	∞ Move person to fresh air. ∞ If person is not breathing, call 911 or an ambulance, and then give artificial respiration, preferably mouth-to-mouth if possible. ∞ Call a poison control center or doctor for further treatment advice.
If swallowed:	∞ Call a poison control center or doctor immediately for treatment advice. ∞ Have person sip a glass of water if able to swallow. ∞ Do not induce vomiting unless told to do so by a poison control center or doctor. ∞ Do not give anything to an unconscious person.
For MEDICAL Emergencies Call 24 Hours A Day 1-800-334-7577 Have the product container or label with you when calling a poison control center or doctor or going for treatment.	

Note to physician: No specific antidote is available. Treat symptomatically.

Appendix 1

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION

Harmful if swallowed, absorbed through the skin or inhaled. Avoid contact with skin, eyes, or clothing. Avoid breathing mist.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

All mixers, loaders, applicators and other handlers must wear:

- long-sleeved shirt and long pants.
- shoes plus socks.
- waterproof gloves.

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

ENGINEERING CONTROLS STATEMENTS

When handlers use closed systems or enclosed cabs in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240 (d) (4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

USER SAFETY RECOMMENDATIONS:
Users should wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
Users should remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
Users should remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change clothing.

ENVIRONMENTAL HAZARDS

This product is toxic to fish, aquatic invertebrates, and plants. Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean watermark. Do not contaminate water when disposing of equipment rinsate or washwater. This product may enter water through spray drift or runoff. Follow directions for use to avoid spray drift and runoff. A level well maintained vegetative buffer strip between areas to which this product is applied and surface water features including ponds, streams, and springs will reduce the potential of this product entering water from rainfall-runoff. Runoff of this product will be reduced by avoiding applications when rainfall is forecasted to occur within 48 hours.

Surface Water Advisory: This pesticide may impact surface water quality due to runoff of rainwater. This is especially true for poorly draining soils with shallow ground water. This product is classified as having high potential for reaching surface water via runoff for several months or more after application.

Ground Water Advisory: This pesticide has properties and characteristics associated with chemicals detected in ground water. This chemical may leach into ground water if used in areas where soils are permeable, particularly where the water table is shallow.

Appendix 1

DIRECTIONS FOR USE

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling.
Read the entire label before using this product

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

SHAKE CONTAINER WELL BEFORE USING.
IN THE STATE OF NEW YORK ONLY: NOT FOR SALE, DISTRIBUTION OR USE IN NASSAU OR SUFFOLK COUNTY.

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. This standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE) and restricted-entry intervals. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 12 hours.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water, is:

Coveralls

Shoes plus socks

Chemical resistant gloves made of any waterproof material

PRODUCT INFORMATION

Indaziflam 200SC Herbicide is formulated as a suspension concentrate of indaziflam at a concentration of 1.67 pounds of active ingredient per gallon.

Indaziflam 200SC Herbicide is a preemergence herbicide for control of annual grasses and broadleaf weeds in Blueberry (Highbush) and other Bushberry Subgroup Crops in 13-07B, except blueberry (Lowbush); Caneberry and other Caneberry Subgroup Crops in 13-07A; Citrus Groves; Coffee; Fruit, Small, Vine Climbing, Except Fuzzy Kiwifruit Subgroup 13-07F; Hops; Pome and Stone Fruit, Tree Nuts, Crops in the proposed Crop Subgroup 23A; Small fruit, edible peel subgroup, including Olive, Ornamentals, Christmas Trees, and Conifer Plantations. Indaziflam 200SC Herbicide may be applied to the soil as a uniform broadcast or band application for the prevention of new weed emergence.

Indaziflam 200SC Herbicide provides preemergence, residual control of weeds. A dry soil surface at time of application and 48 hours after application is optimum for binding the active ingredient to soil particles and preventing its downward movement to the crop's roots. Moisture is needed for activation of Indaziflam 200SC Herbicide. Dry soil conditions following the initial 48-hour period after application of Indaziflam 200SC Herbicide may result in reduced weed control. Weeds that germinate prior to activation by rain or irrigation may not be controlled. If weeds have emerged, the addition of a foliar active herbicide is needed. Indaziflam 200SC Herbicide applied alone will not control weeds that are already emerged. Refer to the "Tank Mix Instructions" section.

This product controls weeds by inhibiting cellulose biosynthesis in plants. It may be applied at any time when the ground is not frozen or covered with snow. It will provide most effective residual weed control when applied to a dry soil surface followed by 48 hours without irrigation or rain, and then followed by adequate moisture from rain or an irrigation event within 21 days and prior to weed seed germination. Weed seeds and seedlings must come into contact with Indaziflam 200SC Herbicide prior to emergence to be controlled. If insufficient moisture is present, some weeds may germinate and emerge from below the treated layer of soil. Avoid using Indaziflam 200SC Herbicide in areas where soil runoff or erosion is likely to occur.

Excessive crop or weed debris present on the soil surface at the time of application may prevent a uniform distribution of the product reaching the soil and consequently may reduce weed control. Performance may be improved by removing the debris prior to applying Indaziflam 200SC Herbicide. In very dense stands of living weeds, an application of a foliar active herbicide first then followed 3-6 weeks later with the application of Indaziflam 200SC Herbicide is recommended for improved performance.

The level of weed control is dependent on many variables including soil texture, moisture, temperature, weed species present, the amount of weed seed present in the soil, and the crop canopy.

Do not apply within 25 feet of ponds, lakes, rivers, streams, wetlands, and habitat containing aquatic and semi-aquatic plants.

The Pre-Harvest Interval (PHI) is 7 days for citrus and 14 days for all other crops listed on this label.

Appendix 1

PRECAUTIONS FOR USE

- Avoid direct or indirect spray contact with crop foliage, green bark, roots, or fruit as it may cause localized crop injury or death. Only trunks with callused, mature brown bark may be sprayed with Indaziflam 200SC Herbicide. If the trunks are not fully callused mature brown bark, they should not be sprayed unless protected from spray contact by nonporous wraps, grow tubes or waxed containers. Contact of Indaziflam 200SC Herbicide with tissues other than mature brown bark may result in serious damage or plant death.
- The soil surface where Indaziflam 200SC Herbicide is to be applied should not have open channels or cracks in the soil. This is to prevent the product from reaching the crop roots either through direct contact from the spray application or with water movement from rain or irrigation as this may cause crop injury. If depressions in the soil such as from settling following transplanting exist around the base of the crop, fill them in with soil prior to applying Indaziflam 200SC Herbicide. Crops that are stressed may be more sensitive to herbicide injury and should not be treated.
- Weed control activity may be reduced if the application is made to soil covered in heavy crop or weed debris that prevents a uniform distribution of the product reaching the soil. Removing the debris prior to applying Indaziflam 200SC Herbicide may improve weed control.
- Rates provided on this label are based on broadcast treatment. For banded applications, reduce the broadcast rate of Indaziflam 200SC Herbicide to the proportion of the field being treated. No area of the field may be treated with more than the highest rate provided on this label regardless of the portion of the field that this represents.
- Do not use in crops that exhibit low vigor or poor health as they may be more susceptible to crop injury. Causes of reduced vigor may include such things as previous pesticide applications, excess fertilizer or salt, diseases, insects, nematodes, drought, flooding, wind damage, frost, nutrient deficiency, or mechanical damage.

RESTRICTIONS FOR USE

- Indaziflam 200SC Herbicide can only be applied in citrus trees established for a minimum of one year after transplanting and exhibiting normal growth and good vigor or in new Citrus Groves one month after planting if the transplanted trees were potted plants (such as citripots) and not bare-rooted, the trunks are protected from spray contact by nonporous wraps, grow tubes or waxed containers, and the trees are actively growing and exhibiting good health and vigor.
- Indaziflam 200SC Herbicide can only be applied in labeled tree nut crops (except pecan) that have been established for a minimum of one year after transplanting and exhibiting normal growth and good vigor.
- Indaziflam 200SC Herbicide can only be applied in labeled pome and stone fruit, pecan, and olive that have been established for a minimum of three years after transplanting and exhibiting normal growth and good vigor.
- Do not use on soils with 20% or more gravel content. To determine gravel content do not remove gravel from soil samples before sending the samples for soil texture analysis, and request that gravel content be included in the analysis. The gravel content (greater than 2 mm or 0.079 inches in size, US standard sieve size 10) is defined as total percent gravel by weight before conducting soil texture analysis.
- Determine soil organic matter content (%OM) of specific orchards, vineyards, and groves by having soil core samples to a minimum depth of 6 inches of soil analyzed.
- Do not apply more than the amount of Indaziflam 200SC Herbicide specified per application and per year or in a 12 month period on this label based on soil texture, percent organic matter content, application site, and crop.
- Allow at least 90 days between applications of Indaziflam 200SC Herbicide.
- Only use in vineyards where the grapes have at least 6 inches of soil barrier between the soil surface and the major portion of the root system.
- Indaziflam 200SC Herbicide can only be applied in grapes that have been established for a minimum of three years after transplanting and exhibiting normal growth and good vigor.
- Do not apply this product through any type of irrigation system.
- Use of spot spraying around desired plants is not allowed due to the variability of the actual application rate. Excessive application rates may result in severe crop injury or death.
- Do not apply this product by aerial application.
- Do not harvest citrus crops within 7 days after the application of Indaziflam 200SC Herbicide.
- Do not harvest crops other than citrus within 14 days after the application of Indaziflam 200SC Herbicide.
- Only crops listed on this label may be replanted or rotated within 24 months after the last application of Indaziflam 200SC Herbicide and while following the instructions listed in the "Rotational Crop Restrictions" section.
- Do not apply this product to frozen or snow covered soil.
- Do not apply this product to water-saturated soil.

- Do not flood-irrigate orchards or vineyards containing stone fruit, pome fruit, grapes, tree nuts, or olives within 60 days following application of Indaziflam 200SC Herbicide.
- Do not apply irrigation, exclusive of flood-irrigation, to treated areas within 48 hours after application.
- Do not apply within 25 feet of ponds, lakes, rivers, streams, wetlands, and habitat containing aquatic and semi-aquatic plants.
- Do not use Indaziflam 200SC Herbicide in Nassau and Suffolk Counties of New York State.

SPRAY DRIFT MANAGEMENT

Spray equipment and weather affect spray drift. Consider all factors when making application decisions. Where states have more stringent regulations, they must be observed. Avoiding spray drift is the responsibility of the applicator or grower. To reduce the potential for drift, the application equipment must be set to apply medium to large droplets (i.e., ASAE ~~Standard~~ S-572.1) with corresponding spray pressure. Use high flow rate nozzles to apply the highest practical spray volume. With most nozzle types, narrower spray angles produce larger droplets. Follow the nozzle manufacturer's directions on pressure, orientation, spray volume, etc., in order to minimize drift and optimize coverage and control.

Wind

Avoid making applications when spray particles may be carried by air currents to areas where sensitive crops and plants are growing. Do not spray near sensitive plants if wind is gusty, below 2 mph, or in excess of 10 mph and moving in the direction of adjacent areas of sensitive crops or plants. Do not apply during temperature inversions. Always make applications when there is some air movement to determine the direction and distance of possible spray drift.

Local terrain may influence wind patterns; the applicator should be familiar with local conditions and understand how they may impact spray drift. Boom or nozzle shielding can reduce the effects of wind or air currents on drift. Verify that the shields do not interfere with uniform deposition of product prior to application.

Temperature Inversion

A surface temperature inversion (i.e., increasing temperature with increasing altitude) greatly increases the potential for drift. Avoid application when conditions are favorable to inversion. Presence of ground fog is a good indicator of a surface temperature inversion.

Sensitive Areas

Sensitive areas to Indaziflam 200SC Herbicide are defined as natural bodies of water (ponds, lakes, rivers, and streams), wetlands, habitats of endangered species and non-labeled agricultural crop areas. Applicators must take all precautions necessary to minimize spray drift to these sensitive areas.

APPLICATION INFORMATION

Indaziflam 200SC Herbicide can only be applied by ground equipment. Do not apply by aerial equipment, chemigation, or spot spraying around desired plants.

Apply Indaziflam 200SC Herbicide alone or in an approved tank mixture in a minimum of 10 gallons of spray mixture per acre. Use higher spray volumes to improve distribution in high densities of emerged weeds or debris. Uniform, thorough spray coverage directed to the soil at the base of the crop is important to achieve consistent weed control. Do not allow spray to directly or indirectly contact crop foliage, green bark, roots, or fruit as it may cause localized crop injury. Application may be made as a broadcast treatment or as a banded treatment under vineyard, grove, or orchard crops. When making banded applications use proportionately less spray water and Indaziflam 200SC Herbicide. The dosage listed on this label is for the treated area of the field regardless of the portion of the field that this represents.

Application Equipment

To minimize spray drift to non-target areas, apply this product using nozzles that deliver a medium or larger spray droplet as defined by the ASAE ~~standard~~ S-572.1 and as shown in nozzle manufacturer's catalogues. Keep the spray boom at the lowest possible spray height recommended by the nozzle manufacturer above the target surface. Refer to nozzle manufacturer's recommendations for proper nozzle, pressure setting and sprayer speed for optimum product performance and minimal spray drift. Use sprayers that provide accurate and uniform application to ensure proper distribution. An off-center (OC) nozzle located at the end of the boom may be used to spray near the trunk but must be oriented so that it directs spray to avoid spray contact with crop foliage and green bark. **Maintain adequate agitation at all times including momentary stops. Since settling may occur and be difficult to get back into suspension, spray solution should not be left in the tank overnight.**

Ensure that the spray equipment including spray tank, pumps, lines, filters, screens, and nozzles are clean and free of residue from previous use before mixing and applying Indaziflam 200SC Herbicide by following the instructions listed under SPRAYER CLEANUP PROCEDURE. Residue remaining in the spray equipment from previous uses can cause crop injury if not properly cleaned. After applying Indaziflam 200SC Herbicide, follow the cleaning instructions again to ensure that no product remains in the spray equipment.

Appendix 1

Uniform thorough spray coverage is important to achieve consistent weed control. Select nozzles, pressure, and application speed that will deliver medium or larger droplets. Verify that application equipment is in good working condition and is properly calibrated to apply the correct amount of product.

Application Method

Broadcast Applications

For all crops listed on this label, apply Indaziflam 200SC Herbicide at rates described in the **Dose Rate Chart** in the **APPLICATION DIRECTIONS** section for the specific crop or site where this product will be used.

Banded Applications

When making banded applications, use the same dosage rate as for broadcast applications but use proportionately less spray water and Indaziflam 200SC Herbicide. The use rate provided is for the treated area of the field regardless of the portion of the field that it represents. Banded applications may be made using the following formula to calculate the amount of herbicide and spray volume needed for orchard or vineyard strip sprays:

Treated Band width in Inches / Row width in Inches	X	HERBICIDE Rate per Treated Acre	=	Amount of HERBICIDE needed for treatment
Treated Band width in Inches / Row width in Inches	X	SPRAY VOLUME per Treated Acre	=	Amount of Spray Volume needed for treatment

Tank Mix Instructions

Indaziflam 200SC Herbicide may be mixed with and applied in combination with most commonly used pesticides registered for use in the approved crops to expand the spectrum of weed control. Indaziflam 200SC Herbicide will generally provide little or no control of weeds that are already emerged or established at the time of application. When weeds are emerged at application, the addition of a labeled foliar active herbicide such as Rely® 280 Herbicide is needed. Only use products that are approved for use in the crop to which the tank mixture is to be applied.

If Indaziflam 200SC Herbicide is to be tank mixed with liquid fertilizers, other pesticides, or additives, compatibility should be tested prior to mixing. To test for compatibility, use a small container and mix a small amount (0.5 to 1 qt) of spray, combining all ingredients in the same ratio and mixing order as the anticipated use. If any indications of physical incompatibility develop, do not use this mixture for spraying. Indications of incompatibility usually appear 5 - 15 minutes after mixing.

~~Read and follow the label of each tank mix partner used with Indaziflam 200SC Herbicide for all precautionary statements, directions for use, geographic and other restrictions. When tank mixing products with different restrictions, follow the directions of the most restricted label.~~

It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.

Mixing Instructions

Ensure that the application equipment has been thoroughly cleaned from previous use before using to apply Indaziflam 200SC Herbicide. Follow the steps listed below:

1. Shake container well to ensure that the product is thoroughly suspended prior to measuring in case some settling has occurred during shipping or storage.
2. Fill the spray tank with 1/2 of the required volume of water prior to the addition of Indaziflam 200SC Herbicide.
3. With the pump and agitator running, add the proper amount of Indaziflam 200SC Herbicide first.
4. Once the Indaziflam 200SC Herbicide is completely dispersed, add any other pesticides, fertilizers or additives if they are to be applied with Indaziflam 200SC Herbicide.
5. Add the rest of the water to the desired volume while maintaining sufficient agitating.

Continue agitation while mixing and during application to ensure a uniform spray mixture.

Re-suspending SC Products in Spray Solution: Like other suspension concentrates (SCs), Indaziflam 200SC Herbicide will settle if left standing without agitation. Reagitate the spray solution for a minimum of 10 minutes before application.

Appendix 1

Weed Control

Indaziflam 200SC Herbicide provides residual control of susceptible grass and broadleaf weeds when applied prior to germination. Best weed control is obtained when Indaziflam 200SC Herbicide is applied to a dry soil surface followed by 48 hours without irrigation or rain, and then followed by adequate moisture from rain or an irrigation event within 21 days and prior to weed seed germination and adequate rain or irrigation is received soon after application and prior to weed germination. Supplemental irrigation may be applied following application to improve weed control.

The weed control activity may be reduced if the application is made to dense weed vegetation or to soil covered in heavy crop or weed debris that prevents a uniform distribution of the product reaching the soil. Removing the debris and / or controlling the existing weeds prior to applying Indaziflam 200SC Herbicide may improve weed control. In very dense stands of living weeds, an application of a foliar active herbicide first then followed 3-6 weeks later with the application of Indaziflam 200SC Herbicide is recommended for improved performance.

If weeds are emerged at application, the addition of a foliar active herbicide is needed. The spectrum of weed control may be increased when Indaziflam 200SC Herbicide is tank mixed with other herbicides. Refer to Tank Mix Instructions section.

Rate Ranges

Select proper use rate based on crop or application site and soil texture and percent organic matter content. Soils with high clay content may require a higher use rate of Indaziflam 200SC Herbicide than soils with low clay content. Where rate ranges are given, use lower rates within the range on coarser textured soils and higher rates within the range on finer textured soils. Using the higher rates will provide longer weed control and may also improve control in fields with heavy weed or crop debris.

If individual orchards, vineyards, or citrus groves have multiple %OM contents throughout the area where Indaziflam 200SC Herbicide is to be applied by a single tank or tank mix, then use the lowest rate of Indaziflam 200SC Herbicide corresponding to the lowest %OM content for that area.

Indaziflam 200SC Herbicide may be used on soils with greater than 10% organic matter; however, the length and level of weed control may be reduced compared to soils with lower organic matter.

Weeds Controlled by 3.5 to 6.5 Fl oz/Ac Indaziflam 200SC Herbicide			
Broadleaves		Grasses	
Common Name	Genus/Species	Common Name	Genus/Species
Amaranth, spiny	*Amaranthus spinosus*	Barley, mouse	*Hordeum murinum*
Buckwheat, wild *	*Polygonum convolvulus*	Barnyardgrass, common	*Echinochloa crus-galli*
Burclover, California *	*Medicago polymorpha*	Bluegrass, annual	*Poa annua*
Buttercup, corn *	*Ranunculus arvensis*	Brome, downy	*Bromus tectorum*
Carpetweed	*Mollugo verticillata*	Brome, foxtail	*Bromus rubens*
Catsear, spotted ***	*Hypochoeris radicata*	Bromegrass, ripgut	*Bromus rigidus*
Celery, wild *	*Apium leptophyllum*	Cheat	*Bromus secalinus*
Chickweed, common	*Stellaria media*	Crabgrass, large	*Digitaria sanguinalis*
Chickweed, mouse-ear	*Cerastium vulgatum*	Crabgrass, smooth	*Digitaria ischaemum*
Clover, crimson ***	*Trifolium incarnatum*	Cupgrass, southwestern	*Eriochloa gracilis*
Clover, red *	*Trifolium pratense*	Foxtail, giant	*Setaria faberi*
Clover, white ***	*Trifolium repens*	Foxtail, green	*Setaria viridis*
Cudweed, purple	*Gnaphalium purpureum*	Foxtail, yellow	*Pennisetum glaucum*
Dandelion, common (seedling)	*Taraxacum officinale*	Goosegrass	*Eleusine indica*
Eveningprimrose, cutleaf *	*Oenothera laciniata*	Guineagrass	*Panicum maximum*
Fiddleneck, coast	*Amsinckia intermedia*	Junglerice	*Echinochloa colonum*
Filaree, redstem / Storksbill	*Erodium cicutarium*	Lovegrass, tufted	*Eragrostis pectinacea*
Filaree, whitestem	*Erodium moschatum*	Millet, wild proso	*Panicum miliaceum*
Fleabane, hairy	*Erigeron bonariensis*	Oat, wild	*Avena fatua*
Geranium, Carolina	*Geranium carolinianum*	Panicum, fall	*Panicum dichotomiflorum*
Groundsel, common	*Senecio vulgaris*	Panicum, Texas *	*Panicum texanum*
Henbit *	*Lamium amplexicaule*	Ryegrass, Italian (annual)	*Lolium multiflorum*
Horseweed / Marestail	*Erigeron canadensis*	Signalgrass, broadleaf	*Brachiaria platyphylla*
Indigo, Hairy	*Indigofera hirsuta*	Sprangletop, bearded	*Leptochloa fascicularis*
Knotweed, prostrate *	*Polygonum aviculare*		

Appendix 1

Weeds Controlled by 3.5 to 6.5 Fl oz/Ac Indaziflam 200SC Herbicide			
Broadleaves		Grasses	
Common Name	Genus/Species	Common Name	Genus/Species
Kochia	*Kochia scoparia*	Sprangletop, Mexican	*Leptochloa uninervia*
Lambsquarters, common **	*Chenopodium album*		
Lettuce, prickly *	*Lactuca serriola*		
Mallow, common *	*Malva neglecta*		
Mallow, little/ Cheeseweed	*Malva parviflora*		
Morningglory, ivyleaf *	*Ipomoea hederacea*		
Morningglory, pitted	*Ipomoea lacunosa*		
Mustard, black	*Brassica nigra*		
Mustard, wild	*Sinapis arvensis*		
Nettle, stinging	*Urtica dioica*		
Pigweed, prostrate	*Amaranthus blitoides*		
Pigweed, redroot	*Amaranthus retroflexus*		
Pigweed, smooth	*Amaranthus hybridus*		
Plantain, buckhorn	*Plantago lanceolata*		
Prickly sida / Teaweed	*Sida spinosa*		
Puncturevine, Common *	*Tribulus terrestris*		
Purslane, common	*Portulaca oleracea*		
Purslane, horse	*Trianthema portulacastrum*		
Pusley, Brazilian ***	*Richardia brazilensis*		
Pusley, Florida	*Richardia scabra*		
Ragweed, common *	*Ambrosia elatior*		
Redmaids	*Calandrinia caulescens*		
Rocket, London	*Sisymbrium irio*		
Sesbania, hemp / Coffeebean	*Sesbania exaltata*		
Shepherd's-purse	*Capsella bursa-pastoris*		
Smartweed, Pennsylvania	*Polygonum pensylvanicum*		
Smellmelon	*Cucumis melo*		
Sorrel, red *	*Rumex acetosella*		
Sowthistle, annual	*Sonchus oleraceus*		
Sowthistle, spiny	*Sonchus asper*		
Spanishneedles *	*Bidens bipinnata*		
Spurge, garden	*Euphorbia hirta*		
Spurge, prostrate	*Euphorbia supina*		
Spurge, spotted	*Euphorbia maculata*		
Spurry, corn	*Spergula arvensis*		
Sunflower, common *	*Helianthus annuus*		
Swinecress	*Coronopus didymus*		
Thistle, Russian	*Salsola kali*		
Velvetleaf	*Abutilon theophrasti*		
Vetch, purple	*Vicia benghalensis*		
Willowherb, panicle	*Epilobium brachycarpum*		
Woodsorrel, common yellow *	*Oxalis stricta*		
Woodsorrel, Florida yellow	*Oxalis florida*		

* Denotes partial control of these weeds

** Consistent control dependent on timely activation by rain or irrigation

*** Seedling control only

Appendix 1

APPLICATION DIRECTIONS FOR USE ON BLUEBERRY (HIGHBUSH) AND OTHER BUSHBERRY SUBGROUP CROPS IN 13-07B (Aronia berry; blueberry, highbush; buffalo currant; Chilean guava; cranberry, highbush; currant, black; currant, red; elderberry; European barberry; gooseberry; honeysuckle, edible; huckleberry; jostaberry; Juneberry (Saskatoon berry); lingonberry; native currant; salal; sea buckthorn; cultivars, varieties, and/or hybrids of these including rabbiteye blueberries, except blueberry (lowbush).

Only use Indaziflam 200SC Herbicide in established plantings at least one year after the bushes have been planted and exhibiting normal growth and good vigor. Only apply Indaziflam 200SC Herbicide to blueberries and bushberries where the soil has completely settled around the bushes and there are no exposed roots, open channels or depressions in the soil that would allow the product to move into the root zone or injury may occur.

Dose Rate Chart for Blueberry (Highbush) and Bushberry Plantings and other 13-07B crops except blueberry (lowbush)

Soil Texture	Indaziflam 200SC Herbicide (fl oz product / broadcast acre)			Minimum Plant Age
Sand	Do Not Use			
Any other soil except those that contain 20% or greater gravel content	Soil percent Organic Matter Content	Rate Per Application	Max Rate Per Year	1 year*
	%	fl oz/A	fl oz/A	
	< 1	3.5 (0.045 lb ai/A)	7.0 (0.09 lb ai/A)	
	≥ 1	5.0 (0.065 lb ai/A)	10.0 (0.13 lb ai/A)	

Do not apply more than a total of 7.0 fl oz product/A (0.09 lb ai/A) per year on soils containing < 1 % organic matter content, or 10.0 fl oz product/A (0.13 lb ai/A) per year on soils containing ≥1 % organic matter content in a 12 month period when used in any highbush blueberry or bushberry planting.

Only apply Indaziflam 200SC Herbicide to soil as a dormant application in late fall through early spring before bud swell.

Apply Indaziflam 200SC Herbicide as a directed application to the soil beneath the bushes.

When making more than one application per year, allow a minimum of 90 days between applications.

Do not apply more than one application of Indaziflam 200SC Herbicide per cropping season per year in California

Do not use in Blueberry (HighBush) and other Bushberry 13-07B crops grown in sand.

Do not use on soils with 20% or more gravel content.

Do not allow spray to contact green stems, foliage, flowers, or berries or unacceptable injury may occur.

***Only use** Indaziflam 200SC Herbicide in established plantings at least three years after the bushes have been planted and exhibiting normal growth and good vigor in California.

Appendix 1

APPLICATION DIRECTIONS FOR USE ON CANEBERRY AND OTHER CANEBERRY SUBGROUP CROPS IN 13-07A (Blackberry; loganberry; raspberry, black and red; wild raspberry; cultivars, varieties, and/or hybrids of these)

Only use Indaziflam 200SC Herbicide in established plantings at least one year after the bushes have been planted and exhibiting normal growth and good vigor. Only apply Indaziflam 200SC Herbicide to caneberries where the soil has completely settled around the bushes and there are no exposed roots, open channels or depressions in the soil that would allow the product to move into the root zone or injury may occur.

Dose Rate Chart for Caneberry Plantings

Soil Texture	Indaziflam 200SC Herbicide (fl oz product / broadcast acre)			Minimum Plant Age
Sand	Do Not Use			
Any other soil except those that contain 20% or greater gravel content	Soil percent Organic Matter Content	Rate Per Application	Max Rate Per Year	1 year*
	%	fl oz/A	fl oz/A	
	< 1	3.5 (0.045 lb ai/A)	7.0 (0.09 lb ai/A)	
	≥ 1	5.0 (0.065 lb ai/A)	10.0 (0.13 lb ai/A)	

Do not apply more than a total of 7.0 fl oz product/A (0.09 lb ai/A) per year on soils containing < 1 % organic matter content, or 10.0 fl oz product/A (0.13 lb ai/A) per year on soils containing ≥1 % organic matter content in a 12 month period when used in any caneberry planting.

Only apply Indaziflam 200SC Herbicide to soil as a dormant application in late fall through early spring before bud swell.

Do not apply more than one application of Indaziflam 200SC Herbicide per cropping season per year in California.

When making more than one application per year, allow a minimum of 90 days between applications.

Apply Indaziflam 200SC Herbicide as a directed application to the soil beneath the canes.

Do not use in Caneberry 13-07A grown on sand.

Do not use on soils with 20% or more gravel content.

Do not allow spray to contact green stems, foliage, flowers, or berries or unacceptable injury may occur.

***Only use** Indaziflam 200SC Herbicide in established plantings at least three years after the bushes have been planted and exhibiting normal growth and good vigor in California.

Appendix 1

APPLICATION DIRECTIONS FOR USE IN CITRUS GROVES

Only apply Indaziflam 200SC Herbicide in citrus groves where the soil has completely settled around citrus trees and there are no open channels or depressions in the soil that would allow the product to move into the root zone through open channels.

Citrus Crops: Crop group 10 including Australian desert lime; Australian finger-lime; Australian round lime; Brown River finger lime; calamondin; citron; citrus hybrids; clementine; grapefruit; Japanese summer grapefruit; kumquat; lemon; lime; Mediterranean mandarin; mount white lime; New Guinea wild lime; orange, sour; orange, sweet; pummelo; Russell River lime; satsuma mandarin; sweet lime; tachibana orange; Tahiti lime; tangelo; tangerine (mandarin); tangor; trifoliate orange; uniq fruit; cultivars, varieties, and or hybrids of these

Dose Rate Chart for Citrus Groves

Soil Texture	Indaziflam 200SC Herbicide (fl oz product / broadcast acre)
Any soil except those that contain 20% or greater gravel content	5.0 to 6.5 fl oz/A (0.065 to 0.085 lb ai/A)

Do not apply more than 10.3 fl oz product/A (0.134 lb ai/A) per year or in a 12 month period.
When making more than one application per year, allow a minimum of 90 days between applications.

Use in Established Groves:

Only apply Indaziflam 200SC Herbicide in groves where the trees have been established for a minimum of one year after transplanting.

Use in Recently Planted Citrus Groves:
Indaziflam 200SC Herbicide may be used in groves planted a minimum of one month provided the following condition exists:

1) The transplanted trees were potted plants (such as citripots) and not bare-rooted.
2) The trunks are protected from spray contact by nonporous wraps, grow tubes, or waxed containers.
3) The trees are actively growing and exhibiting good health and vigor.

Avoid direct or indirect spray contact with crop foliage, green bark, roots, or fruit as it may cause localized crop injury or death. Only the trunks of trees transplanted more than one year may be sprayed with Indaziflam 200SC Herbicide if the trunk is callused, mature brown bark. Contact of Indaziflam 200SC Herbicide with tissues other than mature brown bark can result in serious damage or plant death.

Appendix 1

APPLICATION DIRECTIONS FOR USE ON COFFEE

Only use Indaziflam 200SC Herbicide in established plantings at least one year after the shrubs have been planted and exhibiting normal growth and good vigor. Only apply Indaziflam 200SC Herbicide to coffee shrubs where the soil has completely settled around the shrubs and there are no open channels or depressions in the soil that would allow the product to move into the root zone or injury may occur.

Dose Rate Chart for Coffee

Soil Texture	Indaziflam 200SC Herbicide (fl oz product / broadcast acre)			
Any soil except those that contain 20% or greater gravel content	Soil percent Organic Matter Content	Maximum Rate of First Application	Maximum Rate of Second Application	Max Rate Per Year
	%	fl oz/A	fl oz/A	fl oz/A
	< 1	3.5 (0.045 lb ai/A)	3.5 (0.045 lb ai/A)	7.o (0.091 lb ai/A)
	1 to 3	5.0 (0.065 lb ai/A)		8.5 (0.11 lb ai/A)
	> 3	6.8 (0.089 lb ai/A)		10.3 (0.134 lb ai/A)

Do not apply more than the amount of Indaziflam 200SC Herbicide specified per application and per year or in a 12 month period on this label based on soil texture, percent organic matter content, application site, and crop. When making more than one application per year, allow a minimum of 90 days between applications.

Do not use on soils with 20% or more gravel content.
Do not apply more than 10.3 fl oz product/A (0.134 lb ai/A) per year or in a 12 month period when used in Coffee.

Do not use in coffee grown on sand.

Do not allow spray to contact green stems, foliage, flowers, or beans or unacceptable injury may occur.

Appendix 1

FRUIT, SMALL, VINE CLIMBING, EXCEPT FUZZY KIWIFRUIT SUBGROUP 13-07F including: Amur river grape; gooseberry; grape; kiwifruit, hardy; maypop; schisandra berry; cultivars, varieties, and/or hybrids of these

Only use Indaziflam 200SC Herbicide in established vineyards at least three years after the vines have been planted and exhibiting normal growth and good vigor. Ensure that the grapes have 6 inches of soil barrier between the soil surface and the major portion of the root system prior to using Indaziflam 200SC Herbicide or injury may occur.

Dose Rate Chart for Grape Vineyards and other 13-07F Crops

Soil Texture	Indaziflam 200SC Herbicide (fl oz product / broadcast acre)			Minimum Vine Age
Sand	Do Not Use			
Any other soil except those that contain 20% or greater gravel content	Soil percent Organic Matter Content	Rate Per Application	Max Rate Per Year	3 years
	%	fl oz/A	fl oz/A	
	<1	3.5 to 5.0 (0.045 to 0.065 lb ai/A)	5.0 (0.065 lb ai/A)	
	≥1	3.5 to 5.0 (0.045 to 0.065 lb ai/A)	5.0 (0.065 lb ai/A)	

Do not apply more than the amount of Indaziflam 200SC Herbicide specified per application and per year or in a 12 month period on this label based on soil texture, percent organic matter content, application site, and crop.

Do not use in grapes grown in Florida or Georgia.

Do not use in grapes and other 13-07F crops grown in sand.

Do not use on soils with 20% or more gravel content.

Do not apply more than a total of 5.0 fl oz product/A (0.065 lbs ai/A) per year or in a 12 month period when used in grape vineyards and other 13-07F crops.

When making more than one application per year, allow a minimum of 90 days between applications.

Appendix 1

APPLICATION DIRECTIONS FOR USE ON HOPS

Only use Indaziflam 200SC Herbicide in established plantings at least one year after the vines have been planted and exhibiting normal growth and good vigor. Only apply Indaziflam 200SC Herbicide to hops vines where the soil has completely settled around the vines and there are no exposed roots, open channels or depressions in the soil that would allow the product to move into the root zone or injury may occur.

Dose Rate Chart for Hops

Soil Texture	Indaziflam 200SC Herbicide (fl oz product / broadcast acre)			Minimum Plant Age
Sand	Do Not Use			
Any other soil except those that contain 20% or greater gravel content	Soil percent Organic Matter Content	Rate Per Application	Max Rate Per Year	1 year
	%	fl oz/A	fl oz/A	
	< 1	3.5 (0.045 lb ai/A)	7.0 (0.09 lb ai/A)	
	≥ 1	5.0 (0.065 lb ai/A)	10.0 (0.13 lb ai/A)	

Do not apply more than a total of 7.0 fl oz product/A (0.09 lb ai/A) per year on soils containing < 1 % organic matter content, or 10.0 fl oz product/A (0.13 lb ai/A) per year on soils containing ≥1 % organic matter content in a 12 month period when used in any hops planting.

Do not apply more than two applications of Indaziflam 200SC Herbicide per year.

Application timings can be made as an early spring dormant application and/or as a fall dormant application after vine harvest. The early spring dormant timing can be made on hop shoots that are in the bud stage up to 2" in height.

Apply Indaziflam 200SC Herbicide as a minimum 2-foot band to each side of the hop row.

Do not use in hops grown on sand.

Do not use on soils with 20% or more gravel content.

Do not allow spray to contact green stems, foliage, flowers, or cones or unacceptable injury may occur.

Appendix 1

APPLICATION DIRECTIONS FOR USE IN POME and STONE FRUIT, TREE NUTS, AND CROPS IN THE PROPOSED CROP SUBGROUP 23A; SMALL FRUIT, EDIBLE PEEL SUBGROUP, INCLUDING OLIVE.

For use in pome and stone fruit, pecan, and crops in the proposed Crop Subgroup 23A; Small fruit, edible peel subgroup, including olive, only use Indaziflam 200SC Herbicide in orchards where the trees have been established at least three years and exhibiting normal growth and good vigor.

For use in tree nuts, except pecan, only use Indaziflam 200SC Herbicide in orchards where the trees have been established at least one year and exhibiting normal growth and good vigor.

If cracks in the soil or depressions from transplanting are present, fill them in prior to applying Indaziflam 200SC Herbicide.

Pome Fruit Crop group 11 including: apple; azarole; crabapple; loquat; mayhaw; medlar; pear; pear, Asian; quince; quince, Chinese; quince, Japanese; tejocote; cultivars, varieties, and/or hybrids of these

Stone Fruit Group 12-12 including: Apricot; apricot, Japanese; capulin; cherry, black; cherry, Nanking; cherry, sweet; cherry, tart; Jujube, Chinese; nectarine; peach; plum; plum, American; plum, beach; plum, Canada; plum, cherry; plum, Chickasaw; plum, Damson; plum, Japanese; plum, Klamath; plum, prune; plumcot; sloe; cultivars, varieties, and/or hybrids of these

Tree Nuts: Crop group 14-12 including: African nut-tree; almond; beechnut; Brazil nut; Brazilian pine; bunya; bur oak; butternut; Cajou nut; candlenut; cashew; chestnut; chinquapin; coconut; coquito nut; dika nut; ginkgo; Guiana chestnut; hazelnut (filbert); heartnut; hickory nut; Japanese horse-chestnut; macadamia nut; mongongo nut; monkey-pot; monkey puzzle nut; Okari nut; Pachira nut; peach palm nut; pecan; pequi; Pili nut; pine nut; pistachio; Sapucaia nut; tropical almond; walnut, black; walnut, English; yellowhorn; cultivars, varieties, and/or hybrids of these

Crops in the proposed Crop Subgroup 23A: Small fruit, edible peel subgroup including: Acerola; African plum; agritos, almondette; appleberry; arbutus berry; bayberry, red; bignay; breadnut; cabeluda; carandas-plum; Ceylon iron wood; Ceylon olive; cherry-of-the-Rio-Grande; Chinese olive, black; Chinese olive, white; chirauli-nut; cocoplum; desert-date; false sandalwood; fragrant manjack; gooseberry, Abyssinian; gooseberry, Ceylon; gooseberry, otaheite; governor's plum; grumichama; guabiroba; guava berry; guava, Brazilian; guava, Costa Rican; guayabillo; illawarra plum; Indian-plum; Jamaica-cherry; jambolan; kaffir-plum; kakadu plum; kapundung; karnada; lemon aspen; mombin, yellow; monos plum; mountain cherry; olive; persimmon, black; pitomba; plum-of-Martinique; rukam; rumberry; sea grape; sete-capotes; silver aspen; water apple; water pear; water berry; wax jambu.

Dose Rate Chart for Pome and Stone Fruit, Tree Nuts, and Crops in the Proposed Crop Subgroup 23A; Small Fruit, Edible Peel Subgroup, Including Olive.

Soil Texture	**Indaziflam 200SC Herbicide (fl oz product / broadcast acre)**			
Any soil except those that contain 20% or greater gravel content	Soil percent Organic Matter Content	Rate Per Application	Max Rate Per Year	Minimum Days Between Applications
	%	fl oz/A	fl oz/A	Days
	<1	3.5 to 6.5 (0.045 to 0.085 lb ai/A)	6.0 to 10.3 (0.078 to 0.134 lb ai/A)	90
	1 to 3	3.5 to 6.5 (0.045 to 0.085 lb ai/A)	8.0 to 10.3 (0.104 to 0.134 lb ai/A)	
	> 3	3.5 to 6.5 (0.045 to 0.085 lb ai/A)	10.3 (0.134 lb ai/A)	

Do not apply more than the amount of Indaziflam 200SC Herbicide specified per application and per year or in a 12 month period on this label based on soil texture, percent organic matter content, application site, and crop.

When making more than one application per year, allow a minimum of 90 days between applications.

Appendix 1

Do not use on soils with 20% or more gravel content.

Do not apply when nuts intended for harvest are on the ground or illegal residues may result.

Do not apply more than a total of 10.3 fl oz of product (0.134 lb ai/A) per year or in a 12 month period when used in Pome Fruit, Stone Fruit, Tree Nuts, and crops in the Proposed Crop Subgroup 23A; Small Fruit, Edible Peel Subgroup, including Olive.

In the California counties of Kern, Inyo, Tulare, Kings, Fresno, and Madera Indaziflam 200SC Herbicide can only be applied beginning after harvest up to initiation of pink bud stage in almonds, and up to beginning emergence of green leaf tissue in pistachios, walnuts, and pecans.

APPLICATION DIRECTIONS FOR REPLANTED LABELED CROPS IN ESTABLISHED BLUEBERRY (HIGHBUSH) AND OTHER BUSHBERRY SUBGROUP CROPS IN 13-07B EXCEPT BLUEBERRY (LOWBUSH); CANEBERRY AND OTHER CANEBERRY SUBGROUP CROPS IN 13-07A; COFFEE; FRUIT, SMALL, VINE CLIMBING, EXCEPT FUZZY KIWIFRUIT SUBGROUP 13-07F; HOPS; POME AND STONE FRUIT; SMALL FRUIT, EDIBLE PEEL SUBGROUP, INCLUDING OLIVE ORCHARDS; TREE NUT, AND CROPS IN THE PROPOSED CROP SUBGROUP 23A.

Indaziflam 200SC Herbicide may be used in established orchards/groves/vineyards around new trees or vines (resets/replants) anytime following planting provided the following conditions exist:

1. The soil is completely settled around established and newly planted trees/vines and there are not open channels or depressions in the soil that would allow the product to move into the root zone through open channels.
2. The trunks are protected from spray contact by nonporous wraps, grow tubes, or waxed containers.
3. The trees/vines are exhibiting good health and vigor.
4. Indaziflam 200SC Herbicide can be applied to resets/replants contained within 3 year old and older established grapes, pome and stone fruit, pecan and olive.

Blueberry (highbush) and other bushberry subgroup crops in 13-07B: Aronia berry; blueberry, highbush; buffalo currant; Chilean guava; cranberry, highbush; currant, black; currant, red; elderberry; European barberry; gooseberry; honeysuckle, edible; huckleberry; jostaberry; Juneberry (Saskatoon berry); lingonberry; native currant; salal; sea buckthorn; cultivars, varieties, and/or hybrids of these including rabbiteye blueberries, except blueberry (lowbush).

Caneberry and other caneberry subgroup crops in 13-07A: Blackberry; loganberry; raspberry, black and red; wild raspberry; cultivars, varieties, and/or hybrids of these.

Coffee

Fruit, Small, Vine Climbing, Except Fuzzy Kiwifruit Subgroup 13-07F including: Amur river grape; gooseberry; grape; kiwifruit, hardy; maypop; schisandra berry; cultivars, varieties, and/or hybrids of these.

Hops

Pome Fruit Crop group 11 including: apple; azarole; crabapple; loquat; mayhaw; medlar; pear; pear, Asian; quince; quince, Chinese; quince, Japanese; tejocote; cultivars, varieties, and/or hybrids of these.

Stone Fruit Group 12-12 including: Apricot; apricot, Japanese; capulin; cherry, black; cherry, Nanking; cherry, sweet; cherry, tart; Jujube, Chinese; nectarine; peach; plum; plum, American; plum, beach; plum, Canada; plum, cherry; plum, Chickasaw; plum, Damson; plum, Japanese; plum, Klamath; plum, prune; plumcot; sloe; cultivars, varieties, and/or hybrids of these.

Crops in the proposed Crop Subgroup 23A: Small fruit, edible peel subgroup including: Acerola; African plum; agritos, almondette; appleberry; arbutus berry; bayberry, red; bignay; breadnut; cabeluda; carandas-plum; Ceylon iron wood; Ceylon olive; cherry-of-the-Rio-Grande; Chinese olive, black; Chinese olive, white; chirauli-nut; cocoplum; desert-date; false sandalwood; fragrant manjack; gooseberry, Abyssinian; gooseberry, Ceylon; gooseberry, otaheite; governor's plum; grumichama; guabiroba; guava berry; guava, Brazilian; guava, Costa Rican; guayabillo; illawarra plum; Indian-plum; Jamaica-cherry; jambolan; kaffir-plum; kakadu plum; kapundung; karnada; lemon aspen; mombin, yellow; monos plum; mountain cherry; olive; persimmon, black; pitomba; plum-of-Martinique; rukam; rumberry; sea grape; sete-capotes; silver aspen; water apple; water pear; water berry; wax jambu.

Appendix 1

Tree Nuts: Crop group 14-12 including: African nut-tree; almond; beechnut; Brazil nut; Brazilian pine; bunya; bur oak; butternut; Cajou nut; candlenut; cashew; chestnut; chinquapin; coconut; coquito nut; dika nut; ginkgo; Guiana chestnut; hazelnut (filbert); heartnut; hickory nut; Japanese horse-chestnut; macadamia nut; mongongo nut; monkey-pot; monkey puzzle nut; Okari nut; Pachira nut; peach palm nut; pecan; pequi; Pili nut; pine nut; pistachio; Sapucaia nut; tropical almond; walnut, black; walnut, English; yellowhorn; cultivars, varieties, and/or hybrids of these.

Spot spraying is not allowed. Application is made with broadcast equipment delivering a uniform spray pattern.
Avoid direct or indirect spray contact with crop foliage, green bark, roots, or fruit as it may cause localized crop injury or death. Non-protected trunks of reset/replant trees/vines in an established orchard/vineyard planted more than one year may be sprayed with Indaziflam 200SC Herbicide if the trunk is callused, mature brown bark. Contact of Indaziflam 200SC Herbicide with tissues other than mature brown bark can result in serious damage or plant death. If cracks in the soil or depressions are present after planting, fill them in prior to applying Indaziflam 200SC Herbicide.

An established tree nut orchard, except Pecan, is defined as the majority of trees in the orchard established a minimum of one year. Established Pome and Stone Fruit, Pecan, and crops in the Proposed Crop Subgroup 23A; Small Fruit, Edible Peel Subgroup, including Olive orchards and grape vineyards are defined as the majority of trees/vines in the orchard/grove/vineyard established a minimum of three years.

Labeled crops may be planted anytime following an application of Indaziflam 200SC Herbicide if the treated soil is removed from the transplant hole and soil that has not received any application of Indaziflam 200SC Herbicide within the last 12 months is used around the roots of the new transplant.

APPLICATION DIRECTIONS FOR USE IN FARMSTEAD AREAS

Indaziflam 200SC Herbicide will provide preemergence weed control around farmstead building foundations, non-paved farm roads and driveways, farm equipment lots, ungrazed fences, and shelter belts (windbreaks) around cropland when applied according to the directions found on this label.

Refer to the APPLICATION INFORMATION section of this label for application instructions and a list of the weeds that Indaziflam 200SC Herbicide will control. Apply Indaziflam 200SC Herbicide in a uniform broadcast spray as described in the APPLICATION INFORMATION section of this label. Apply as a directed spray when using under and around desired trees or shrubs such as in a shelterbelt once they are well established and the soil has finished settling. Apply 5.0 fl oz/A for coarse and medium textured soil or 5 to 6.5 fl oz/A for fine textured soil in a minimum spray volume of 10 gallons per acre in a single application. Do not exceed 6.8 fl oz/A of this product (0.088 lb ai/acre) per year or in a 12 month period for any site. For small sprayers mix 0.1 fl oz per gallon water to be applied to 1,000 square feet. Avoid direct or indirect spray contact with foliage, green bark, and roots of desired plants as it may cause plant injury or death.

Indaziflam 200SC Herbicide will not control weeds that are already emerged. For postemergence control of weeds, refer to the Tank Mix Instructions section of this label and follow the Mixing Instructions provided. Only use products that are also registered for the specific use where the application of the mixture is intended. When tank mixing products with different restrictions, follow the directions of the most restricted label.

Do not use Indaziflam 200SC Herbicide in farmstead areas on Long Island, NY.

Appendix 1

ORNAMENTALS, CHRISTMAS TREES, AND CONIFER PLANTATIONS

Indaziflam 200SC Herbicide may be applied for pre-emergent weed control in landscape ornamentals, hedgerows, production ornamentals in outdoor nurseries, shade houses, hoop houses, Christmas trees, and conifer plantations. Apply Indaziflam 200SC Herbicide as a directed spray, prior to weed seed germination to the soil surface around dormant or actively growing ornamentals/ Christmas trees/conifer plantations as listed in the table below. Apply Indaziflam 200SC Herbicide to established ornamentals/Christmas trees/conifer plantations. If the grower is uncertain about ornamental/ Christmas trees/conifer plantations establishment after transplanting, wait 2 months before applying Indaziflam 200SC Herbicide.

USE RESTRICTIONS FOR INDAZIFLAM 200SC HERBICIDE ON LANDSCAPE AND PRODUCTION ORNAMENTALS, CHRISTMAS TREES, AND CONIFERS

- Do not exceed the maximum single application rates specified under each Ornamental use.
- Do not exceed a total of 6.8 fl oz (0.088 lb ai/acre) of Indaziflam 200SC Herbicide per acre in a 12 month period.
- Do not allow spray to contact foliage. Indaziflam 200SC Herbicide may cause localized injury to the foliage, especially young leaf tissue. If the spray should contact the foliage, remove affected foliage or wash off immediately.
- Do not use Indaziflam 200SC Herbicide around bedding plants (annuals and herbaceous plants not specified, or not listed as tolerant on this label) or in areas where bedding plants may be planted or seeded for a minimum of one year after application of Indaziflam 200SC Herbicide to a landscape bed.
- Do not use Indaziflam 200SC Herbicide around bearing fruit and nut trees.
- Do not use Indaziflam 200SC Herbicide around non-bearing fruit trees unless they are at least 1 year old (citrus) and 3 years old (all others). Non-bearing trees are defined as trees that will not bear fruit until at least 1 year after treatment.
- Do not use Indaziflam 200SC Herbicide within the drip line of bearing fruit and nut trees.
- Do not mix Indaziflam 200SC Herbicide into the soil. Cultivating or disturbing the soil surface after application may reduce weed control activity.
- Avoid applying Indaziflam 200SC Herbicide to heavily mulched landscape beds, as reduced weed control may occur. For best results remove existing mulch and replace mulch after an application of Indaziflam 200SC Herbicide.
- If transplanting mature plants listed as tolerant on this label into soil treated with Indaziflam 200SC Herbicide within the preceding 12 months, discard existing soil from the planting hole and add new soil around roots to minimize effects on plant establishment.
- Do not use Indaziflam 200SC Herbicide on ornamentals being grown in a greenhouse.
- Do not use Indaziflam 200SC Herbicide on nursery seedbeds, rooted cuttings or young plants in liners.
- Do not apply Indaziflam 200SC Herbicide to ornamentals growing in containers except pot-in-pot ornamentals.
- Do not apply Indaziflam 200SC Herbicide to ornamental bulbs in production fields.
- Do not apply Indaziflam 200SC Herbicide to ornamental bulbs in landscapes, commercial fields, or residential sites after they have emerged.
- Do not apply Indaziflam 200SC Herbicide to herbaceous perennials (e.g. hosta) after they have emerged.
- Do not apply Indaziflam 200SC Herbicide over-the-top of ornamentals/ Christmas trees/conifer plantations.
- Do not apply Indaziflam 200SC Herbicide to budded grafts or graft unions as this could cause plant injury or death.
- Do not apply Indaziflam 200SC Herbicide by air.

USE OF INDAZIFLAM 200SC HERBICIDE ON ORNAMENTALS/ CHRISTMAS TREES/CONIFER PLANTATIONS IN COARSE AND SANDY SOILS

Soil conditions can affect the tolerance of ornamentals/ Christmas trees/conifer plantations to Indaziflam 200SC Herbicide. Excessively coarse or sandy soils may allow for downward movement of Indaziflam 200SC Herbicide into the root zone and cause significant root damage and phytotoxicity. Coarse soils, for example, may include significant quantities of sand, gravel, decomposed granite, and ground cinders. Prior to application of Indaziflam 200SC Herbicide on these soils, confirm soil texture with a soil test. Ornamentals/ Christmas trees/conifer plantations grown in soil exceeding 80% sand or 20% gravel may be at risk. If Indaziflam 200SC Herbicide is to be applied in these soils, evaluate tolerance of a few plants of each ornamental/ Christmas trees/conifer plantations in Indaziflam 200SC Herbicide treated soil for 2 to 3 months prior to a large scale application.

Appendix 1

SYMPTOMS OF INDAZIFLAM 200SC HERBICIDE INJURY ON ORNAMENTALS

Indaziflam 200SC Herbicide may injure sensitive ornamentals by damaging roots or leaves. Plant foliage damaged by root absorption will appear stunted, deformed, and may not recover. If Indaziflam 200SC Herbicide is allowed to contact leaves, leaf symptoms including leaf spot, leaf discoloration, and leaf curl may appear. Symptoms appear within several days after application. Leaves formed after appearance of symptoms may recover.

Users must assess the severity of any symptoms on cultivars not listed on this label, before proceeding with large-scale applications of Indaziflam 200SC Herbicide. The user assumes all responsibility for damage on cultivars not listed on this label.

LANDSCAPE ORNAMENTAL USES

Indaziflam 200SC Herbicide may be used in residential, commercial, as well as federal, state and local plantings of ornamentals and hedgerows for pre-emergent weed control. Indaziflam 200SC Herbicide should be applied as a directed spray only to established (rooted) plants and not to newly rooted cuttings or seedlings. To avoid root damage, apply Indaziflam 200SC Herbicide around transplants when the soil has firmly settled around the root area. Irrigation or rainfall will help to settle the soil and seal surface cracks. Make applications prior to mulching for best weed control. If Indaziflam 200SC Herbicide should contact foliage, wash off immediately to avoid damage. Herbaceous annuals and perennials are sensitive to Indaziflam 200SC Herbicide. Applications of Indaziflam 200SC Herbicide should only be made to ornamentals listed on this label.

AMOUNT TO USE: Apply Indaziflam 200SC Herbicide as a broadcast, directed spray at 2.2 to 4.4 fl oz/acre around ornamentals.

To activate Indaziflam 200SC Herbicide for maximum herbicidal benefit, irrigate the area treated with Indaziflam 200SC Herbicide to move the herbicide into the soil within several days after application. With dry soil, use a minimum of 0.25 inches of irrigation water, and with soil at or greater than field capacity; the amount of irrigation water should be reduced. In either case, do not create conditions that cause visible run-off of irrigation water. Adequate rainfall following an application will negate the need for irrigation.

A subsequent application of Indaziflam 200SC Herbicide can be made within 90 days after the initial application to extend weed control provided that the maximum allowed rate does not exceed 6.8 fl oz (0.088 lb ai/acre) of this product per acre in a (0.088 lb ai/acre) 12 month period.

COMBINATIONS OF INDAZIFLAM 200SC HERBICIDE WITH NON-SELECTIVE HERBICIDES AROUND ORNAMENTALS

Remove existing weed growth before application of Indaziflam 200SC Herbicide or use a post-emergence herbicide labeled for control. Indaziflam 200SC Herbicide may be used in combination with a non-selective herbicide. Avoid contact of spray containing a non-selective herbicide with foliage, stems, green bark, or bare roots of turf grasses, trees, shrubs, or other desirable vegetation, since severe damage may result. If spraying areas adjacent to desirable plants with a non-selective herbicide, use a shield while spraying to help prevent spray from contacting foliage of desirable plants.

It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.

PRODUCTION ORNAMENTAL USES

Indaziflam 200SC Herbicide provides up to 8 months of weed control with a single application. The exact length of control depends on many environmental factors as well as the weeds to be controlled and the weed pressure. Apply Indaziflam 200SC Herbicide as a directed spray to the soil surface only to established (rooted) plants in the soil or in pots and not to newly rooted cuttings/or seedling beds in production nurseries. Do not apply Indaziflam 200SC Herbicide to newly rooted cuttings/or seedling beds. To avoid root damage, apply Indaziflam 200SC Herbicide around transplants when the plant is well established and the soil has firmly settled around the root area. Irrigation or rainfall will help to settle the soil and seal surface cracks. Apply Indaziflam 200SC Herbicide around dormant plants. If applied after dormancy, care should be taken not to contact expanding buds or new leaves. Applications of Indaziflam 200SC Herbicide should only be made to ornamentals listed on this label. Indaziflam 200SC Herbicide should be applied to soil free of weeds, debris, and soil clods for optimum efficacy. Herbicidal efficacy may be reduced if soil is disturbed after application.

Application of Indaziflam 200SC Herbicide to deciduous foliage or green bark may result in unacceptable injury. Apply Indaziflam 200SC Herbicide to established ornamentals. If the grower is uncertain about ornamental establishment after transplanting, wait 2 months before applying Indaziflam 200SC Herbicide.

AMOUNT TO USE: Apply Indaziflam 200SC Herbicide as a broadcast, directed spray at 2.8 to 6.8 fl oz (0.088 lb ai/acre) of Indaziflam 200SC Herbicide per acre (0.06 to 0.13 fl oz per 1,000 sq ft) around ornamentals in 20 to 100 gallons of water per acre (0.5 to 2.3 gallons of water per 1,000 sq ft).

To activate Indaziflam 200SC Herbicide for maximum herbicidal benefit, irrigate the area treated with Indaziflam 200SC Herbicide to move the herbicide into the soil within 21 days after application. With dry soil, use a minimum of 0.125 to 0.25 inches of irrigation water.

Appendix 1

With soil at or greater than field capacity, reduce the amount of irrigation water. In either case, do not create conditions that cause visible run-off of irrigation water. Adequate rainfall following an application will negate the need for irrigation.

A subsequent application of Indaziflam 200SC Herbicide can be made within 90 days after the initial application provided that the maximum allowed rate does not exceed 6.8 fl oz (0.088 lb ai/acre) Indaziflam 200SC Herbicide (0.088 lb ai/acre) per acre in a 12-month period.

Do not apply Indaziflam 200SC Herbicide to plant types not listed as tolerant on this label. Indaziflam 200SC Herbicide may be applied to cultivars of listed tolerant plants that are not listed on this label. Prior to large-scale applications, treat a small number of such plants at the desired use rate. Treated plants should then be evaluated 1 to 2 months after application for possible injury and acceptable tolerance.

IMPORTANT: Direct application of Indaziflam 200SC Herbicide to the soil surface and away from plant foliage and bark. Avoid direct spray contact on plant surfaces, foliage, and green bark or injury may result. Application of Indaziflam 200SC Herbicide after bud swell may cause injury if herbicide contacts foliage. Avoid application under environmental conditions that favor drift to non-targeted areas. Deep cultivation reduces the effectiveness of Indaziflam 200SC Herbicide and should be avoided.

COMBINATIONS OF INDAZIFLAM 200SC HERBICIDE WITH NON SELECTIVE HERBICIDES AROUND ORNAMENTALS

Remove existing weed growth before application of Indaziflam 200SC Herbicide or use a post-emergence herbicide labeled for control. Indaziflam 200SC Herbicide may be used in combination with a non-selective herbicide. Avoid contact of spray containing a non-selective herbicide with foliage, stems, green bark, or bare roots of turf grasses, trees, shrubs, or other desirable vegetation, since severe damage may result. If spraying areas adjacent to desirable plants with a non-selective herbicide, use a shield while spraying to help prevent spray from contacting foliage of desirable plants.

It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.

ORNAMENTALS AND THEIR CULTIVARS TOLERANT TO INDAZIFLAM 200SC HERBICIDE

Tolerant ornamentals and their cultivars are listed in the following table. Apply as a directed spray around tolerant ornamentals. If a cultivar to be treated is not listed on this label, treat several plants of the cultivar at the single maximum desired use rate and evaluate 1 to 2 months later for possible injury and acceptable tolerance. The user assumes responsibility for application on plants not listed in this table.

Common Name	Scientific Name	Cultivar
Abelia	*Abelia grandiflora*	
Apple	*Malus sp.*	(non-bearing)
Apple	*Malus domestica*	Haralred (non-bearing)
Arborvitae	*Thuja occidentalis*	Nigra
Arborvitae	*Thuja occidentalis*	Techny
Arborvitae	*Thuja occidentalis*	Green Giant
Asparagus Fern	*Asparagus plumosus*	
Aspen, Quaking	*Populus tremuloides*	
Azalea	*Rhododendron sp.*	Girard's Rose
Azalea	*Rhododendron sp.*	Fashion
Azalea	*Rhododendron sp.*	VF 14
Azalea	*Rhododendron sp.*	Golden Torch
Azalea, Encore	*Rhododendron sp.*	Autumn Debutante
Bald Cypress	*Taxodium distichum*	
Bamboo, Golden	*Phyllostachys aurea*	
Barberry	*Berberis sp.*	
Birch	*Betula populifolia*	Whitespire
Birch, River	*Betula nigra*	Heritage
Birch, River	*Betula nigra*	
Black Tupelo	*Nyssa sylvatica*	Wild Fire
Bluebird	*Caryopteris x clandonensis*	Dark Knight
Boxwood	*Buxus microphylla*	Green Beauty
Boxwood	*Buxus microphylla*	Chicagoland Green
Boxwood	*Buxus microphylla*	Baby Gem
Boxwood	*Buxus microphylla*	Wintergreen

Appendix 1

Butterfly Bush	*Buddleia*	Nanho Blue
Camellia	*Camellia japonica*	Margaret Heathcliff Pink
Camellia	*Camellia sasanqua*	Cleopatra Pink
Catalpa, Southern	*Catalpa bignoniaceae*	
Cedar, Atlantic white	*Chamaecyparis sp.*	
Cedar, Eastern Red	*Juniperus virginiana*	
Cedar, Japanese	*Cryptomeria japonica*	Black Dragon
Cedar, Japanese	*Cryptomeria japonica*	Burkii
Cedar, Japanese	*Cryptomeria japonica*	Yoshino
Cherry, American Plum	*Prunus americana*	
Cherry, Okame	*Prunus x incamp*	
Cherry,	*Prunus serrulata*	Kwanzan
Cherry, Purple Leaf Sand	*Prunus cistena*	
Cherry, Sargent	*Prunus sargentii*	Spring Wonder
Cherry, Yoshino	*Prunus x yedoensis*	Yoshino
Chokeberry	*Aronia sp.*	
Cotoneaster	*Cotoneaster dammeri*	Coral Beauty
Cottonwood	*Populus deltoides*	Sioux
Crabapple	*Malus x 'Harvest Gold'*	
Crabapple	*Malus x 'Snowdrift'*	
Crabapple	*Malus coronaria*	
Crape Myrtle	*Lagerstroemia indica x fauriei*	Muskogee
Crape Myrtle	*Lagerstroemia x 'Miami'*	
Crape Myrtle	*Lagerstroemia indica x fauriei*	Tuscarora
Cotoneaster	*Cotoneaster*	Coral Beauty
Cypress, false	*Chamaecyparis sp.*	Gold Mops
Cypress, Mediterranean	*Cupressus sempervirens*	
Cypress, Leyland	*Cupressus x leylandii*	
Daphne	*Daphne caucasica*	Summer Ice
Dawn Redwood,	*Metasequoia glyptostroboides*	
Day-lily (before unfurling)	*Hemerocallis sp.*	Green Flutter
Day-lily (before unfurling)	*Hemerocallis sp.*	Stella d'Oro
Dogwood, Kousa	*Cornus kousa*	Kousa
Elm, American	*Ulmus americana*	
Elm, Bosque	*Ulmus parvifolia*	
Eucalyptus, Silver Dollar Gum	*Eucalyptus polyanthemos*	
Euonymus,	*Euonymus alatus*	Compacta
Fir,	*Abies fraseri*	
Florida Pipestem	*Leucothoe populifolia*	
Forsythia	*Forsythia*	Lynwood
Forsythia	*Forsythia sp.*	Golden Bells
Fragrant tea olive	*Osmanthus fragrans*	
Gardenia	*Gardenia radicans*	Radicans
Gardenia	*Gardenia jasminoides*	Mystery
Gardenia	*Gardenia jasminoides*	Frostproof
Gaura	*Gaura lindheimeri*	Pink Fountain
Gold-Dust Plant	*Aucuba japonica*	Gold Dust
Green Ash	*Fraxinus pennsylvanica*	
Green Ash	*Fraxinus pennsylvanica*	Georgia Gem
Hardy Kiwi	*Actinidia arguta*	Anna
Hawthorn, Thornless	*Crataegus crus-galli*	Inermis
Hibiscus, Chinese	*Hibiscus rosa-sinensis*	San Diego Red
Holly,	*Ilex x aquip*	
Holly,	*Ilex x attenuata*	East Palatka
Holly, Chinese	*Ilex cornuta*	Needlepoint
Holly, Foster	*Ilex x attenuata*	Fosteri
Holly, Gallberry	*Ilex glabra*	Densa
Holly, Meservae	*Ilex meservae*	Blue Princess
Holly, Nellie R. Stevens	*Ilex*	Nellie R. Stevens
Holly, American	*Ilex opaca*	
Holly,	*Ilex verticillata*	Jim Dandy

Appendix 1

Holly,	*Ilex verticillata*	Red Sprite
Holly, Japanese	*Ilex crenata*	Sky Pencil
Honeylocust,	*Gleditsia tricanthos*	Sunburst
Honeylocust,	*Gleditsia tricanthos*	Skyline
Indian Hawthorn	*Raphiolepsis indica*	Pink Lady
Japanese Cleyera	*Ternstromia gymnanthera*	
Japanese Mock-orange	*Pittosporum tobira*	Variegata
Jasmine, Asiatic/Yellow Star	*Trachelospermum asiaticum*	
Jasmine, winter	*Jasminum nudiflorum*	
Juniper, Bar Harbour	*Juniperus horizontalis*	Bar Harbour
Juniper, Blue Pacific	*Juniperus conferta*	Blue Pacific
Juniper, Blue Rug	*Juniperus horizontalis*	Blue Rug
Juniper, Brodie	*Juniperus virginiana*	
Juniper, Spartan	*Juniperus chinensis*	Spartan
Lantana	*Lantana camara*	Landmark Sunrise Rose
Lilac	*Syringa x 'Penda'*	Bloomerang
London Plane Tree,	*Plantanus acerifolia*	
Loropetalum	*Loropetalum chinensis*	Burgundy
Loropetalum	*Loropetalum chinensis*	Ruby
Magnolia,	*Magnolia grandiflora*	Bracken Brown Beauty'
Magnolia,	*Magnolia grandiflora*	Little Gem
Magnolia, Jane	*Magnolia liliflora 'Nigra' x M. stellata*	Rosea
Maple, Autumn Blaze	*Acer freemanii*	Jeffersred
Maple, red	*Acer rubrum*	
Maple, Red	*Acer rubrum*	Red Sunset
Maple, Red	*Acer rubrum*	October Glory
Maple, Silver	*Acer saccharinum*	
Maple, Sugar	*Acer saccharum*	
Maple, Sugar	*Acer saccharum*	Commemoration
Nandina	*Nandina domestica.*	Firepower
Ninebark,	*Physocarpus opulifolius*	Summer Wine
Oak, Southern Live	*Quercus virginiana*	
Oak, Cathedral Live	*Quercus virginiana*	SDLN
Oak, Northern Red	*Quercus rubra*	
Oak, Nuttal	*Quercus nuttallii*	
Oak, Shumard	*Quercus shumardii*	
Ohio Buckeye,	*Aesculus glabra*	
Palm, Areca	*Dypsis lutescens*	
Palm, Manila	*Adonidia merrillii*	
Palm, Alexander	*Archontophoenix alexandre*	
Palm, Florida Thatch	*Thrinax radiate*	
Palm, Spindle	*Hyophorbe verschaffeltii*	
Pear, Callery	*Pyrus calleryana*	Chanticleer
Pear, Callery	*Pyrus calleryana*	Bradford
Pieris,	*Pieris japonica*	Shojo
Pine, Canary Island	*Pinus canariensis*	
Pine, Eastern White	*Pinus strobus*	
Pine, Scotch	*Pinus sylvestrus*	
Pistache, Texas	*Pistacia texana*	
Plum, Crimson Pointe	*Prunus x cerasifera*	Cipriozam
Podocarpus	*Podocarpus macrophyllus*	
Privet,	*Ligustrum sp.*	
Redbud, Eastern	*Cercis canadensis*	MN Strain
Redbud,	*Cercis reniformis*	Oklahoma
Rhododendron,	*Rhododendron x crete*	
Rose,	*Rosa wichurana*	Dr. Huey
Rose	*Rosa sp.*	Pink Knock Out®
Rose	*Rosa sp.*	Knock Out®
Rose, Virginia	*Rosa virginiana*	
Rose Mallow	*Hibiscus moscheutos*	
Rose of Sharon	*Hibiscus syriacus*	Pink Heart
Rose of Sharon	*Hibiscus syriacus*	Boule de Feu

Appendix 1

Russian Sage	*Perovskia atriplicifolia*	
Skip Laurel,	*Prunus laurocerasis*	
Snowberry, common	*Smyphoricarpos albus*	
Spicebush,	*Lindera benzoin*	
Spruce, Blackhills	*Picea glauca*	
Spruce, Norway	*Picea abies*	
Tamarisk,	*Tamarix ramosissima*	Pink Cascade
Taxus (Yew)	*Taxus cuspidata*	Capitada
Thin-fruit Sedge	*Carex flaccosperma*	
Viburnum, Burkwood	*Viburnum x burkwoodii*	
Virbunum	*Virbunum lantana*	Mohican
Viburnum, popcorn	*Viburnum plicatum*	Popcorn
Wax myrtle, southern	*Myrica cerifera*	
Weigelia, variegated	*Weigelia variegate*	

Do not use Indaziflam 200SC Herbicide on any of these plants, as injury will occur.

Common Name	**Scientific Name**
Blue Fescue Grass	*Festuca glauca*
Columbine	*Aquilegia canadensis*
Coneflower	*Echinacea purpurea*
Croton	*Codiaeum variegatum*
Dianthus	*Dianthus sp.*
Euonymus, Japanese	*Euonymus japonicus*
Fountain Grass	*Pennisetum alopecuroides*
Fountain Grass, purple	*Pennisetum setaceum*
Golden Dewdrops	*Duranta erecta*
Hydrangea	*Hydrangea macrophylla*
Ixora	*Ixora coccinea*
Lavender, Munstead	*Lavandula angustifolia*
Lilyturf	*Liriope sp.*
Mint	*Mentha sp.*
Mondo Grass	*Ophiopogon japonicus*
Muhlygrass	*Muhlenbergia capillaries*
Plumbago	*Plumbago spp.*
Sage	*Salvia spp*
Sweet Viburnum	*Viburnum odoratissimum*
Tickseed, Dwarf mouse-ear	*Coreopsis auriculata*
Weigela	*Weigela spp.*

Appendix 1

CONIFERS AND CHRISTMAS TREES

Indaziflam 200SC Herbicide may be used for pre-emergence weed control in conifer nurseries and Christmas tree farms. Indaziflam 200SC Herbicide may be applied as a directed spray to soil surrounding established plants. Avoid contacting plant stems and leaves with the directed spray solution as injury may occur. Established plants are transplants that are actively growing and where the soil has settled. Do not apply to seedlings or seedling beds. Apply 2.8-5.8 fl oz of Indaziflam 200SC Herbicide per acre for these uses. Do not exceed 6.8 fl oz (0.088 lb ai/acre) of Indaziflam 200SC Herbicide per acre in a growing season.

Indaziflam 200SC Herbicide may be tank-mixed with products containing the following active ingredients labeled for use in conifers: glyphosate or glufosinate. Do not apply tank-mixes of Indaziflam 200SC Herbicide with these active ingredients to conifer and Christmas tree foliage. Follow use restrictions on all labels.

It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.

SPRAYER CLEANUP PROCEDURE

Before and after using Indaziflam 200SC Herbicide, thoroughly clean all mixing and spray equipment, including tanks, pumps, lines, filters, screens, and nozzles with a good quality tank cleaner on an approved rinse pad or on the field site where an approved crop is being grown. Clean sprayer thoroughly after each use and before Indaziflam 200SC Herbicide residue dries in the equipment. Proper PPE must be worn while cleaning.

1. Completely drain all remaining spray solution from the tank in an appropriate location.
2. Clean the sprayer using a commercially available tank cleaner following the use instructions provided by the manufacturer. A rotating cleaning nozzle may be beneficial to dislodge any product from the sides of the tank.
3. Drain all cleaning solution from the tank and lines in an appropriate location.
4. Rinse the tank and flush spray booms with clean water to remove the cleaning solution.
5. Remove, clean, and inspect filters, screens, nozzles, and boom end caps if equipped to ensure that no product remains.
6. Rinse the inside and outside of the spray tank and all lines once more with clean water.
7. Drain all rinse solution in an appropriate location.

If any Indaziflam 200SC Herbicide is left in the spray equipment and subsequently applied to another crop, it has the potential to cause injury to that crop.

ROTATIONAL CROP RESTRICTIONS

Indaziflam 200SC Herbicide is intended for use in perennial tree and vine crops listed in this label and for non-crop farmstead uses. Do not rotate to any crops not listed on this label within 24 months after the last application. Planting earlier than this may result in crop injury or death. If a crop is not on this label, a bioassay should be conducted prior to planting if Indaziflam 200SC Herbicide has been used in the previous 36 months. A successful field bioassay means growing a test strip or several plots of the intended crop from seed or transplant to maturity without any observed herbicide symptoms. The test should be conducted in representative areas across the field that includes knolls, low areas, field edges, and changes in soil texture. The rotational crop interval must be extended if the field bioassay does not result in acceptable crop tolerance.

Labeled citrus crops may be transplanted into soil previously treated with Indaziflam 200SC Herbicide 1 month or more after the last application provided potted trees (such as citripots) are used.

New orchards of labeled pome and stone fruit, tree nut, and olive may be established in a location previously treated with Indaziflam 200SC Herbicide 1 year after application. Grape vineyards may be established in a location previously treated with Indaziflam 200SC Herbicide 2 years after application. In labeled pome and stone fruit, tree nuts, grapes, and olive previously treated soil must be thoroughly mixed to a depth of at least 6 inches prior to planting. This may be done through any combination of tillage operations such as ripping, disking, or plowing.

If other herbicides have also been used, follow the most restrictive label for the crop rotation interval.

RESISTANCE MANAGEMENT

Indaziflam, the active ingredient in this product, is a Group 29 herbicide based on the mode of action classification system of the Weed Science Society of America. A given weed population may contain plants naturally resistant to Group 29 herbicides. Such resistant weed plants may not be effectively managed using Group 29 herbicides but may be effectively managed using another herbicide alone or in mixtures from a different Group and/or by using cultural or mechanical practices. However, a herbicide mode of action classification by itself may not adequately address specific weeds that are resistant to specific herbicides. Consult your local company representative, state cooperative extension service, professional consultants, or other qualified authorities to determine appropriate actions for treating specific resistant weeds.

Appendix 1

Best Management Practices

Proactively implementing diversified weed control strategies to minimize selection for weed populations resistant to herbicides is recommended. A diversified weed management program may include the use of multiple herbicides with different modes of action with overlapping weed control spectrum, tillage operations and/or other cultural practices that control weeds. Research has demonstrated that using the labeled rate and directions for use is important to delay the selection for resistance. Scouting after a herbicide application is important because it can facilitate the early identification of weed shifts and/or weed resistance and thus provide direction on future weed management practices. One of the best ways to contain resistant populations is to implement measures to avoid allowing weeds to reproduce by seed or to proliferate vegetatively. Cleaning equipment between sites and avoiding movement of plant material between sites will greatly aid in retarding the spread of resistant weed seed.

There are no known cases of weed resistance to Indaziflam 200SC Herbicide or any known instances of cross-resistance between Indaziflam 200SC Herbicide and other classes of herbicides or modes of action. Research has shown that performance of Indaziflam 200SC Herbicide is not affected by the presence of biotypes resistant to glyphosate, triazines, ALS-inhibiting, growth regulant, or other herbicide modes of action.

To delay the development of herbicide resistance, the following practices are recommended:

- Use herbicides with different modes of action in the tank mixture, rotation, or in conjunction with alternate cultural practices.
- Always use at least the minimum rate specified by the label and observe all use rate instructions.
- Avoid the consecutive use of Indaziflam 200SC Herbicide unless another herbicide that is effective on the same target weeds is used in rotation or as a tankmix partner.
- Base herbicide use on a comprehensive Integrated Pest Management (IPM) program.
- Monitor treated areas and control escaped weeds by alternate means.
- Contact local extension or crop advisor for IPM and resistance management information.

STORAGE AND DISPOSAL

Do not contaminate water, food or feed by storage or disposal.

PESTICIDE STORAGE: Protect the product from freezing temperatures. Store the product at temperatures above 32°F and prefe rably above 40°F.

PESTICIDE DISPOSAL: Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

CONTAINER HANDLING

Rigid, Non-refillable containers small enough to shake (i.e., with capacities equal to or less than 5 gallons)

Non-refillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times.

Pressure rinse as follows: Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 PSI for at least 30 seconds. Drain for 10 seconds after the flow begins to drip.

Offer for recycling, if available or reconditioning, if appropriate. Then puncture and dispose of in a sanitary landfill, or by other procedures approved by State and local authorities.

Rigid, Non-refillable containers (greater than 5 gallons or 50 lbs)

Non-refillable Containers

Non-refillable containers - Do not reuse or refill this container. Refer to Bottom Discharge IBC or Top Discharge IBC, Drums, Kegs information as follows.

Bottom Discharge IBC (e.g. – Schuetz Caged IBC or Snyder Square Stackable)

Pressure rinsing the container before final disposal is the responsibility of the person disposing of the container. To pressure rinse the container before final disposal, empty the remaining contents from the IBC into application equipment or mix tank. Raise the bottom of the IBC by 1.5 inches on the side which is opposite of the bottom discharge valve to promote more complete product removal. Completely remove the top lid of the IBC. Use water pressurized to at least 40 PSI to rinse all interior portions. Continuously pump or drain rinsate into application equipment or rinsate collection system while pressure rinsing. Continue pressure rinsing for 2 minutes or until rinsate becomes clear. Replace the lid and close bottom valve.

Top Discharge IBC, Drums, Kegs (e.g.– Snyder 120 Next Gen, Bonar B120, Drums, Kegs).

Appendix 1

Triple rinsing the container before final disposal is the responsibility of the person disposing of the container. To triple rinse the container before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container at least 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Rinse all interior surfaces. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this procedure two more times.

Once container is rinsed, offer for recycling if available or puncture and dispose of in a sanitary landfill.

Refillable Containers

Refillable container – Refer to Bottom Discharge IBC or Top Discharge IBC, Drums, Kegs information as follows. Refill this container with pesticide only. Do not reuse this container for any other purpose. Contact your Ag retailer or Bayer CropScience for container return, disposal and recycling information.

Bottom Discharge IBC (e.g. – Schuetz Caged IBC or Snyder Square Stackable)

Pressure rinsing the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To pressure rinse the container before final disposal, empty the remaining contents from the IBC into application equipment or mix tank. Raise the bottom of the IBC by 1.5 inches on the side which is opposite of the bottom discharge valve to promote more complete product removal. Completely remove the top lid of the IBC. Use water pressurized to at least 40 PSI to rinse all interior portions. Continuously pump or drain rinsate into application equipment or rinsate collection system while pressure rinsing. Continue pressure rinsing for 2 minutes or until rinsate becomes clear. Replace the lid and close bottom valve.

Top Discharge IBC, Drums, Kegs (e.g.– Snyder 120 Next Gen, Bonar B120, Drums, Kegs).

Triple rinsing the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To triple rinse the containers before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container at least 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Rinse all interior surfaces. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this procedure two more times.

Once container is rinsed, offer for recycling if available or puncture and dispose of in a sanitary landfill.

End users are authorized to remove tamper evident cables as required to remove the product from the container unless the container is equipped with one way valves and refilling or returning is planned. If this is the case, end users are not authorized to remove tamper evident cables, one way valves or clean container.

Appendix 1

IMPORTANT: READ BEFORE USE

Read the entire Directions for Use, Conditions, Disclaimer of Warranties and Limitations of Liability before using this product. If terms are not acceptable, return the unopened product container at once.

By using this product, user or buyer accepts the following Conditions, Disclaimer of Warranties and Limitations of Liability.

CONDITIONS: The directions for use of this product are believed to be adequate and must be followed carefully. However, it is impossible to eliminate all risks associated with the use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as weather conditions, presence of other materials, or the manner of use or application, all of which are beyond the control of Bayer CropScience LP. All such risks shall be assumed by the user or buyer.

DISCLAIMER OF WARRANTIES: TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, BAYER CROPSCIENCE LP MAKES NO OTHER WARRANTIES, EXPRESS OR IMPLIED, OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE OR OTHERWISE, THAT EXTEND BEYOND THE STATEMENTS MADE ON THIS LABEL. No agent of Bayer CropScience LP is authorized to make any warranties beyond those contained herein or to modify the warranties contained herein. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, BAYER CROPSCIENCE LP DISCLAIMS ANY LIABILITY WHATSOEVER FOR SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT.

LIMITATIONS OF LIABILITY: TO THE EXTENT CONSISTENT WITH APPLICABLE LAW THE EXCLUSIVE REMEDY OF THE USER OR BUYER FOR ANY AND ALL LOSSES, INJURIES OR DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, WHETHER IN CONTRACT, WARRANTY, TORT, NEGLIGENCE, STRICT LIABILITY OR OTHERWISE, SHALL NOT EXCEED THE PURCHASE PRICE PAID, OR AT BAYER CROPSCIENCE LP'S ELECTION, THE REPLACEMENT OF PRODUCT.

NET CONTENTS:

Rely® is a registered trademark of Bayer CropScience LP

PRODUCED FOR

Bayer CropScience

Bayer CropScience LP
P.O. Box 12014, 2 T.W. Alexander Drive
Research Triangle Park, North Carolina 27709
1-866-99BAYER (1-866-992-2937)

Indaziflam 200SC Herbicide (MASTER) 07/05/2017

Appendix 2

GROUP	29	HERBICIDE

Indaziflam 500SC Herbicide

ABN: Alion® HL

For Preemergent Weed Control in Blueberry (Highbush) and other Bushberry Subgroup Crops in 13-07B, except blueberry (Lowbush); Caneberry and other Caneberry Subgroup Crops in 13-07A; Citrus Groves; Coffee; Fruit, Small, Vine Climbing, Except Fuzzy Kiwifruit Subgroup 13-07F; Hops; Pome and Stone Fruit, Tree Nuts, Crops in the proposed Crop Subgroup 23A; Small fruit, edible peel subgroup, including Olive, Ornamentals, Christmas Trees, and Conifer Plantations.

ACTIVE INGREDIENT:

Indaziflam*.....45.05%

OTHER INGREDIENTS:..... 54.95%
TOTAL: **100.00%**

Contains 4.16 pounds of indaziflam per gallon.
*(CAS No: 730979-19-8)

EPA Reg. No.: 264-1105 **EPA Est. No**

KEEP OUT OF REACH OF CHILDREN

CAUTION

For MEDICAL And TRANSPORTATION Emergencies ONLY Call 24 Hours A Day 1-800-334-7577
For PRODUCT USE Information Call 1-866-99BAYER (1-866-992-2937)

[See additional precautionary statements and directions for use on label.]

FIRST AID

If on skin or clothing:	• Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15-20 minutes. • Call a poison control center or doctor for treatment advice.
If inhaled:	• Move person to fresh air. • If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. • Call a poison control center or doctor for further treatment advice.
If swallowed:	• Call a poison control center or doctor immediately for treatment advice. • Have person sip a glass of water if able to swallow. • Do not induce vomiting unless told to do so by a poison control center or doctor. • Do not give anything to an unconscious person.
For MEDICAL Emergencies Call 24 Hours A Day 1-800-334-7577 Have the product container or label with you when calling a poison control center or doctor or going for treatment.	

Note to physician: No specific antidote is available. Treat symptomatically.

Appendix 2

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION

Harmful if swallowed, absorbed through the skin or inhaled. Avoid contact with skin, eyes, or clothing. Avoid breathing mist.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

All mixers, loaders, applicators and other handlers must wear:

- long-sleeved shirt and long pants.
- shoes plus socks.
- waterproof gloves.

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

ENGINEERING CONTROLS STATEMENTS

When handlers use closed systems or enclosed cabs in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240 (d) (4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

USER SAFETY RECOMMENDATIONS

Users should wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.

Users should remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.

Users should remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change clothing.

ENVIRONMENTAL HAZARDS

This product is toxic to fish, aquatic invertebrates, and plants. Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean water mark. Do not contaminate water when disposing of equipment rinsate or washwater. This product may enter water through spray drift or runoff. Follow directions for use to avoid spray drift and runoff. A level well maintained vegetative buffer strip between areas to which this product is applied and surface water features including ponds, streams, and springs will reduce the potential of this product entering water from rainfall-runoff. Runoff of this product will be reduced by avoiding applications when rainfall is forecasted to occur within 48 hours.

Surface Water Advisory: This pesticide may impact surface water quality due to runoff of rain water. This is especially true for poorly draining soils with shallow ground water. This product is classified as having high potential for reaching surface water via runoff for several months or more after application.

Ground Water Advisory: This pesticide has properties and characteristics associated with chemicals detected in ground water. This chemical may leach into ground water if used in areas where soils are permeable, particularly where the water table is shallow.

DIRECTIONS FOR USE

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling.
Read the entire label before using this product

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

SHAKE CONTAINER WELL BEFORE USING.
IN THE STATE OF NEW YORK ONLY: NOT FOR SALE, DISTRIBUTION OR USE IN NASSAU OR SUFFOLK COUNTY.

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. This standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE) and restricted-entry intervals. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 12 hours.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water, is:

Coveralls

Shoes plus socks

Chemical resistant gloves made of any waterproof material

PRODUCT INFORMATION

Indaziflam 500SC Herbicide is formulated as a suspension concentrate of indaziflam at a concentration of 4.16 pounds of active ingredient per gallon.

Indaziflam 500SC Herbicide is a preemergence herbicide for control of annual grasses and broadleaf weeds in Blueberry (Highbush) and other Bushberry Subgroup Crops in 13-07B, except blueberry (Lowbush); Caneberry and other Caneberry Subgroup Crops in 13-07A; Citrus Groves; Coffee; Fruit, Small, Vine Climbing, Except Fuzzy Kiwifruit Subgroup 13-07F; Hops; Pome and Stone Fruit, Tree Nuts, Crops in the proposed Crop Subgroup 23A; Small fruit, edible peel subgroup, including Olive, Ornamentals, Christmas Trees, and Conifer Plantations. Indaziflam 500SC Herbicide may be applied to the soil as a uniform broadcast or band application for the prevention of new weed emergence.

Indaziflam 500SC Herbicide provides preemergence, residual control of weeds. A dry soil surface at time of application and 48 hours after application is optimum for binding the active ingredient to soil particles and preventing its downward movement to the crop's roots. Moisture is needed for activation of Indaziflam 500SC Herbicide. Dry soil conditions following the initial 48-hour period after application of Indaziflam 500SC Herbicide may result in reduced weed control. Weeds that germinate prior to activation by rain or irrigation may not be controlled. If weeds have emerged, the addition of a foliar active herbicide is needed. Indaziflam 500SC Herbicide applied alone will not control weeds that are already emerged. Refer to the "Tank Mix Instructions" section.

This product controls weeds by inhibiting cellulose biosynthesis in plants. It may be applied at any time when the ground is not frozen or covered with snow. It will provide most effective residual weed control when applied to a dry soil surface followed by 48 hours without irrigation or rain, and then followed by adequate moisture from rain or an irrigation event within 21 days and prior to weed seed germination. Weed seeds and seedlings must come into contact with Indaziflam 500SC Herbicide prior to emergence to be controlled. If insufficient moisture is present, some weeds may germinate and emerge from below the treated layer of soil. Avoid using Indaziflam 500SC Herbicide in areas where soil runoff or erosion is likely to occur.

Excessive crop or weed debris present on the soil surface at the time of application may prevent a uniform distribution of the product reaching the soil and consequently may reduce weed control. Performance may be improved by removing the debris prior to applying Indaziflam 500SC Herbicide. In very dense stands of living weeds, an application of a foliar active herbicide first then followed 3-6 weeks later with the application of Indaziflam 500SC Herbicide is recommended for improved performance.

The level of weed control is dependent on many variables including soil texture, moisture, temperature, weed species present, the amount of weed seed present in the soil, and the crop canopy.

Do not apply within 25 feet of ponds, lakes, rivers, streams, wetlands, and habitat containing aquatic and semi-aquatic plants.

The Pre-Harvest Interval (PHI) is 7 days for citrus and 14 days for all other crops listed on this label.

Appendix 2

PRECAUTIONS FOR USE

- Avoid direct or indirect spray contact with crop foliage, green bark, roots or fruit as it may cause localized crop injury or death. Only trunks with callused, mature brown bark may be sprayed with Indaziflam 500SC Herbicide. If the trunks are not fully callused, mature brown bark they should not be sprayed unless protected from spray contact by nonporous wraps, grow tubes or waxed containers. Contact of Indaziflam 500SC Herbicide with tissues other than mature brown bark may result in serious damage or plant death.
- The soil surface where Indaziflam 500SC Herbicide is to be applied should not have open channels or cracks in the soil. This is to prevent the product from reaching the crop roots either through direct contact from the spray application or with water movement from rain or irrigation as this may cause crop injury. If depressions in the soil such as from settling following transplanting exist around the base of the crop, fill them in with soil prior to applying Indaziflam 500SC Herbicide. Crops that are stressed may be more sensitive to herbicide injury and should not be treated.
- Weed control activity may be reduced if the application is made to soil covered in heavy crop or weed debris that prevents a uniform distribution of the product reaching the soil. Removing the debris prior to applying Indaziflam 500SC Herbicide may improve weed control.
- Rates provided on this label are based on broadcast treatment. For banded applications reduce the broadcast rate of Indaziflam 500SC Herbicide to the proportion of the field being treated. No area of the field may be treated with more than the highest rate provided on this label regardless of the portion of the field that this represents.
- Do not use in crops that exhibit low vigor or poor health as they may be more susceptible to crop injury. Causes of reduced vigor may include such things as previous pesticide applications, excess fertilizer or salt, diseases, insects, nematodes, drought, flooding, wind damage, frost, nutrient deficiency, or mechanical damage.

RESTRICTIONS FOR USE

- Indaziflam 500SC Herbicide can only be applied in citrus trees established for a minimum of one year after transplanting and exhibiting normal growth and good vigor, or in new citrus groves one month after planting if the transplanted trees were potted plants (such as citripots) and not bare-rooted, the trunks are protected from spray contact by nonporous wraps, grow tubes or waxed containers, and the trees are actively growing and exhibiting good health and vigor.
- Indaziflam 500SC Herbicide can only be applied in labeled tree nut crops (except pecan) that have been established for a minimum of one year after transplanting and exhibiting normal growth and good vigor.
- Indaziflam 500SC Herbicide can only be applied in labeled pome and stone fruit, pecan and olive that have been established for a minimum of three years after transplanting and exhibiting normal growth and good vigor.
- Do not use on soils with 20% or more gravel content. To determine gravel content do not remove gravel from soil samples before sending the samples for soil texture analysis, and request that gravel content be included in the analysis. The gravel content (greater than 2 mm or 0.079 inches in size, US standard sieve size 10) is defined as total percent gravel by weight before conducting soil texture analysis.
- Determine soil organic matter content (%OM) of specific orchards, vineyards, and groves by having soil core samples to a minimum depth of 6 inches of soil analyzed.
- Do not apply more than the amount of Indaziflam 500SC Herbicide specified per application and per year or in a 12 month period on this label based on soil texture, percent organic matter content, application site and crop.
- Allow at least 90 days between applications of Indaziflam 500SC Herbicide.
- Only use in vineyards where the grapes have at least 6 inches of soil barrier between the soil surface and the major portion of the root system.
- Indaziflam 500SC Herbicide can only be applied in grapes that have been established for a minimum of three years after transplanting and exhibiting normal growth and good vigor.
- Do not apply this product through any type of irrigation system.
- Use of spot spraying around desired plants is not allowed due to the variability of the actual application rate. Excessive application rates may result in severe crop injury or death.
- Do not apply this product by aerial application.
- Do not harvest citrus crops within 7 days after the application of Indaziflam 500SC Herbicide.
- Do not harvest crops other than citrus within 14 days after the application of Indaziflam 500SC Herbicide.
- Only crops listed on this label may be replanted or rotated within 24 months after the last application of Indaziflam 500SC Herbicide and while following the instructions listed in the "Rotational Crop Restrictions" section.
- Do not apply this product to frozen or snow covered soil.
- Do not apply this product to water-saturated soil.

- Do not flood-irrigate orchards or vineyards containing stone fruit, pome fruit, grapes, tree nuts, or olives within 60 days following application of Indaziflam 500SC Herbicide.
- Do not apply irrigation, exclusive of flood-irrigation, to treated areas within 48 hours after application.
- Do not apply within 25 feet of ponds, lakes, rivers, streams, wetlands, and habitat containing aquatic and semi-aquatic plants.
- Do not use Indaziflam 500SC Herbicide in Nassau and Suffolk Counties of New York State.

SPRAY DRIFT MANAGEMENT

Spray equipment and weather affect spray drift. Consider all factors when making application decisions. Where states have more stringent regulations, they must be observed. Avoiding spray drift is the responsibility of the applicator or grower. To reduce the potential for drift, the application equipment must be set to apply medium to large droplets (i.e., ASAE Standard 572.1) with corresponding spray pressure. Use high flow rate nozzles to apply the highest practical spray volume. With most nozzle types, narrower spray angles produce larger droplets. Follow the nozzle manufacturer's directions on pressure, orientation, spray volume, etc., in order to minimize drift and optimize coverage and control.

Wind

Avoid making applications when spray particles may be carried by air currents to areas where sensitive crops and plants are growing. Do not spray near sensitive plants if wind is gusty, below 2 mph, or in excess of 10 mph and moving in the direction of adjacent areas of sensitive crops or plants. Do not apply during temperature inversions. Always make applications when there is some air movement to determine the direction and distance of possible spray drift.

Local terrain may influence wind patterns; the applicator should be familiar with local conditions and understand how they may impact spray drift. Boom or nozzle shielding can reduce the effects of wind or air currents on drift. Verify that the shields do not interfere with uniform deposition of product prior to application.

Temperature Inversion

A surface temperature inversion (i.e., increasing temperature with increasing altitude) greatly increases the potential for drift. Avoid application when conditions are favorable to inversion. Presence of ground fog is a good indicator of a surface temperature inversion.

Sensitive Areas

Sensitive areas to Indaziflam 500SC Herbicide are defined as natural bodies of water (ponds, lakes, rivers, streams), wetlands, habitats of endangered species and non-labelled agricultural crop areas. Applicators must take all precautions necessary to minimize spray drift to these sensitive areas.

APPLICATION INFORMATION

Indaziflam 500SC Herbicide can only be applied by ground equipment. Do not apply by aerial equipment, chemigation, or spot spraying around desired plants.

Apply Indaziflam 500SC Herbicide alone or in an approved tank mixture in a minimum of 10 gallons of spray mixture per acre. Use higher spray volumes to improve distribution in high densities of emerged weeds or debris. Uniform, thorough spray coverage directed to the soil at the base of the crop is important to achieve consistent weed control. Do not allow spray to directly or indirectly contact crop foliage, green bark, roots, or fruit as it may cause localized crop injury. Application may be made as a broadcast treatment or as a banded treatment under vineyard, grove, or orchard crops. When making banded applications use proportionately less spray water and Indaziflam 500SC Herbicide. The dosage listed on this label is for the treated area of the field regardless of the portion of the field that this represents.

Application Equipment

To minimize spray drift to non-target areas, apply this product using nozzles that deliver a medium or larger spray droplet as defined by the ASAE ~~standard~~ S-572.1 and as shown in nozzle manufacturer's catalogues. Keep the spray boom at the lowest possible spray height recommended by the nozzle manufacturer above the target surface. Refer to nozzle manufacturer's recommendations for proper nozzle, pressure setting and sprayer speed for optimum product performance and minimal spray drift. Use sprayers that provide accurate and uniform application to ensure proper distribution. An off-center (OC) nozzle located at the end of the boom may be used to spray near the trunk but must be oriented so that it directs spray to avoid spray contact with crop foliage and green bark. **Maintain adequate agitation at all times including momentary stops. Since settling may occur and be difficult to get back into suspension, spray solution should not be left in the tank overnight.**

Ensure that the spray equipment including spray tank, pumps, lines, filters, screens, and nozzles are clean and free of residue from previous use before mixing and applying Indaziflam 500SC Herbicide by following the instructions listed under SPRAYER CLEANUP PROCEDURE. Residue remaining in the spray equipment from previous uses can cause crop injury if not properly cleaned. After applying Indaziflam 500SC Herbicide follow the cleaning instructions again to ensure that no product remains in the spray equipment.

Appendix 2

Uniform thorough spray coverage is important to achieve consistent weed control. Select nozzles, pressure, and application speed that will deliver medium or larger droplets. Verify that application equipment is in good working condition and is properly calibrated to apply the correct amount of product.

Application Method

Broadcast Applications

For all crops listed on this label, apply Indaziflam 500SC Herbicide by ground equipment at rates described in the **Dose Rate Chart** in the **APPLICATION DIRECTIONS** section for the specific crop or site where this product will be used.

Banded Applications

When making banded applications, use the same dosage rate as for broadcast applications but use proportionately less spray water and Indaziflam 500SC Herbicide. The use rate provided is for the treated area of the field regardless of the portion of the field that it represents. Banded applications may be made using the following formula to calculate the amount of herbicide and spray volume needed for orchard or vineyard strip sprays:

$$\frac{\text{Treated Band width in Inches}}{\text{Row width in Inches}} \times \text{Herbicide Rate per Treated Acre} = \text{Amount of Herbicide Needed for Treatment}$$

$$\frac{\text{Treated Band width in Inches}}{\text{Row width in Inches}} \times \text{Spray Volume per Treated Acre} = \text{Amount of Spray Volume Needed for Treatment}$$

Tank Mix Instructions

Indaziflam 500SC Herbicide may be mixed with and applied in combination with most commonly used pesticides registered for use in the approved crops to expand the spectrum of weed control. Indaziflam 500SC Herbicide will generally provide little or no control of weeds that are already emerged or established at the time of application. When weeds are emerged at application, the addition of a labeled foliar active herbicide such as Rely® 280 Herbicide is needed. Only use products that are approved for use in the crop to which the tank mixture is to be applied.

If Indaziflam 500SC Herbicide is to be tank mixed with liquid fertilizers, other pesticides, or additives, compatibility should be tested prior to mixing. To test for compatibility, use a small container and mix a small amount (0.5 to 1 qt) of spray, combining all ingredients in the same ratio and mixing order as the anticipated use. If any indications of physical incompatibility develop, do not use this mixture for spraying. Indications of incompatibility usually appear 5-15 minutes after mixing.

It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.

Appendix 2

Mixing Instructions

Ensure that the application equipment has been thoroughly cleaned from previous use before using to apply Indaziflam 500SC Herbicide. Follow the steps listed below:

1. Shake container well to ensure that the product is thoroughly suspended prior to measuring in case some settling has occurred during shipping or storage.
2. Fill the spray tank with 1/2 of the required volume of water prior to the addition of Indaziflam 500SC Herbicide.
3. With the pump and agitator running, add the proper amount of Indaziflam 500SC Herbicide first.
4. Once the Indaziflam 500SC Herbicide is completely dispersed, add any other pesticides, fertilizers or additives if they are to be applied with Indaziflam 500SC Herbicide.
5. Add the rest of the water to the desired volume while maintaining sufficient agitating.

Continue agitation while mixing and during application to ensure a uniform spray mixture.

Re-suspending SC Products in Spray Solution: Like other suspension concentrates (SCs), Indaziflam 500SC Herbicide will settle if left standing without agitation. Reagitate the spray solution for a minimum of 10 minutes before application.

Weed Control

Indaziflam 500SC Herbicide provides residual control of susceptible grass and broadleaf weeds when applied prior to germination. Best weed control is obtained when Indaziflam 500SC Herbicide is applied to a dry soil surface followed by 48 hours without irrigation or rain, and then followed by adequate moisture from rain or an irrigation event within 21 days and prior to weed seed germination and adequate rain or irrigation is received soon after application and prior to weed germination. Supplemental irrigation may be applied following application to improve weed control.

The weed control activity may be reduced if the application is made to dense weed vegetation or to soil covered in heavy crop or weed debris that prevents a uniform distribution of the product reaching the soil. Removing the debris and / or controlling the existing weeds prior to applying Indaziflam 500SC Herbicide may improve weed control. In very dense stands of living weeds, an application of a foliar active herbicide first then followed 3-6 weeks later with the application of Indaziflam 500SC Herbicide is recommended for improved performance.

If weeds are emerged at application, the addition of a foliar active herbicide is needed. The spectrum of weed control may be increased when Indaziflam 500SC Herbicide is tank mixed with other herbicides. Refer to Tank Mix Instructions section.

Rate Ranges

Select proper use rate based on crop or application site and soil texture and percent organic matter content. Soils with high clay content may require a higher use rate of Indaziflam 500SC Herbicide than soils with low clay content. Where rate ranges are given, use lower rates within the range on coarser textured soils and higher rates within the range on finer textured soils. Using the higher rates will provide longer weed control and may also improve control in fields with heavy weed or crop debris.

If individual orchards, vineyards, or citrus groves have multiple %OM contents throughout the area where Indaziflam 500SC Herbicide is to be applied by a single tank or tank mix, then use the lowest rate of Indaziflam 500SC Herbicide corresponding to the lowest %OM content for that area.

Indaziflam 500SC Herbicide may be used on soils with greater than 10% organic matter, however the length and level of weed control may be reduced compared to soils with lower organic matter.

Appendix 2

Weeds Controlled by 1.4 to 2.6 Fl oz/Ac Indaziflam 500SC Herbicide			
Broadleaves		**Grasses**	
Common Name	**Genus/Species**	**Common Name**	**Genus/Species**
Amaranth, spiny	*Amaranthus spinosus*	Barley, mouse	*Hordeum murinum*
Buckwheat, wild*	*Polygonum convolvulus*	Barnyardgrass, common	*Echinochloa crus-galli*
Burclover, California*	*Medicago polymorpha*	Bluegrass, annual	*Poa annua*
Buttercup, corn*	*Ranunculus arvensis*	Brome, downy	*Bromus tectorum*
Carpetweed	*Mollugo verticillata*	Brome, foxtail	*Bromus rubens*
Catsear, spotted***	*Hypochoeris radicata*	Bromegrass, ripgut	*Bromus rigidus*
Celery, wild*	*Apium leptophyllum*	Cheat	*Bromus secalinus*
Chickweed, common	*Stellaria media*	Crabgrass, large	*Digitaria sanguinalis*
Chickweed, mouse-ear	*Cerastium vulgatum*	Crabgrass, smooth	*Digitaria ischaemum*
Clover, crimson***	*Trifolium incarnatum*	Cupgrass, southwestern	*Eriochloa gracilis*
Clover, red*	*Trifolium pratense*	Foxtail, giant	*Setaria faberi*
Clover, white***	*Trifolium repens*	Foxtail, green	*Setaria viridis*
Cudweed, purple	*Gnaphalium purpureum*	Foxtail, yellow	*Pennisetum glaucum*
Dandelion, common (seedling)	*Taraxacum officinale*	Goosegrass	*Eleusine indica*
Eveningprimrose, cutleaf *	*Oenothera laciniata*	Guineagrass	*Panicum maximum*
Fiddleneck, coast	*Amsinckia intermedia*	Junglerice	*Echinochloa colonum*
Filaree, redstem / Storksbill	*Erodium cicutarium*	Lovegrass, tufted	*Eragrostis pectinacea*
Filaree, whitestem	*Erodium moschatum*	Millet, wild proso	*Panicum miliaceum*
Fleabane, hairy	*Erigeron bonariensis*	Oat, wild	*Avena fatua*
Geranium, Carolina	*Geranium carolinianum*	Panicum, fall	*Panicum dichotomiflorum*
Groundsel, common	*Senecio vulgaris*	Panicum, Texas*	*Panicum texanum*
Henbit*	*Lamium amplexicaule*	Ryegrass, Italian (annual)	*Lolium multiflorum*
Horseweed / Marestail	*Erigeron canadensis*	Signalgrass, broadleaf	*Brachiaria platyphylla*
Indigo, Hairy	*Indigofera hirsuta*	Sprangletop, bearded	*Leptochloa fascicularis*
Knotweed, prostrate*	*Polygonum aviculare*	Sprangletop, Mexican	*Leptochloa uninervia*
Kochia	*Kochia scoparia*		
Lambsquarters, common**	*Chenopodium album*		
Lettuce, prickly*	*Lactuca serriola*		
Mallow, common*	*Malva neglecta*		
Mallow, little/ Cheeseweed	*Malva parviflora*		
Morningglory, ivyleaf*	*Ipomoea hederacea*		
Morningglory, pitted*	*Ipomoea lacunosa*		
Mustard, black	*Brassica nigra*		
Mustard, wild	*Sinapis arvensis*		
Nettle, stinging	*Urtica dioica*		
Pigweed, prostrate	*Amaranthus blitoides*		
Pigweed, redroot	*Amaranthus retroflexus*		
Pigweed, smooth	*Amaranthus hybridus*		
Plantain, buckhorn	*Plantago lanceolata*		
Prickly sida / Teaweed	*Sida spinosa*		
Puncturevine, Common*	*Tribulus terrestris*		
Purslane, common	*Portulaca oleracea*		
Purslane, horse	*Trianthema portulacastrum*		
Pusley, Brazilian***	*Richardia brazilensis*		
Pusley, Florida	*Richardia scabra*		
Ragweed, common*	*Ambrosia elatior*		
Redmaids	*Calandrinia caulescens*		
Rocket, London	*Sisymbrium irio*		
Sesbania, hemp / Coffeebean	*Sesbania exaltata*		

Appendix 2

Weeds Controlled by 1.4 to 2.6 Fl oz/Ac Indaziflam 500SC Herbicide			
Broadleaves			
Common Name	**Genus/Species**		
Shepherd's-purse	*Capsella bursa-pastoris*		
Smartweed, Pennsylvania	*Polygonum pensylvanicum*		
Smellmelon	*Cucumis melo*		
Sorrel, red*	*Rumex acetosella*		
Sowthistle, annual	*Sonchus oleraceus*		
Sowthistle, spiny	*Sonchus asper*		
Spanishneedles	*Bidens bipinnata*		
Spurge, garden	*Euphorbia hirta*		
Spurge, prostrate	*Euphorbia supina*		
Spurge, spotted	*Euphorbia maculata*		
Spurry, corn	*Spergula arvensis*		
Sunflower, common*	*Helianthus annuus*		
Swinecress	*Coronopus didymus*		
Thistle, Russian	*Salsola kali*		
Velvetleaf	*Abutilon theophrasti*		
Vetch, purple	*Vicia benghalensis*		
Willowherb, panicle	*Epilobium brachycarpum*		
Woodsorrel, common yellow*	*Oxalis stricta*		
Woodsorrel, Florida yellow	*Oxalis florida*		

* Denotes partial control of these weeds

** Consistent control dependent on timely activation by rain or irrigation

*** Seedling control only

Appendix 2

APPLICATION DIRECTIONS FOR USE ON BLUEBERRY (HIGHBUSH) AND OTHER BUSHBERRY SUBGROUP CROPS IN 13-07B (Aronia berry; blueberry, highbush; buffalo currant; Chilean guava; cranberry, highbush; currant, black; currant, red; elderberry; European barberry; gooseberry; honeysuckle, edible; huckleberry; jostaberry; Juneberry (Saskatoon berry); lingonberry; native currant; salal; sea buckthorn; cultivars, varieties, and/or hybrids of these including rabbiteye blueberries, except blueberry (lowbush).

Only use Indaziflam 500SC Herbicide in established plantings at least one year after the bushes have been planted and exhibiting normal growth and good vigor. Only apply Indaziflam 500SC Herbicide to blueberries and bushberries where the soil has completely settled around the bushes and there are no exposed roots, open channels or depressions in the soil that would allow the product to move into the root zone or injury may occur.

Dose Rate Chart for Blueberry (HighBush) and Bushberry Plantings and other 13-07B Crops, except Blueberry (lowbush)

Soil Texture	Indaziflam 500SC Herbicide (fl oz product / broadcast acre)			Minimum Plant Age
Sand	Do Not Use			
Any other soil except those that contain 20% or greater gravel content	Soil % Organic Matter Content	Rate Per Application	Max Rate Per Year	1 year*
	%	fl oz/A	fl oz/A	
	< 1	1.4 (0.045 lb ai/A)	2.8 (0.09 lb ai/A)	
	≥ 1	2.0 (0.065 lb ai/A)	4.0 (0.13 lb ai/A)	

Do not apply more than a total of 2.8 fl oz product/A (0.09 lb ai/A) per year on soils containing < 1 % organic matter content, or 4.0 fl oz product/A (0.13 lb ai/A) per year on soils containing ≥1 % organic matter content in a 12 month period when used in any highbush blueberry or bushberry planting.

Only apply Indaziflam 500SC Herbicide to soil as a dormant application in late fall through early spring before bud swell.

Apply Indaziflam 500SC Herbicide as a directed application to the soil beneath the bushes.

When making more than one application per year, allow a minimum of 90 days between applications.

Do not apply more than one application of Indaziflam 500SC Herbicide per cropping season per year in California

Do not use in Blueberry (HighBush) and other Bushberry 13-07B crops grown in sand.

Do not use on soils with 20% or more gravel content.

Do not allow spray to contact green stems, foliage, flowers, or berries or unacceptable injury may occur.

* **Only use** Indaziflam 500SC Herbicide in established plantings at least three years after the bushes have been planted and exhibiting normal growth and good vigor in California.

Appendix 2

APPLICATION DIRECTIONS FOR USE ON CANEBERRY AND OTHER CANEBERRY SUBGROUP CROPS IN 13-07A (Blackberry; loganberry; raspberry, black and red; wild raspberry; cultivars, varieties, and/or hybrids of these)

Only use Indaziflam 500SC Herbicide in established plantings at least one year after the bushes have been planted and exhibiting normal growth and good vigor. Only apply Indaziflam 500SC Herbicide to caneberries where the soil has completely settled around the bushes and there are no exposed roots, open channels or depressions in the soil that would allow the product to move into the root zone or injury may occur.

Dose Rate Chart for Caneberry Plantings

Soil Texture	Indaziflam 500SC Herbicide (fl oz product / broadcast acre)			Minimum Plant Age
Sand	Do Not Use			
Any other soil except those that contain 20% or greater gravel content	Soil % Organic Matter Content	Rate Per Application	Max Rate Per Year	1 year*
	%	fl oz/A	fl oz/A	
	< 1	1.4 (0.045 lb ai/A)	2.8 (0.09 lb ai/A)	
	≥ 1	2.0 (0.065 lb ai/A)	4.0 (0.13 lb ai/A)	

Do not apply more than a total of 2.8 fl oz product/A (0.09 lb ai/A) per year on soils containing < 1 % organic matter content, or 4.0 fl oz product/A (0.13 lb ai/A) per year on soils containing ≥1 % organic matter content in a 12 month period when used in any caneberry planting.

Only apply Indaziflam 500SC Herbicide to soil as a dormant application in late fall through early spring before bud swell.

Do not apply more than one application of Indaziflam 500SC Herbicide per cropping season per year in California

When making more than one application per year, allow a minimum of 90 days between applications.

Apply Indaziflam 500SC Herbicide as a directed application to the soil beneath the canes.

Do not use in Caneberry 13-07A grown on sand.

Do not use on soils with 20% or more gravel content.

Do not allow spray to contact green stems, foliage, flowers, or berries or unacceptable injury may occur.

* **Only use** Indaziflam 500SC Herbicide in established plantings at least three years after the bushes have been planted and exhibiting normal growth and good vigor in California.

Appendix 2

APPLICATION DIRECTIONS FOR USE IN CITRUS GROVES

Only apply Indaziflam 500SC Herbicide in citrus groves where the soil has completely settled around citrus trees and there are no open channels or depressions in the soil that would allow the product to move into the root zone through open channels.

Citrus Crops: Crop group 10 including Australian desert lime; Australian finger-lime; Australian round lime; Brown River finger lime; calamondin; citron; citrus hybrids; clementine; grapefruit; Japanese summer grapefruit; kumquat; lemon; lime; Mediterranean mandarin; mount white lime; New Guinea wild lime; orange, sour; orange, sweet; pummelo; Russell River lime; satsuma mandarin; sweet lime; tachibana orange; Tahiti lime; tangelo; tangerine (mandarin); tangor; trifoliate orange; uniq fruit; cultivars, varieties, and or hybrids of these

Dose Rate Chart for Citrus Groves

Soil Texture	Indaziflam 500SC Herbicide (fl oz product / broadcast acre)
Any soil except those that contain 20% or greater gravel content	2.0 to 2.6 fl oz/A (0.065 to 0.085 lb ai/A)

Do not apply more than 4.1 fl oz product/A (0.134 lb ai/A) per year or in a 12 month period.
When making more than one application per year, allow a minimum of 90 days between applications.

Use in Established Groves:

Only apply Indaziflam 500SC Herbicide in groves where the trees have been established for a minimum of one year after transplanting.

Use in Recently Planted Citrus Groves:

Indaziflam 500SC Herbicide may be used in groves planted a minimum of one month provided the following condition exists:

1. The transplanted trees were potted plants (such as citripots) and not bare-rooted
2. The trunks are protected from spray contact by nonporous wraps, grow tubes, or waxed containers.
3. The trees are actively growing and exhibiting good health and vigor.

Avoid direct or indirect spray contact with crop foliage, green bark, roots, or fruit as it may cause localized crop injury or death. Only the trunks of trees transplanted more than one year may be sprayed with Indaziflam 500SC Herbicide if the trunk is callused, mature brown bark. Contact of Indaziflam 500SC Herbicide with tissues other than mature brown bark can result in serious damage or plant death.

Appendix 2

APPLICATION DIRECTIONS FOR USE ON COFFEE

Only use Indaziflam 500SC Herbicide in established plantings at least one year after the shrubs have been planted and exhibiting normal growth and good vigor. Only apply Indaziflam 500SC Herbicide to coffee shrubs where the soil has completely settled around the shrubs and there are no open channels or depressions in the soil that would allow the product to move into the root zone or injury may occur.

Dose Rate Chart for Coffee

Soil Texture	Indaziflam 500SC Herbicide (fl oz product / broadcast acre)			
Any soil except those that contain 20% or greater gravel content	Soil % Organic Matter Content	Maximum Rate of First Application	Maximum Rate of Second Application	Max Rate Per Year
	%	fl oz/A	fl oz/A	fl oz/A
	< 1	1.4 (0.045 lb ai/A)	1.4 (0.045 lb ai/A)	2.8 (0.091 lb ai/A)
	1 to 3	2.0 (0.065 lb ai/A)		3.4 (0.11 lb ai/A)
	> 3	2.7 (0.089 lb ai/A)		4.1 (0.134 lb ai/A)

Do not apply more than the amount of Indaziflam 500SC Herbicide specified per application and per year or in a 12 month period on this label based on soil texture, % organic matter content, application site, and crop. When making more than one application per year, allow a minimum of 90 days between applications.

Do not use on soils with 20% or more gravel content.
Do not apply more than 4.1 fl oz product/A (0.134 lb ai/A) per year or in a 12 month period when used in Coffee

Do not use in coffee grown on sand.

Do not allow spray to contact green stems, foliage, flowers, or beans or unacceptable injury may occur.

Appendix 2

FRUIT, SMALL, VINE CLIMBING, EXCEPT FUZZY KIWIFRUIT SUBGROUP 13-07F including: Amur river grape; gooseberry; grape; kiwifruit, hardy; maypop; schisandra berry; cultivars, varieties, and/or hybrids of these

Only use Indaziflam 500SC Herbicide in established vineyards at least three years after the vines have been planted and exhibiting normal growth and good vigor. Ensure that the grapes have 6 inches of soil barrier between the soil surface and the major portion of the root system prior to using Indaziflam 500SC Herbicide or injury may occur.

Dose Rate Chart for Grape Vineyards and other 13-07F Crops

Soil Texture	Indaziflam 500SC Herbicide (fl oz product / broadcast acre)			Minimum Vine Age
Sand	Do Not Use			
Any other soil except those that contain 20% or greater gravel content	**Soil Percent Organic Matter Content**	**Rate Per Application**	**Max Rate Per Year**	3 years
	%	**fl oz/A**	**fl oz/A**	
	<1	1.4 to 2.0 (0.045 to 0.065 lb ai/A)	2.0 (0.065 lb ai/A)	
	≥1	1.4 to 2.0 (0.045 to 0.065 lb ai/A)	2.0 (0.065 lb ai/A)	

Do not apply more than the amount of Indaziflam 500SC Herbicide specified per application and per year or in a 12 month period on this label based on soil texture, percent organic matter content, application site, and crop.

Do not use in grapes grown in Florida or Georgia.

Do not use in grapes grown on sand.

Do not use on soils with 20% or more gravel content.

Do not apply more than a total of 2.0 fl oz product/A (0.065 lbs ai/A) per year or in a 12 month period when used in grape vineyards.

When making more than one application per year, allow a minimum of 90 days between applications.

Appendix 2

APPLICATION DIRECTIONS FOR USE ON HOPS

Only use Indaziflam 500SC Herbicide in established plantings at least one year after the vines have been planted and exhibiting normal growth and good vigor. Only apply Indaziflam 500SC Herbicide to hops vines where the soil has completely settled around the vines and there are no exposed roots, open channels or depressions in the soil that would allow the product to move into the root zone or injury may occur.

Dose Rate Chart for Hops

Soil Texture	Indaziflam 500SC Herbicide (fl oz product / broadcast acre)			Minimum Plant Age
Sand	Do Not Use			
Any other soil except those that contain 20% or greater gravel content	Soil % Organic Matter Content	Rate Per Application	Max Rate Per Year	1 year
	%	fl oz/A	fl oz/A	
	< 1	1.4 (0.045 lb ai/A)	2.8 (0.09 lb ai/A)	
	≥ 1	2.0 (0.065 lb ai/A)	4.0 (0.13 lb ai/A)	

Do not apply more than a total of 2.8 fl oz product/A (0.09 lb ai/A) per year on soils containing < 1 % organic matter content, or 4.0 fl oz product/A (0.13 lb ai/A) per year on soils containing ≥1 % organic matter content in a 12 month period when used in any hops planting.

Do not apply more than two applications of Indaziflam 500SC Herbicide per year.

Application timings can be made as an early spring dormant application and/or as a fall dormant application after vine harvest. The early spring dormant timing can be made on hop shoots that are in the bud stage up to 2" in height.

Apply Indaziflam 500SC Herbicide as a minimum 2-foot band to each side of the hop row.

Do not use in hops grown on sand.

Do not use on soils with 20% or more gravel content.

Do not allow spray to contact green stems, foliage, flowers, or cones or unacceptable injury may occur.

Appendix 2

APPLICATION DIRECTIONS FOR USE IN POME and STONE FRUIT, TREE NUTS, AND CROPS IN THE PROPOSED CROP SUBGROUP 23A; SMALL FRUIT, EDIBLE PEEL SUBGROUP, INCLUDING OLIVE.

For use in pome and stone fruit, pecan, and proposed Crop Subgroup 23A; Small fruit, edible peel subgroup, including olive, only use Indaziflam 500SC Herbicide in orchards where the trees have been established at least three years and exhibiting normal growth and good vigor.

For use in tree nuts, except pecan, only use Indaziflam 500SC Herbicide in orchards where the trees have been established at least one year and exhibiting normal growth and good vigor.

If cracks in the soil or depressions from transplanting are present, fill them in prior to applying Indaziflam 500SC Herbicide.

Pome Fruit: Crop group 11 including: apple; azarole; crabapple; loquat; mayhaw; medlar; pear; pear, Asian; quince; quince, Chinese; quince, Japanese; tejocote; cultivars, varieties, and/or hybrids of these.

Stone Fruit Group 12-12 including: Apricot; apricot, Japanese; capulin; cherry, black; cherry, Nanking; cherry, sweet; cherry, tart; Jujube, Chinese; nectarine; peach; plum; plum, American; plum, beach; plum, Canada; plum, cherry; plum, Chickasaw; plum, Damson; plum, Japanese; plum, Klamath; plum, prune; plumcot; sloe; cultivars, varieties, and/or hybrids of these

Tree Nuts: Crop group 14-12 including: African nut-tree; almond; beechnut; Brazil nut; Brazilian pine; bunya; bur oak; butternut; Cajou nut; candlenut; cashew; chestnut; chinquapin; coconut; coquito nut; dika nut; ginkgo; Guiana chestnut; hazelnut (filbert); heartnut; hickory nut; Japanese horse-chestnut; macadamia nut; mongongo nut; monkey-pot; monkey puzzle nut; Okari nut; Pachira nut; peach palm nut; pecan; pequi; Pili nut; pine nut; pistachio; Sapucaia nut; tropical almond; walnut, black; walnut, English; yellowhorn; cultivars, varieties, and/or hybrids of these

Crops in the proposed Crop Subgroup 23A: Small fruit, edible peel subgroup including: Acerola; African plum; agritos, almondette; appleberry; arbutus berry; bayberry, red; bignay; breadnut; cabeluda; carandas-plum; Ceylon iron wood; Ceylon olive; cherry-of-the-Rio-Grande; Chinese olive, black; Chinese olive, white; chirauli-nut; cocoplum; desert-date; false sandalwood; fragrant manjack; gooseberry, Abyssinian; gooseberry, Ceylon; gooseberry, otaheite; governor's plum; grumichama; guabiroba; guava berry; guava, Brazilian; guava, Costa Rican; guayabillo; illawarra plum; Indian-plum; Jamaica-cherry; jambolan; kaffir-plum; kakadu plum; kapundung; karnada; lemon aspen; mombin, yellow; monos plum; mountain cherry; olive; persimmon, black; pitomba; plum-of-Martinique; rukam; rumberry; sea grape; sete-capotes; silver aspen; water apple; water pear; water berry; wax jambu.

Dose Rate Chart for Pome and Stone Fruit, Tree Nuts, and Crops in the Proposed Crop Subgroup 23A; Small Fruit, Edible Peel Subgroup, Including Olive

Soil Texture	Indaziflam 500SC Herbicide (fl oz product / broadcast acre)			
Any soil except those that contain 20% or greater gravel content	**Soil Percent Organic Matter Content**	**Rate Per Application**	**Max Rate Per Year**	**Minimum Days Between Applications**
	%	**fl oz/A**	**fl oz/A**	**Days**
	<1	1.4 to 2.6 (0.045 to 0.085 lb ai/A)	2.4 to 4.1 (0.078 to 0.134 lb ai/A)	90
	1 to 3	1.4 to 2.6 (0.045 to 0.085 lb ai/A)	3.2 to 4.1 (0.104 to 0.134 lb ai/A)	
	> 3	1.4 to 2.6 (0.045 to 0.085 lb ai/A)	4.1 (0.134 lb ai/A)	

Appendix 2

Do not apply more than the amount of Indaziflam 500SC Herbicide specified per application and per year or in a 12 month period on this label based on soil texture, percent organic matter content, application site, and crop.

When making more than one application per year, allow a minimum of 90 days between applications.

Do not use on soils with 20% or more gravel content.

Do not apply when nuts intended for harvest are on the ground or illegal residues may result.

Do not apply more than a total of 4.1 fl oz of product (0.134 lb ai/A) per year or in a 12 month period when used in pome fruit, stone fruit, tree nuts and Crops in the Proposed Crop Subgroup 23A; Small Fruit, Edible Peel Subgroup, including Olive.

In the California counties of Kern, Inyo, Tulare, Kings, Fresno, and Madera, Indaziflam 500SC Herbicide can only be applied beginning after harvest up to initiation of pink bud stage in almonds, and up to beginning emergence of green leaf tissue in pistachios, walnuts, and pecans.

APPLICATION DIRECTIONS FOR REPLANTED LABELED CROPS IN ESTABLISHED BLUEBERRY (HIGHBUSH) AND OTHER BUSHBERRY SUBGROUP CROPS IN 13-07B, EXCEPT BLUEBERRY (LOWBUSH); CANEBERRY AND OTHER CANEBERRY SUBGROUP CROPS IN 13-07A; COFFEE; FRUIT, SMALL, VINE CLIMBING, EXCEPT FUZZY KIWIFRUIT SUBGROUP 13-07F; HOPS; POME AND STONE FRUIT; SMALL FRUIT, EDIBLE PEEL SUBGROUP, INCLUDING OLIVE ORCHARDS; TREE NUT, AND CROPS IN THE PROPOSED CROP SUBGROUP 23A.

Indaziflam 500SC Herbicide may be used in established orchards/groves/vineyards around new trees or vines (resets/replants) anytime following planting provided the following conditions exist:

1. The soil is completely settled around established and newly planted trees/vines and there are not open channels or depressions in the soil that would allow the product to move into the root zone through open channels.
2. The trunks are protected from spray contact by nonporous wraps, grow tubes, or waxed containers.
3. The trees/vines are exhibiting good health and vigor.
4. Indaziflam 500SC Herbicide can be applied to resets/replants contained within 3 year old and older established grapes, pome and stone fruit, pecan and olive.

Blueberry (highbush) and other bushberry subgroup crops in 13-07B, except blueberry (lowbush): Aronia berry; blueberry, highbush; buffalo currant; Chilean guava; cranberry, highbush; currant, black; currant, red; elderberry; European barberry; gooseberry; honeysuckle, edible; huckleberry; jostaberry; Juneberry (Saskatoon berry); lingonberry; native currant; salal; sea buckthorn; cultivars, varieties, and/or hybrids of these including rabbiteye blueberries, except blueberry (lowbush).

Caneberry and other caneberry subgroup crops in 13-07A: Blackberry; loganberry; raspberry, black and red; wild raspberry; cultivars, varieties, and/or hybrids of these.

Coffee

Fruit, Small, Vine Climbing, Except Fuzzy Kiwifruit Subgroup 13-07F including: Amur river grape; gooseberry; grape; kiwifruit, hardy; maypop; schisandra berry; cultivars, varieties, and/or hybrids of these.

Hops

Pome Fruit Crop group 11 including: apple; azarole; crabapple; loquat; mayhaw; medlar; pear; pear, Asian; quince; quince, Chinese; quince, Japanese; tejocote; cultivars, varieties, and/or hybrids of these.

Stone Fruit Group 12-12 including: Apricot; apricot, Japanese; capulin; cherry, black; cherry, Nanking; cherry, sweet; cherry, tart; Jujube, Chinese; nectarine; peach; plum; plum, American; plum, beach; plum, Canada; plum, cherry; plum, Chickasaw; plum, Damson; plum, Japanese; plum, Klamath; plum, prune; plumcot; sloe; cultivars, varieties, and/or hybrids of these.

Crops in the proposed Crop Subgroup 23A: Small fruit, edible peel subgroup including: Acerola; African plum; agritos, almondette; appleberry; arbutus berry; bayberry, red; bignay; breadnut; cabeluda; carandas-plum; Ceylon iron wood; Ceylon olive; cherry-of-the-Rio-Grande; Chinese olive, black; Chinese olive, white; chirauli-nut; cocoplum; desert-date; false sandalwood; fragrant manjack; gooseberry, Abyssinian; gooseberry, Ceylon; gooseberry, otaheite; governor's plum; grumichama; guabiroba; guava berry; guava, Brazilian; guava, Costa Rican; guayabillo; illawarra plum; Indian-plum; Jamaica-cherry; jambolan; kaffir-plum; kakadu plum; kapundung;

karnada; lemon aspen; mombin, yellow; monos plum; mountain cherry; olive; persimmon, black; pitomba; plum-of-Martinique; rukam; rumberry; sea grape; sete-capotes; silver aspen; water apple; water pear; water berry; wax jambu.

Tree Nuts: Crop group 14-12 including: African nut-tree; almond; beechnut; Brazil nut; Brazilian pine; bunya; bur oak; butternut; Cajou nut; candlenut; cashew; chestnut; chinquapin; coconut; coquito nut; dika nut; ginkgo; Guiana chestnut; hazelnut (filbert); heartnut; hickory nut; Japanese horse-chestnut; macadamia nut; mongongo nut; monkey-pot; monkey puzzle nut; Okari nut; Pachira nut; peach palm nut; pecan; pequi; Pili nut; pine nut; pistachio; Sapucaia nut; tropical almond; walnut, black; walnut, English; yellowhorn; cultivars, varieties, and/or hybrids of these.

Spot spraying is not allowed. Application is made with broadcast equipment delivering a uniform spray pattern.
Avoid direct or indirect spray contact with crop foliage, green bark, roots, or fruit as it may cause localized crop injury or death. Non-protected trunks of reset/replant trees/vines in an established orchard/vineyard planted more than one year may be sprayed with Indaziflam 500SC Herbicide if the trunk is callused, mature brown bark. Contact of Indaziflam 500SC Herbicide with tissues other than mature brown bark can result in serious damage or plant death. If cracks in the soil or depressions are present after planting, fill them in prior to applying Indaziflam 500SC Herbicide.

An established tree nut orchard, except Pecan, is defined as the majority of trees in the orchard established a minimum of one year. Established Pome and Stone Fruit, Pecan, and crops in the Proposed Crop Subgroup 23A; Small Fruit, Edible Peel Subgroup, including Olive orchards and grape vineyards are defined as the majority of trees/vines in the orchard/grove/vineyard established a minimum of three years.

Labeled crops may be planted anytime following an application of Indaziflam 500SC Herbicide if the treated soil is removed from the transplant hole and soil that has not received any application of Indaziflam 500SC Herbicide within the last 12 months is used around the roots of the new transplant.

APPLICATION DIRECTIONS FOR USE IN FARMSTEAD AREAS

Indaziflam 500SC Herbicide will provide preemergence weed control around farmstead building foundations, non-paved farm roads and driveways, farm equipment lots, ungrazed fences, and shelter belts (windbreaks) around cropland when applied according to the directions found on this label.

Refer to the APPLICATION INFORMATION section of this label for application instructions and a list of the weeds that Indaziflam 500SC will control. Apply Indaziflam 500SC Herbicide in a uniform broadcast spray as described in the APPLICATION INFORMATION section of this label. Apply as a directed spray when using under and around desired trees or shrubs such as in a shelterbelt once they are well-established and the soil has finished settling. Apply 2.0 fl oz/A for coarse and medium textured soil or 2.0 to 2.6 fl oz/A for fine textured soil in a minimum spray volume of 10 gallons per acre in a single application. Do not exceed 2.7 fl oz/A (0.088 lb ai/acre) per year or in a 12 month period for any site. For small sprayers mix 0.04 fl oz per gallon water to be applied to 1,000 square feet. Avoid direct or indirect spray contact with foliage, green bark, and roots of desired plants as it may cause localized plant injury or death.

Indaziflam 500SC Herbicide will not control weeds that are already emerged. For postemergence control of weeds, refer to the Tank Mix Instructions section of this label and follow the Mixing Instructions provided. Only use products that are also registered for the specific use where the application of the mixture is intended. When tank mixing products with different restrictions, follow the directions of the most restricted label.

Do not use Indaziflam 500SC Herbicide in farmstead areas on Long Island, NY.

ORNAMENTALS, CHRISTMAS TREES, AND CONIFER PLANTATIONS

Indaziflam 500SC Herbicide may be applied for pre-emergent weed control in landscape ornamentals, hedgerows, production ornamentals in outdoor nurseries, shadehouses, hoophouses, Christmas trees, and conifer plantations. Apply Indaziflam 500SC Herbicide as a directed spray, prior to weed seed germination to the soil surface around dormant or actively growing ornamentals/Christmas trees/conifer plantations as listed in the table below. Apply Indaziflam 500SC Herbicide to established ornamentals/Christmas trees/conifer plantations. If the grower is uncertain about ornamental/Christmas trees/conifer plantations establishment after transplanting, wait 2 months before applying Indaziflam 500SC Herbicide.

Appendix 2

USE RESTRICTIONS FOR INDAZIFLAM 500SC HERBICIDE ON LANDSCAPE AND PRODUCTION ORNAMENTALS, CHRISTMAS TREES, AND CONIFERS

- Do not exceed the maximum single application rates specified under each Ornamental use.
- Do not exceed a total of 2.7 fl oz (0.088 lb ai/acre) of Indaziflam 500SC Herbicide per acre in a 12 month period.
- Do not allow spray to contact foliage. Indaziflam 500SC Herbicide may cause localized injury to the foliage, especially young leaf tissue. If the spray should contact the foliage, remove affected foliage or wash off immediately.
- Do not use Indaziflam 500SC Herbicide around bedding plants (annuals and herbaceous plants not specified, or not listed as tolerant on this label) or in areas where bedding plants may be planted or seeded for a minimum of one year after application of Indaziflam 500SC Herbicide to a landscape bed.
- Do not use Indaziflam 500SC Herbicide around bearing fruit and nut trees.
- Do not use Indaziflam 500SC Herbicide around non-bearing fruit trees unless they are at least 1 year old (citrus) and 3 years old (all others). Non-bearing trees are defined as trees that will not bear fruit until at least 1 year after treatment.
- Do not use Indaziflam 500SC Herbicide within the dripline of bearing fruit and nut trees.
- Do not mix Indaziflam 500SC Herbicide into the soil. Cultivating or disturbing the soil surface after application may reduce weed control activity.
- Avoid applying Indaziflam 500SC Herbicide to heavily mulched landscape beds, as reduced weed control may occur. For best results remove existing mulch and replace mulch after an application of Indaziflam 500SC Herbicide.
- If transplanting mature plants listed as tolerant on this label into soil treated with Indaziflam 500SC Herbicide within the preceding 12 months, discard existing soil from the planting hole and add new soil around roots to minimize effects on plant establishment.
- Do not use Indaziflam 500SC Herbicide on ornamentals being grown in a greenhouse.
- Do not use Indaziflam 500SC Herbicide on nursery seedbeds, rooted cuttings or young plants in liners.
- Do not apply Indaziflam 500SC Herbicide to ornamentals growing in containers except pot-in-pot ornamentals.
- Do not apply Indaziflam 500SC Herbicide to ornamental bulbs in production fields.
- Do not apply Indaziflam 500SC Herbicide to ornamental bulbs in landscapes, commercial fields, or residential sites after they have emerged.
- Do not apply Indaziflam 500SC Herbicide to herbaceous perennials (e.g. hosta) after they have emerged.
- Do not apply Indaziflam 500SC Herbicide over-the-top of ornamentals/Christmas trees/conifer plantations.
- Do not apply Indaziflam 500SC Herbicide to budded grafts or graft unions as this could cause plant injury or death.
- Do not apply Indaziflam 500SC Herbicide by air.

USE OF INDAZIFLAM 500SC HERBICIDE ON ORNAMENTALS/CHRISTMAS TREES/CONIFER PLANTATIONS IN COARSE AND SANDY SOILS

Soil conditions can affect the tolerance of ornamentals/Christmas trees/conifer plantations to Indaziflam 500SC Herbicide. Excessively coarse or sandy soils may allow for downward movement of Indaziflam 500SC Herbicide into the root zone and cause significant root damage and phytotoxicity. Coarse soils, for example, may include significant quantities of sand, gravel, decomposed granite, and ground cinders. Prior to application of Indaziflam 500SC Herbicide on these soils, confirm soil texture with a soil test. Ornamentals/Christmas trees/conifer plantations grown in soil exceeding 80% sand or 20% gravel may be at risk. If Indaziflam 500SC Herbicide is to be applied in these soils, evaluate tolerance of a few plants of each ornamental/Christmas trees/conifer plantations in Indaziflam 500SC Herbicide treated soil for 2 to 3 months prior to a large scale application.

SYMPTOMS OF INDAZIFLAM 500SC HERBICIDE INJURY ON ORNAMENTALS

Indaziflam 500SC Herbicide may injure sensitive ornamentals by damaging roots or leaves. Plant foliage damaged by root absorption will appear stunted, deformed, and may not recover. If Indaziflam 500SC Herbicide is allowed to contact leaves, leaf symptoms including leaf spot, leaf discoloration, and leaf curl may appear. Symptoms appear within several days after application. Leaves formed after appearance of symptoms may recover.

Users must assess the severity of any symptoms on cultivars not listed on this label, before proceeding with large-scale applications of Indaziflam 500SC Herbicide. The user assumes all responsibility for damage on cultivars not listed on this label.

Appendix 2

LANDSCAPE ORNAMENTAL USES

Indaziflam 500SC Herbicide may be used in residential, commercial, as well as federal, state and local plantings of ornamentals and hedgerows for pre-emergent weed control. Indaziflam 500SC Herbicide should be applied as a directed spray only to established (rooted) plants and not to newly rooted cuttings or seedlings. To avoid root damage, apply Indaziflam 500SC Herbicide around transplants when the soil has firmly settled around the root area. Irrigation or rainfall will help to settle the soil and seal surface cracks. Make applications prior to mulching for best weed control. If Indaziflam 500SC Herbicide should contact foliage, wash off immediately to avoid damage. Herbaceous annuals and perennials are sensitive to Indaziflam 500SC Herbicide. Applications of Indaziflam 500SC Herbicide should only be made to ornamentals listed on this label.

AMOUNT TO USE: Apply Indaziflam 500SC Herbicide as a broadcast, directed spray at 0.88 to 1.7 fl oz/acre around ornamentals.

To activate Indaziflam 500SC Herbicide for maximum herbicidal benefit, irrigate the area treated with Indaziflam 500SC Herbicide to move the herbicide into the soil within several days after application. With dry soil, use a minimum of 0.25 inches of irrigation water, and with soil at or greater than field capacity, the amount of irrigation water should be reduced. In either case, do not create conditions that cause visible run-off of irrigation water. Adequate rainfall following an application will negate the need for irrigation.

A subsequent application of Indaziflam 500SC Herbicide can be made within 90 days after the initial application to extend weed control provided that the maximum allowed rate does not exceed 2.7 fl oz (0.088 lb ai/acre) of this product per acre in a 12 month period.

COMBINATIONS OF INDAZIFLAM 500SC HERBICIDE WITH NON-SELECTIVE HERBICIDES AROUND ORNAMENTALS

Remove existing weed growth before application of Indaziflam 500SC Herbicide or use a post-emergence herbicide labeled for control. Indaziflam 500SC Herbicide may be used in combination with a non-selective herbicide. Avoid contact of spray containing a non-selective herbicide with foliage, stems, green bark, or bare roots of turfgrasses, trees, shrubs, or other desirable vegetation, since severe damage may result. If spraying areas adjacent to desirable plants with a non-selective herbicide, use a shield while spraying to help prevent spray from contacting foliage of desirable plants.
It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.

PRODUCTION ORNAMENTAL USES

Indaziflam 500SC Herbicide provides up to 8 months of weed control with a single application. The exact length of control depends on many environmental factors as well as the weeds to be controlled and the weed pressure. Apply Indaziflam 500SC Herbicide as a directed spray to the soil surface only to established (rooted) plants in the soil or in pots and not to newly rooted cuttings/or seedling beds in production nurseries. Do not apply Indaziflam 500SC Herbicide to newly rooted cuttings/or seedling beds. To avoid root damage, apply Indaziflam 500SC Herbicide around transplants when the plant is well established and the soil has firmly settled around the root area. Irrigation or rainfall will help to settle the soil and seal surface cracks. Apply Indaziflam 500SC Herbicide around dormant plants. If applied after dormancy, care should be taken not to contact expanding buds or new leaves. Applications of Indaziflam 500SC Herbicide should only be made to ornamentals listed on this label. Indaziflam 500SC Herbicide should be applied to soil free of weeds, debris, and soil clods for optimum efficacy. Herbicidal efficacy may be reduced if soil is disturbed after application.

Application of Indaziflam 500SC Herbicide to deciduous foliage or green bark may result in unacceptable injury. Apply Indaziflam 500SC Herbicide to established ornamentals. If the grower is uncertain about ornamental establishment after transplanting, wait 2 months before applying Indaziflam 500SC Herbicide.

AMOUNT TO USE: Apply Indaziflam 500SC Herbicide as a broadcast, directed spray at 1.1 to 2.7 fl oz (0.088 lb ai/acre) of Indaziflam 500SC Herbicide per acre (0.02 to 0.05 fl oz per 1,000 sq ft) around ornamentals in 20 to 100 gallons of water per acre (0.5 to 2.3 gallons of water per 1,000 sq ft).

To activate Indaziflam 500SC Herbicide for maximum herbicidal benefit, irrigate the area treated with Indaziflam 500SC Herbicide to move the herbicide into the soil within 21 days after application. With dry soil, use a minimum of 0.125 to 0.25 inches of irrigation water. With soil at or greater than field capacity, reduce the amount of irrigation water. In either case, do not create conditions that cause visible run-off of irrigation water. Adequate rainfall following an application will negate the need for irrigation.

A subsequent application of Indaziflam 500SC Herbicide can be made within 90 days after the initial application provided that the maximum allowed rate does not exceed 2.7 fl oz (0.088 lb ai/acre) per acre in a 12-month period.

Do not apply Indaziflam 500SC Herbicide to plant types not listed as tolerant on this label. Indaziflam 500SC Herbicide may be applied to cultivars of listed tolerant plants that are not listed on this label. Prior to large-scale applications, treat a small number of such plants at the desired use rate. Treated plants should then be evaluated 1 to 2 months after application for possible injury and acceptable tolerance.

Appendix 2

IMPORTANT: Direct application of Indaziflam 500SC Herbicide to the soil surface and away from plant foliage and bark. Avoid direct spray contact on plant surfaces, foliage, and green bark or injury may result. Application of Indaziflam 500SC Herbicide after bud swell may cause injury if herbicide contacts foliage. Avoid application under environmental conditions that favor drift to non-targeted areas. Deep cultivation reduces the effectiveness of Indaziflam 500SC Herbicide and should be avoided.

COMBINATIONS OF INDAZIFLAM 500SC HERBICIDE WITH NON SELECTIVE HERBICIDES AROUND ORNAMENTALS

Remove existing weed growth before application of Indaziflam 500SC Herbicide or use a post-emergence herbicide labeled for control. Indaziflam 500SC Herbicide may be used in combination with a non-selective herbicide. Avoid contact of spray containing a non-selective herbicide with foliage, stems, green bark, or bare roots of turfgrasses, trees, shrubs, or other desirable vegetation, since severe damage may result. If spraying areas adjacent to desirable plants with a non-selective herbicide, use a shield while spraying to help prevent spray from contacting foliage of desirable plants.

It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.

ORNAMENTALS AND THEIR CULTIVARS TOLERANT TO INDAZIFLAM 500SC HERBICIDE

Tolerant ornamentals and their cultivars are listed in the following table. Apply as a directed spray around tolerant ornamentals. If a cultivar to be treated is not listed on this label, treat several plants of the cultivar at the single maximum desired use rate and evaluate 1 to 2 months later for possible injury and acceptable tolerance. The user assumes responsibility for application on plants not listed in this table.

Common Name	Scientific Name	Cultivar
Abelia	*Abelia grandiflora*	
Apple	*Malus sp.*	(non-bearing)
Apple	*Malus domestica*	Haralred (non-bearing)
Arborvitae	*Thuja occidentalis*	Nigra
Arborvitae	*Thuja occidentalis*	Techny
Arborvitae	*Thuja occidentalis*	Green Giant
Asparagus Fern	*Asparagus plumosus*	
Aspen, Quaking	*Populus tremuloides*	
Azalea	*Rhododendron sp.*	Girard's Rose
Azalea	*Rhododendron sp.*	Fashion
Azalea	*Rhododendron sp.*	VF 14
Azalea	*Rhododendron sp.*	Golden Torch
Azalea, Encore	*Rhododendron sp.*	Autumn Debutante
Bald Cypress	*Taxodium distichum*	
Bamboo, Golden	*Phyllostachys aurea*	
Barberry	*Berberis sp.*	
Birch	*Betula populifolia*	Whitespire
Birch, River	*Betula nigra*	Heritage
Birch, River	*Betula nigra*	
Black Tupelo	*Nyssa sylvatica*	Wild Fire
Bluebird	*Caryopteris x clandonensis*	Dark Knight
Boxwood	*Buxus microphylla*	Green Beauty
Boxwood	*Buxus microphylla*	Chicagoland Green
Boxwood	*Buxus microphylla*	Baby Gem
Boxwood	*Buxus microphylla*	Wintergreen
Butterfly Bush	*Buddleia*	Nanho Blue
Camellia	*Camellia japonica*	Margaret Heathcliff Pink
Camellia	*Camellia sasanqua*	Cleopatra Pink
Catalpa, Southern	*Catalpa bignoniaceae*	
Cedar, Atlantic white	*Chamaecyparis sp.*	
Cedar, Eastern Red	*Juniperus virginiana*	
Cedar, Japanese	*Cryptomeria japonica*	Black Dragon
Cedar, Japanese	*Cryptomeria japonica*	Burkii
Cedar, Japanese	*Cryptomeria japonica*	Yoshino
Cherry, American Plum	*Prunus americana*	
Cherry, Okame	*Prunus x incamp*	
Cherry,	*Prunus serrulata*	Kwanzan

Appendix 2

Cherry, Purple Leaf Sand	*Prunus cistena*	
Cherry, Sargent	*Prunus sargentii*	Spring Wonder
Cherry, Yoshino	*Prunus x yedoensis*	Yoshino
Chokeberry	*Aronia sp.*	
Cotoneaster	*Cotoneaster dammeri*	Coral Beauty
Cottonwood	*Populus deltoides*	Sioux
Crabapple	*Malus x 'Harvest Gold'*	
Crabapple	*Malus x 'Snowdrift'*	
Crabapple	*Malus coronaria*	
Crape Myrtle	*Lagerstroemia indica x fauriei*	Muskogee
Crape Myrtle	*Lagerstroemia x 'Miami'*	
Crape Myrtle	*Lagerstroemia indica x fauriei*	Tuscarora
Cotoneaster	*Cotoneaster*	Coral Beauty
Cypress, false	*Chamaecyparis sp.*	Gold Mops
Cypress, Mediterranean	*Cupressus sempervirens*	
Cypress, Leyland	*Cupressus x leylandii*	
Daphne	*Daphne caucasica*	Summer Ice
Dawn Redwood,	*Metasequoia glyptostroboides*	
Day-lily (before unfurling)	*Hemerocallis sp.*	Green Flutter
Day-lily (before unfurling)	*Hemerocallis sp.*	Stella d'Oro
Dogwood, Kousa	*Cornus kousa*	Kousa
Elm, American	*Ulmus americana*	
Elm, Bosque	*Ulmus parvifolia*	
Eucalyptus, Silver Dollar Gum	*Eucalyptus polyanthemos*	
Euonymus,	*Euonymus alatus*	Compacta
Fir,	*Abies fraseri*	
Florida Pipestem	*Leucothoe populifolia*	
Forsythia	*Forsythia*	Lynwood
Forsythia	*Forsythia sp.*	Golden Bells
Fragrant tea olive	*Osmanthus fragrans*	
Gardenia	*Gardenia radicans*	Radicans
Gardenia	*Gardenia jasminoides*	Mystery
Gardenia	*Gardenia jasminoides*	Frostproof
Gaura	*Gaura lindheimeri*	Pink Fountain
Gold-Dust Plant	*Aucuba japonica*	Gold Dust
Green Ash	*Fraxinus pennsylvanica*	
Green Ash	*Fraxinus pennsylvanica*	Georgia Gem
Hardy Kiwi	*Actinidia arguta*	Anna
Hawthorn, Thornless	*Crataegus crus-galli*	Inermis
Hibiscus, Chinese	*Hibiscus rosa-sinensis*	San Diego Red
Holly,	*Ilex x aquip*	
Holly,	*Ilex x attenuata*	East Palatka
Holly, Chinese	*Ilex cornuta*	Needlepoint
Holly, Foster	*Ilex x attenuata*	Fosteri
Holly, Gallberry	*Ilex glabra*	Densa
Holly, Meservae	*Ilex meservae*	Blue Princess
Holly, Nellie R. Stevens	*Ilex*	Nellie R. Stevens
Holly, American	*Ilex opaca*	
Holly,	*Ilex verticillata*	Jim Dandy
Holly,	*Ilex verticillata*	Red Sprite
Holly, Japanese	*Ilex crenata*	Sky Pencil
Honeylocust,	*Gleditsia tricanthos*	Sunburst
Honeylocust,	*Gleditsia tricanthos*	Skyline
Indian Hawthorn	*Raphiolepsis indica*	Pink Lady
Japanese Cleyera	*Ternstromia gymnanthera*	
Japanese Mock-orange	*Pittosporum tobira*	Variegata
Jasmine, Asiatic/Yellow Star	*Trachelospermum asiaticum*	
Jasmine, winter	*Jasminum nudiflorum*	
Juniper, Bar Harbour	*Juniperus horizontalis*	Bar Harbour
Juniper, Blue Pacific	*Juniperus conferta*	Blue Pacific
Juniper, Blue Rug	*Juniperus horizontalis*	Blue Rug

Appendix 2

Juniper, Brodie	*Juniperus virginiana*	
Juniper, Spartan	*Juniperus chinensis*	Spartan
Lantana	*Lantana camara*	Landmark Sunrise Rose
Lilac	*Syringa x 'Penda'*	Bloomerang
London Plane Tree,	*Plantanus acerifolia*	
Loropetalum	*Loropetalum chinensis*	Burgundy
Loropetalum	*Loropetalum chinensis*	Ruby
Magnolia,	*Magnolia grandiflora*	Bracken Brown Beauty'
Magnolia,	*Magnolia grandiflora*	Little Gem
Magnolia, Jane	*Magnolia liliflora 'Nigra' x M. stellata*	Rosea
Maple, Autumn Blaze	*Acer freemanii*	Jeffersred
Maple, red	*Acer rubrum*	
Maple, Red	*Acer rubrum*	Red Sunset
Maple, Red	*Acer rubrum*	October Glory
Maple, Silver	*Acer saccharinum*	
Maple, Sugar	*Acer saccharum*	
Maple, Sugar	*Acer saccharum*	Commemoration
Nandina	*Nandina domestica.*	Firepower
Ninebark,	*Physocarpus opulifolius*	Summer Wine
Oak, Southern Live	*Quercus virginiana*	
Oak, Cathedral Live	*Quercus virginiana*	SDLN
Oak, Northern Red	*Quercus rubra*	
Oak, Nuttal	*Quercus nuttallii*	
Oak, Shumard	*Quercus shumardii*	
Ohio Buckeye,	*Aesculus glabra*	
Palm, Areca	*Dypsis lutescens*	
Palm, Manila	*Adonidia merrillii*	
Palm, Alexander	*Archontophoenix alexandre*	
Palm, Florida Thatch	*Thrinax radiate*	
Palm, Spindle	*Hyophorbe verschaffeltii*	
Pear, Callery	*Pyrus calleryana*	Chanticleer
Pear, Callery	*Pyrus calleryana*	Bradford
Pieris,	*Pieris japonica*	Shojo
Pine, Canary Island	*Pinus canariensis*	
Pine, Eastern White	*Pinus strobus*	
Pine, Scotch	*Pinus sylvestrus*	
Pistache, Texas	*Pistacia texana*	
Plum, Crimson Pointe	*Prunus x cerasifera*	Cipriozam
Podocarpus	*Podocarpus macrophyllus*	
Privet,	*Ligustrum sp.*	
Redbud, Eastern	*Cercis canadensis*	MN Strain
Redbud,	*Cercis reniformis*	Oklahoma
Rhododendron,	*Rhododendron x crete*	
Rose,	*Rosa wichurana*	Dr. Huey
Rose	*Rosa sp.*	Pink Knock Out®
Rose	*Rosa sp.*	Knock Out®
Rose, Virginia	*Rosa virginiana*	
Rose Mallow	*Hibiscus moscheutos*	
Rose of Sharon	*Hibiscus syriacus*	Pink Heart
Rose of Sharon	*Hibiscus syriacus*	Boule de Feu
Russian Sage	*Perovskia atriplicifolia*	
Skip Laurel,	*Prunus laurocerasis*	
Snowberry, common	*Smyphoricarpos albus*	
Spicebush,	*Lindera benzoin*	
Spruce, Blackhills	*Picea glauca*	
Spruce, Norway	*Picea abies*	
Tamarisk,	*Tamarix ramosissima*	Pink Cascade
Taxus (Yew)	*Taxus cuspidata*	Capitada
Thin-fruit Sedge	*Carex flaccosperma*	
Viburnum, Burkwood	*Viburnum x burkwoodii*	
Virbunum	*Virbunum lantana*	Mohican
Viburnum, popcorn	*Viburnum plicatum*	Popcorn

Wax myrtle, southern	*Myrica cerifera*	
Weigelia, variegated	*Weigelia variegate*	

Do not use Indaziflam 500SC Herbicide on any of these plants, as injury will occur.

Common Name	Scientific Name
Blue Fescue Grass	*Festuca glauca*
Columbine	*Aquilegia canadensis*
Coneflower	*Echinacea purpurea*
Croton	*Codiaeum variegatum*
Dianthus	*Dianthus sp.*
Euonymus, Japanese	*Euonymus japonicus*
Fountain Grass	*Pennisetum alopecuroides*
Fountain Grass, purple	*Pennisetum setaceum*
Golden Dewdrops	*Duranta erecta*
Hydrangea	*Hydrangea macrophylla*
Ixora	*Ixora coccinea*
Lavender, Munstead	*Lavandula angustifolia*
Lilyturf	*Liriope sp.*
Mint	*Mentha sp.*
Mondo Grass	*Ophiopogon japonicus*
Muhlygrass	*Muhlenbergia capillaries*
Plumbago	*Plumbago spp.*
Sage	*Salvia spp*
Sweet Viburnum	*Viburnum odoratissimum*
Tickseed, Dwarf mouse-ear	*Coreopsis auriculata*
Weigela	*Weigela spp.*

CONIFERS AND CHRISTMAS TREES

Indaziflam 500SC Herbicide may be used for pre-emergence weed control in conifer nurseries and Christmas tree farms. Indaziflam 500SC Herbicide may be applied as a directed spray to soil surrounding established plants. Avoid contacting plant stems and leaves with the directed spray solution as injury may occur. Established plants are transplants that are actively growing and where the soil has settled. Do not apply to seedlings or seedling beds. Apply 1.1 to 2.3 fl oz of Indaziflam 500SC Herbicide per acre for these uses. Do not exceed 2.7 fl oz (0.088 lb ai/acre) of Indaziflam 500SC Herbicide per acre in a growing season.

Indaziflam 500SC Herbicide may be tank-mixed with products containing the following active ingredients labeled for use in conifers: glyphosate or glufosinate. Do not apply tank-mixes of Indaziflam 500SC Herbicide with these active ingredients to conifer and Christmas tree foliage. Follow use restrictions on all labels.

It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.

Appendix 2

SPRAYER CLEANUP PROCEDURE

Before and after using Indaziflam 500SC Herbicide, thoroughly clean all mixing and spray equipment, including tanks, pumps, lines, filters, screens, and nozzles with a good quality tank cleaner on an approved rinse pad or on the field site where an approved crop is being grown. Clean sprayer thoroughly after each use and before Indaziflam 500SC Herbicide residue dries in the equipment. Proper PPE must be worn while cleaning.

1. Completely drain all remaining spray solution from the tank in an appropriate location.
2. Clean the sprayer using a commercially available tank cleaner following the use instructions provided by the manufacturer. A rotating cleaning nozzle may be beneficial to dislodge any product from the sides of the tank.
3. Drain all cleaning solution from the tank and lines in an appropriate location.
4. Rinse the tank and flush spray booms with clean water to remove the cleaning solution.
5. Remove, clean, and inspect filters, screens, nozzles, and boom endcaps if equipped to ensure that no product remains.
6. Rinse the inside and outside of the spray tank and all lines once more with clean water.
7. Drain all rinse solution in an appropriate location.

If any Indaziflam 500SC Herbicide is left in the spray equipment and subsequently applied to another crop it has the potential to cause injury to that crop.

ROTATIONAL CROP RESTRICTIONS

Indaziflam 500SC Herbicide is intended for use in perennial tree and vine crops listed in this label and for non-crop farmstead uses. Do not rotate to any crops not listed on this label within 24 months after the last application. Planting earlier than this may result in crop injury or death. If a crop is not on this label, a bioassay should be conducted prior to planting if Indaziflam 500SC Herbicide has been used in the previous 36 months. A successful field bioassay means growing a test strip or several plots of the intended crop from seed or transplant to maturity without any observed herbicide symptoms. The test should be conducted in representative areas across the field that includes knolls, low areas, field edges, and changes in soil texture. The rotational crop interval must be extended if the field bioassay does not result in acceptable crop tolerance.

Labeled citrus crops may be transplanted into soil previously treated with Indaziflam 500SC Herbicide 1 month or more after the last application provided potted trees (such as citripots) are used.

New orchards of labeled pome and stone fruit, tree nut and olive may be established in a location previously treated with Indaziflam 500SC Herbicide 1 year after application. Grape vineyards may be established in a location previously treated with Indaziflam 500SC Herbicide 2 years after application. In labeled pome and stone fruit, tree nuts, grapes, and olive previously treated soil must be thoroughly mixed to a depth of at least 6 inches prior to planting. This may be done through any combination of tillage operations such as ripping, disking, or plowing.

If other herbicides have also been used, follow the most restrictive label for the crop rotation interval.

RESISTANCE MANAGEMENT

Indaziflam, the active ingredient in this product, is a Group 29 herbicide based on the mode of action classification system of the Weed Science Society of America. A given weed population may contain plants naturally resistant to Group 29 herbicides. Such resistant weed plants may not be effectively managed using Group 29 herbicides but may be effectively managed using another herbicide alone or in mixtures from a different Group and/or by using cultural or mechanical practices. However, a herbicide mode of action classification by itself may not adequately address specific weeds that are resistant to specific herbicides. Consult your local company representative, state cooperative extension service, professional consultants or other qualified authorities to determine appropriate actions for treating specific resistant weeds.

Best Management Practices

Proactively implementing diversified weed control strategies to minimize selection for weed populations resistant to herbicides is recommended. A diversified weed management program may include the use of multiple herbicides with different modes of action with overlapping weed control spectrum, tillage operations and/or other cultural practices that control weeds. Research has demonstrated that using the labeled rate and directions for use is important to delay the selection for resistance. Scouting after a herbicide application is important because it can facilitate the early identification of weed shifts and/or weed resistance and thus provide direction on future weed management practices. One of the best ways to contain resistant populations is to implement measures to avoid allowing weeds to reproduce by seed or to proliferate vegetatively. Cleaning equipment between sites and avoiding movement of plant material between sites will greatly aid in retarding the spread of resistant weed seed.

Appendix 2

There are no known cases of weed resistance to Indaziflam 500SC Herbicide or any known instances of cross resistance between Indaziflam 500SC Herbicide and other classes of herbicides or modes of action. Research has shown that performance of Indaziflam 500SC Herbicide is not affected by the presence of biotypes resistant to glyphosate, triazines, ALS-inhibiting, growth regulant, or other herbicide modes of action.

To delay the development of herbicide resistance, the following practices are recommended:

- Use herbicides with different modes of action in the tank mixture, rotation, or in conjunction with alternate cultural practices.
- Always use at least the minimum rate specified by the label and observe all use rate instructions.
- Avoid the consecutive use of Indaziflam 200SC Herbicide unless another herbicide that is effective on the same target weeds is used in rotation or as a tankmix partner.
- Base herbicide use on a comprehensive Integrated Pest Management (IPM) program.
- Monitor treated areas and control escaped weeds by alternate means.
- Contact local extension or crop advisor for IPM and resistance management information.

STORAGE AND DISPOSAL

Do not contaminate water, food or feed by storage or disposal.

PESTICIDE STORAGE: Protect the product from freezing temperatures. Store the product at temperatures above 32°F and preferably above 40°F.

PESTICIDE DISPOSAL: Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

CONTAINER HANDLING

Rigid, Non-refillable containers small enough to shake (i.e., with capacities equal to or less than 5 gallons)

Non-refillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times.

Pressure rinse as follows: Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 PSI for at least 30 seconds. Drain for 10 seconds after the flow begins to drip.

Offer for recycling, if available or reconditioning, if appropriate. Then puncture and dispose of in a sanitary landfill, or by other procedures approved by State and local authorities.

Rigid, Non-refillable containers (greater than 5 gallons or 50 lbs)

Non-refillable Containers

Non-refillable containers - Do not reuse or refill this container. Refer to Bottom Discharge IBC or Top Discharge IBC, Drums, Kegs information as follows.

Bottom Discharge IBC (e.g. – Schuetz Caged IBC or Snyder Square Stackable)

Pressure rinsing the container before final disposal is the responsibility of the person disposing of the container. To pressure rinse the container before final disposal, empty the remaining contents from the IBC into application equipment or mix tank. Raise the bottom of the IBC by 1.5 inches on the side which is opposite of the bottom discharge valve to promote more complete product removal. Completely remove the top lid of the IBC. Use water pressurized to at least 40 PSI to rinse all interior portions. Continuously pump or drain rinsate into application equipment or rinsate collection system while pressure rinsing. Continue pressure rinsing for 2 minutes or until rinsate becomes clear. Replace the lid and close bottom valve.

Top Discharge IBC, Drums, Kegs (e.g.– Snyder 120 Next Gen, Bonar B120, Drums, Kegs).

Triple rinsing the container before final disposal is the responsibility of the person disposing of the container. To triple rinse the container before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container at least 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Rinse all interior surfaces. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this procedure two more times.

Once container is rinsed, offer for recycling if available or puncture and dispose of in a sanitary landfill.

Refillable Containers

Appendix 2

Refillable container – Refer to Bottom Discharge IBC or Top Discharge IBC, Drums, Kegs information as follows. Refill this container with pesticide only. Do not reuse this container for any other purpose. Contact your Ag retailer or Bayer CropScience for container return, disposal and recycling information.

Bottom Discharge IBC (e.g. – Schuetz Caged IBC or Snyder Square Stackable)

Pressure rinsing the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To pressure rinse the container before final disposal, empty the remaining contents from the IBC into application equipment or mix tank. Raise the bottom of the IBC by 1.5 inches on the side which is opposite of the bottom discharge valve to promote more complete product removal. Completely remove the top lid of the IBC. Use water pressurized to at least 40 PSI to rinse all interior portions. Continuously pump or drain rinsate into application equipment or rinsate collection system while pressure rinsing. Continue pressure rinsing for 2 minutes or until rinsate becomes clear. Replace the lid and close bottom valve.

Top Discharge IBC, Drums, Kegs (e.g.– Snyder 120 Next Gen, Bonar B120, Drums, Kegs).

Triple rinsing the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To triple rinse the containers before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container at least 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Rinse all interior surfaces. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this procedure two more times.

Once container is rinsed, offer for recycling if available or puncture and dispose of in a sanitary landfill.

End users are authorized to remove tamper evident cables as required to remove the product from the container unless the container is equipped with one way valves and refilling or returning is planned. If this is the case, end users are not authorized to remove tamper evident cables, one way valves or clean container.

Appendix 2

IMPORTANT: READ BEFORE USE

Read the entire Directions for Use, Conditions, Disclaimer of Warranties and Limitations of Liability before using this product. If terms are not acceptable, return the unopened product container at once.

By using this product, user or buyer accepts the following Conditions, Disclaimer of Warranties and Limitations of Liability.

CONDITIONS: The directions for use of this product are believed to be adequate and must be followed carefully. However, it is impossible to eliminate all risks associated with the use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as weather conditions, presence of other materials, or the manner of use or application, all of which are beyond the control of Bayer CropScience LP. All such risks shall be assumed by the user or buyer.

DISCLAIMER OF WARRANTIES: TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, BAYER CROPSCIENCE LP MAKES NO OTHER WARRANTIES, EXPRESS OR IMPLIED, OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE OR OTHERWISE, THAT EXTEND BEYOND THE STATEMENTS MADE ON THIS LABEL. No agent of Bayer CropScience LP is authorized to make any warranties beyond those contained herein or to modify the warranties contained herein. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, BAYER CROPSCIENCE LP DISCLAIMS ANY LIABILITY WHATSOEVER FOR SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT.

LIMITATIONS OF LIABILITY: TO THE EXTENT CONSISTENT WITH APPLICABLE LAW THE EXCLUSIVE REMEDY OF THE USER OR BUYER FOR ANY AND ALL LOSSES, INJURIES OR DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, WHETHER IN CONTRACT, WARRANTY, TORT, NEGLIGENCE, STRICT LIABILITY OR OTHERWISE, SHALL NOT EXCEED THE PURCHASE PRICE PAID, OR AT BAYER CROPSCIENCE LP'S ELECTION, THE REPLACEMENT OF PRODUCT.

NET CONTENTS:

Rely® is a registered trademark of Bayer CropScience LP

PRODUCED FOR

Bayer CropScience

Bayer CropScience LP
P.O. Box 12014, 2 T.W. Alexander Drive
Research Triangle Park, North Carolina 27709
1-866-99BAYER (1-866-992-2937)

Indaziflam 500SC Herbicide (MASTER) 7/05/2017

Appendix 3

AMERICAN PISTACHIO GROWERS

December 13, 2016

Ann Prichard
California Department of Pesticide Regulation
Pesticide Registration Branch
1001 I Street
Sacramento, CA 95812-4015

RE: Request for EPA-CDPR Concurrent Review for Alion Complete

Dear Ms. Prichard,

American Pistachio Growers, a trade association representing over 625 pistachio growers in California, Arizona and New Mexico, would like to request concurrent review (EPA and CDPR) on Alion Complete a product made by Bayer CropScience (Bayer). Alion Complete is registered under Bayer CropScience for agricultural uses.

Alion Complete will be a co-formulated WG mixture of Alion Herbicide, registered as CDPR Reg. No. 264-1106-AA, containing 19.05% indaziflam together with DuPont's Matrix SG Herbicide, registered as CDPR Reg. No. 352-768-AA, containing 25% rimsulfuron.

Applicators currently tank mix Alion Herbicide with DuPont Matrix SG Herbicide for a broader spectrum residual weed control. There are several benefits for an in-can mixture of these products, including occupational safety, weed resistance management, decreasing the need for follow-up burn-down herbicides, and overall performance.

Bayer anticipates its submission to the EPA in May, 2017. Per California Notice 2015-03, Bayer is submitting justification with documentation to support their request for a concurrent review with CDPR. The attributes of this new product is beneficial to users in the pistachio and entire nut industry where labeled uses allow.

Proposed Benefits:

Benefits for Occupational safety—loading multiple premixed actives reduces the potential for an accidental exposure to workers based on the decreased number of mixing and loading events when compared to individually mixing and loading each component separately.

Benefit of Dry Formulation—Dry products are preferred by many applicators due to reduced weight and volume associated with liquid herbicides. This combination product would also reduce the need to measure two different herbicides which also improves efficiency and reduces the potential errors associated with measuring. The WG formulation is more concentrated which reduces the amount of packaging material and disposal costs.

9 RIVER PARK PLACE EAST, SUITE 410 | FRESNO, CA 93720-1530 | TEL: 559.475.0435 FAX: 559.475.0624 | AmericanPistachios.org

Appendix 3

Improved Weed Control—the application rate of Alion Herbicide can be lowered by the addition of a low rate of Dupont Matrix SG Herbicide and still achieve equivalent grass and broadleaf control. Application of the in-can formulation at 3 oz/acre is the equivalent of the two products at their lowest rates, Alion Herbicide at 3.5 oz/acre and Dupont Matrix SG Herbicide at 2 oz/acre. This is good news for growers that less product can be used and achieve the same, or better level of control.

Solution for Sensitive Areas—both indaziflam and rimsulfuron are very safe to use around tree crops compared to other bareground herbicides. Providing a single use product for sensitive sites with defined active ingredient ratios will reduce the potential for off-target crop and tree damage.

Weed Resistance Management—The co-formulated products complement each other in having excellent pre-emergent weed control with indaziflam and excellent pre-post activity with rimsulfuron. Weed seeds that have already germinated are not well-controlled by indaziflam but are controlled by rimsulfuron. The overall weed control is more thorough and commonly does not require follow-up applications of burn-down herbicides from "escaped" weeds. The simultaneous use of both products will insure these remain useful tools to farmers and other applicators as long as possible.

Thank you for consideration of my comments. Please let me know if you have any questions.

Thank you,

Richard Matoian

Richard Matoian
Executive Director

Appendix 3

CALIFORNIA FRESH FRUIT ASSOCIATION

978 West Alluvial, Suite 107, Fresno, California 93711-5700
PHONE 559.226.6330 FAX 559.222.8326
www.CAFreshFruit.com

December 10, 2016

Ann Prichard
Registration Branch Chief
California Department of Pesticide Regulation
1001 I Street
Sacramento, CA 95812-4015

Email: Ann.Prichard@cdpr.ca.gov

Ref: Bayer CropScience – Alion Complete Request for Concurrent Review for Registration

Dear Ms. Prichard,

The California Fresh Fruit Association (CFFA) is a voluntary agricultural trade association which represents permanent fresh fruit crops produced within California. CFFA is the primary public policy organization for the fresh fruit industry; table grapes, berries and deciduous tree fruit and represents the industry's interests on legislative and regulatory issues at state, federal and international levels. The membership of CFFA is comprised of growers, packers/shippers, marketers and associations indirectly involved with the production of fresh fruit commodities.

Our members are extremely interested in the development and safe use of pest management tools including crop protection chemicals for vegetative management uses within the production of fresh fruits. Most orchardists and pest control advisors are well aware of herbicide resistant weeds and the challenge it presents for weed management.

Weed management in orchard and vine crops is complex and getting further complicated by herbicide resistant weeds. As a result of our relatively mild climate and seasonally variable temperature and moisture conditions, we encounter weed germination and emergence in every season. Strategies to manage a fraction of the weeds present may not work equally well for other species and so handling weed problems requires that we continue to support registrations that will increase the number of effective weed management tools available to growers.

Appendix 3

CFFA would like to communicate support for the request of a concurrent review with the U.S. Environmental Protection Agency (EPA) for the new co-formulated product of Alion Complete (Bayer CropScience) and the EPA registration anticipated submission date of May 2017.

Sincerely,
California Fresh Fruit Association

Marcy L. Martin
Director, Trade

c: George P. Radanovich, President

Appendix 3

December 13, 2016

Ann Prichard
Registration Branch Chief
California Department of Pesticide Regulation
1001 I Street
Sacramento, CA 95812-4015
Ann.Prichard@cdpr.ca.gov

RE: Support for concurrent State/Federal review of Alion Complete (indaziflam plus rimsulfuron) herbicide

This letter is written to express support of the University of California weed science program for California Department of Pesticide Regulation to review the submitted label for the herbicide "Alion Complete" (active ingredients indaziflam and rimsulfuron) concurrently with the Federal label registration. John Roncoroni is a weed science Cooperative Extension Farm Advisor working primarily in the perennial crops of Napa, Sonoma, and Yolo counties. Brad Hanson is a Weed Science Cooperative Extension Specialist with a statewide research and extension program in orchard and vineyard weed control and herbicide performance and crop safety.

The herbicide Alion Complete would be of benefit to the California perennial crop market with very little downside or risks. Both active ingredients, indaziflam (as Alion) and rimsulfuron (as Matrix and other formulations) are widely used already in this market. In fact, because of their complementary weed control property and modes of action, they are very often used together as a tank mix. From our perspective, there are several important benefits to this co-formulation of these two widely used and demonstrably safe herbicides.

First, **herbicide-resistant weed management.** One of the primary current challenges in orchard and vineyard crops is the evolution of glyphosate-resistant weeds. Two recommendations for managing current resistance problems and minimizing selection for new resistant populations include rotating herbicide modes of action over time and utilizing more than one mode of action in mixture. The two active ingredients in Alion Complete have been important tools for managing glyphosate resistance because they are both preemergence herbicides (compared to glyphosate which has only postemergence activity). These herbicides each affect a different target site than glyphosate: indaziflam is a cellulose biosynthesis inhibitor and rimsulfuron inhibits the enzyme acetolactate synthase (ALS) while glyphosate affects an enzyme called EPSPS. When applied together, either as a tankmix or in this premix formulation, they provide overlapping activity on many important weeds which more effectively manages glyphosate resistant weeds and minimizes the chance of resistance to either and of them.

Second, **weed control performance.** One of the strengths of Alion herbicide (indaziflam) is the excellent duration of weed control which, in some cases, can last for 6 or more months and reduce the need for late season applications of post-emergence herbicides (eg glyphosate, glufosinate, or paraquat among others). However, indaziflam has little postemergence activity and must be incorporated by irrigation or rainfall to initiate activity. Rimsulfuron, on the other hand, typically does not provide as long of duration of control but does have some postemergence activity and greater potential to control seedlings that germinate before proper rainfall incorporation occurs. This complementary nature is the primary reason why indaziflam and rimsulfuron are commonly used in tank mixes in California

course the premix formulation is not likely to be substantially better than the tankmix in this regard, but would simplify the process and reduce handling of the pesticides and packaging waste.

As alluded to above, since the two active ingredients are commonly applied together, co-packaging them would provide benefits in terms of **reduced packaging waste and reducing loader/mixer exposure** simply by having one package instead of two. As Alion Complete would be formulated as a WG, this premix would have additional **worker safety, spill and packaging cleanup, and measuring accuracy** compared to the liquid formulations of Alion (either as the currently sold 200SC or the newer 500SC).

In conclusion, because these two active ingredients are commonly used in California in their solo-product formulations, their use and safety is well documented and there should be no increased environmental risk for the co-formulation. The two herbicides are commonly used as a tankmix; thus a co-formulation should provide some benefit in terms of decreased packaging waste and potential worker exposure.

Although the co-formulation is not likely to dramatically change weed management in perennial crops, we believe it does provide important benefits and poses virtually no risks compared to tankmixes of the two widely used solo products.

We support concurrent CDPR and Federal review of the Alion Complete label to expedite its use in California orchard and vineyard cropping systems.

Best regards,

Brad Hanson
Cooperative Extension Weed Science Specialist
Department of Plant Sciences
UC Davis
bhanson@ucdavis.edu
530-752-8115

John Roncoroni
Weed Science Farm Advisor
UC Cooperative Extension
Napa CA
jaroncoroni@ucanr.edu
707-253-7259

Appendix 3

WESTERN AGRICULTURAL PROCESSORS
ASSOCIATION

1785 N. Fine Avenue, Fresno, California 93727
559-455-9272
f: 559-251-4471
www.agprocessors.org

December 12, 2016

Ms. Ann Prichard
California Department of Pesticide Regulation
Pesticide Registration Branch
1001 I Street
Sacramento, CA 95812-4015

Reference: ***Request for EPA-CDPR Concurrent Review for Alion Complete***

Dear Ms. Prichard,

The Western Agricultural Processors Association (WAPA) represents hullers/shellers and processors of almonds, walnuts, pistachios and pecans in California on regulatory and legislative issues that impact the tree nut industry such as pesticides, safety, water, labor and air quality issues. WAPA is requesting a concurrent review be completed by the US Environmental Protection Agnecy (EPA) and the California Department of Pesticide Regulation (CDPR) for the herbicide **Alion Complete**.

We would highly encourage CDPR to conduct a concurrent review with EPA to ensure that crop protection products are introduced to the marketplace in the most effective and timely manner. As products are regulated or removed from the market place growers, including our membership, are left with a few amount of products creating issues including increased resistance to the existing products. Alion Complete, a co-formulation of indzaiflam (Alion) with rimsulfuron (Dupont Matrix SG), requires a lesser amount of product applied than with the original Alion formulation but provides equal effectiveness in weed management. Our growers would greatly benefit from having Alion Complete available to them at the earliest available time, as it offers a "built in" herbicide resistance management given its co-formulation of Alion and Dupont Matrix SG.

Thank you for reviewing our request for CDPR and EPA to conduct a concurrent review for Alion Complete. WAPA sees great value in both agencies working in coordination to bring a product that provides growers an effective, reliable and safe product to ensure sustainable, long-term weed management.

Sincerely,

Jodi Raley

Jodi Raley
Director of Regulatory Affairs

Appendix 4

Weed Science Society of America - Herbicide Site of Action (SOA) Classification List
Date last modified: 5 December 2018
For questions, contact Dr. Scott Senseman at 'ssensema@utk.edu'
http://wssa.net/wssa/weed/herbicides/

Herbicide	Class	Site of Action	Chemical Family
alloxydim	1(A)	Acetyl CoA Carboxylase (ACCase) Inhibitor	Cyclohexanedione ('DIMs')
butroxydim	1(A)	Acetyl CoA Carboxylase (ACCase) Inhibitor	Cyclohexanedione ('DIMs')
clethodim	1(A)	Acetyl CoA Carboxylase (ACCase) Inhibitor	Cyclohexanedione ('DIMs')
clodinafop-propargyl	1(A)	Acetyl CoA Carboxylase (ACCase) Inhibitor	Aryloxyphenoxy-propionate ('FOPs')
cycloxydim	1(A)	Acetyl CoA Carboxylase (ACCase) Inhibitor	Cyclohexanedione ('DIMs')
cyhalofop-butyl	1(A)	Acetyl CoA Carboxylase (ACCase) Inhibitor	Aryloxyphenoxy-propionate ('FOPs')
diclofop	1(A)	Acetyl CoA Carboxylase (ACCase) Inhibitor	Aryloxyphenoxy-propionate ('FOPs')
fenoxaprop-P	1(A)	Acetyl CoA Carboxylase (ACCase) Inhibitor	Aryloxyphenoxy-propionate ('FOPs')
fluazifop-P	1(A)	Acetyl CoA Carboxylase (ACCase) Inhibitor	Aryloxyphenoxy-propionate ('FOPs')
haloxyfop	1(A)	Acetyl CoA Carboxylase (ACCase) Inhibitor	Aryloxyphenoxy-propionate ('FOPs')
metamifop	1(A)	Acetyl CoA Carboxylase (ACCase) Inhibitor	Aryloxyphenoxy-propionate ('FOPs')
pinoxaden	1(A)	Acetyl CoA Carboxylase (ACCase) Inhibitor	Phenylpyrazoline ('DEN')
propaquizafop	1(A)	Acetyl CoA Carboxylase (ACCase) Inhibitor	Aryloxyphenoxy-propionate ('FOPs')
quizalofop-P	1(A)	Acetyl CoA Carboxylase (ACCase) Inhibitor	Aryloxyphenoxy-propionate ('FOPs')
sethoxydim	1(A)	Acetyl CoA Carboxylase (ACCase) Inhibitor	Cyclohexanedione ('DIMs')
tepraloxydim	1(A)	Acetyl CoA Carboxylase (ACCase) Inhibitor	Cyclohexanedione ('DIMs')
tralkoxydim	1(A)	Acetyl CoA Carboxylase (ACCase) Inhibitor	Cyclohexanedione ('DIMs')
amidosulfuron	2(B)	Acetolactate Synthase (ALS) or Acetohydroxy Acid Synthase (AHAS) inhibitor	Sulfonylurea
azimsulfuron	2(B)	Acetolactate Synthase (ALS) or Acetohydroxy Acid Synthase (AHAS) inhibitor	Sulfonylurea
bensulfuron-methyl	2(B)	Acetolactate Synthase (ALS) or Acetohydroxy Acid Synthase (AHAS) inhibitor	Sulfonylurea
bispyribac-sodium	2(B)	Acetolactate Synthase (ALS) or Acetohydroxy Acid Synthase (AHAS) inhibitor	Pyrimidinyl(thio)benzoate
chlorimuron-ethyl	2(B)	Acetolactate Synthase (ALS) or Acetohydroxy Acid Synthase (AHAS) inhibitor	Sulfonylurea
chlorsulfuron	2(B)	Acetolactate Synthase (ALS) or Acetohydroxy Acid Synthase (AHAS) inhibitor	Sulfonylurea
cinosulfuron	2(B)	Acetolactate Synthase (ALS) or Acetohydroxy Acid Synthase (AHAS) inhibitor	Sulfonylurea
cloransulam-methyl	2(B)	Acetolactate Synthase (ALS) or Acetohydroxy Acid Synthase (AHAS) inhibitor	Triazolopyrimidine
cyclosulfamuron	2(B)	Acetolactate Synthase (ALS) or Acetohydroxy Acid Synthase (AHAS) inhibitor	Sulfonylurea
diclosulam	2(B)	Acetolactate Synthase (ALS) or Acetohydroxy Acid Synthase (AHAS) inhibitor	Triazolopyrimidine
ethametsulfuron-methyl	2(B)	Acetolactate Synthase (ALS) or Acetohydroxy Acid Synthase (AHAS) inhibitor	Sulfonylurea
ethoxysulfuron	2(B)	Acetolactate Synthase (ALS) or Acetohydroxy Acid Synthase (AHAS) inhibitor	Sulfonylurea
flazasulfuron	2(B)	Acetolactate Synthase (ALS) or Acetohydroxy Acid Synthase (AHAS) inhibitor	Sulfonylurea
florasulam	2(B)	Acetolactate Synthase (ALS) or Acetohydroxy Acid Synthase (AHAS) inhibitor	Triazolopyrimidine
flucarbazone-sodium	2(B)	Acetolactate Synthase (ALS) or Acetohydroxy Acid Synthase (AHAS) inhibitor	Sulfonylaminocarbonyl-triazolinone
flucetosulfuron	2(B)	Acetolactate Synthase (ALS) or Acetohydroxy Acid Synthase (AHAS) inhibitor	Sulfonylurea
flumetsulam	2(B)	Acetolactate Synthase (ALS) or Acetohydroxy Acid Synthase (AHAS) inhibitor	Triazolopyrimidine
flupyrsulfuron-methyl-sodium	2(B)	Acetolactate Synthase (ALS) or Acetohydroxy Acid Synthase (AHAS) inhibitor	Sulfonylurea
foramsulfuron	2(B)	Acetolactate Synthase (ALS) or Acetohydroxy Acid Synthase (AHAS) inhibitor	Sulfonylurea

Appendix 4

Weed Science Society of America - Herbicide Site of Action (SOA) Classification List (cont'd)
Date last modified: 5 December 2018
For questions, contact Dr. Scott Senseman at 'ssensema@utk.edu'
http://wssa.net/wssa/weed/herbicides/

halosulfuron-methyl	2(B)	Acetolactate Synthase (ALS) or Acetohydroxy Acid Synthase (AHAS) inhibitor	Sulfonylurea
imazamethabenz methyl	2(B)	Acetolactate Synthase (ALS) or Acetohydroxy Acid Synthase (AHAS) inhibitor	Imidazolinone
imazamox	2(B)	Acetolactate Synthase (ALS) or Acetohydroxy Acid Synthase (AHAS) inhibitor	Imidazolinone
imazapic	2(B)	Acetolactate Synthase (ALS) or Acetohydroxy Acid Synthase (AHAS) inhibitor	Imidazolinone
imazapyr	2(B)	Acetolactate Synthase (ALS) or Acetohydroxy Acid Synthase (AHAS) inhibitor	Imidazolinone
imazaquin	2(B)	Acetolactate Synthase (ALS) or Acetohydroxy Acid Synthase (AHAS) inhibitor	Imidazolinone
imazethapyr	2(B)	Acetolactate Synthase (ALS) or Acetohydroxy Acid Synthase (AHAS) inhibitor	Imidazolinone
imazosulfuron	2(B)	Acetolactate Synthase (ALS) or Acetohydroxy Acid Synthase (AHAS) inhibitor	Sulfonylurea
iodosulfuron	2(B)	Acetolactate Synthase (ALS) or Acetohydroxy Acid Synthase (AHAS) inhibitor	Sulfonylurea
mesosulfuron	2(B)	Acetolactate Synthase (ALS) or Acetohydroxy Acid Synthase (AHAS) inhibitor	Sulfonylurea
metazosulfuron	2(B)	Acetolactate Synthase (ALS) or Acetohydroxy Acid Synthase (AHAS) inhibitor	Sulfonylurea
metsulfuron-methyl	2(B)	Acetolactate Synthase (ALS) or Acetohydroxy Acid Synthase (AHAS) inhibitor	Sulfonylurea
nicosulfuron	2(B)	Acetolactate Synthase (ALS) or Acetohydroxy Acid Synthase (AHAS) inhibitor	Sulfonylurea
penoxsulam	2(B)	Acetolactate Synthase (ALS) or Acetohydroxy Acid Synthase (AHAS) inhibitor	Triazolopyrimidine
primisulfuron-methyl	2(B)	Acetolactate Synthase (ALS) or Acetohydroxy Acid Synthase (AHAS) inhibitor	Sulfonylurea
propoxycarbazone-sodium	2(B)	Acetolactate Synthase (ALS) or Acetohydroxy Acid Synthase (AHAS) inhibitor	Sulfonylaminocarbonyl-triazolinone
prosulfuron	2(B)	Acetolactate Synthase (ALS) or Acetohydroxy Acid Synthase (AHAS) inhibitor	Sulfonylurea
pyrazosulfuron-ethyl	2(B)	Acetolactate Synthase (ALS) or Acetohydroxy Acid Synthase (AHAS) inhibitor	Sulfonylurea
pyribenzoxim	2(B)	Acetolactate Synthase (ALS) or Acetohydroxy Acid Synthase (AHAS) inhibitor	Pyrimidinyl(thio)benzoate
pyrimisulfan	2(B)	Acetolactate Synthase (ALS) or Acetohydroxy Acid Synthase (AHAS) inhibitor	Pyrimidinyl(thio)benzoate
pyrithiobac-sodium	2(B)	Acetolactate Synthase (ALS) or Acetohydroxy Acid Synthase (AHAS) inhibitor	Pyrimidinyl(thio)benzoate
pyroxsulam	2(B)	Acetolactate Synthase (ALS) or Acetohydroxy Acid Synthase (AHAS) inhibitor	Triazolopyrimidine
rimsulfuron	2(B)	Acetolactate Synthase (ALS) or Acetohydroxy Acid Synthase (AHAS) inhibitor	Sulfonylurea
sulfometuron-methyl	2(B)	Acetolactate Synthase (ALS) or Acetohydroxy Acid Synthase (AHAS) inhibitor	Sulfonylurea
sulfosulfuron	2(B)	Acetolactate Synthase (ALS) or Acetohydroxy Acid Synthase (AHAS) inhibitor	Sulfonylurea
thiencarbazone-methyl	2(B)	Acetolactate Synthase (ALS) or Acetohydroxy Acid Synthase (AHAS) inhibitor	Sulfonylaminocarbonyl-triazolinone
thifensulfuron-methyl	2(B)	Acetolactate Synthase (ALS) or Acetohydroxy Acid Synthase (AHAS) inhibitor	Sulfonylurea
triasulfuron	2(B)	Acetolactate Synthase (ALS) or Acetohydroxy Acid Synthase (AHAS) inhibitor	Sulfonylurea
tribenuron-methyl	2(B)	Acetolactate Synthase (ALS) or Acetohydroxy Acid Synthase (AHAS) inhibitor	Sulfonylurea
trifloxysulfuron	2(B)	Acetolactate Synthase (ALS) or Acetohydroxy Acid Synthase (AHAS) inhibitor	Sulfonylurea

Appendix 4

Weed Science Society of America - Herbicide Site of Action (SOA) Classification List (cont'd)
Date last modified: 5 December 2018
For questions, contact Dr. Scott Senseman at 'ssensema@utk.edu'
http://wssa.net/wssa/weed/herbicides/

triflusulfuron-methyl	2[(B)]	Acetolactate Synthase (ALS) or Acetohydroxy Acid Synthase (AHAS) inhibitor	Sulfonylurea
benefin	3[(K1)]	Inhibitor of microtubule assembly	Dinitroaniline
trifluralin	3[(K1)]	Inhibitor of microtubule assembly	Dinitroaniline
DCPA	3[(K1)]	Inhibitor of microtubule assembly	Benzoic acid
dithiopyr	3[(K1)]	Inhibitor of microtubule assembly	Pyridine
ethalfluralin	3[(K1)]	Inhibitor of microtubule assembly	Dinitroaniline
oryzalin	3[(K1)]	Inhibitor of microtubule assembly	Dinitroaniline
pendimethalin	3[(K1)]	Inhibitor of microtubule assembly	Dinitroaniline
prodiamine	3[(K1)]	Inhibitor of microtubule assembly	Dinitroaniline
pronamide	3[(K1)]	Inhibitor of microtubule assembly	Benzamide
thiazopyr	3[(K1)]	Inhibitor of microtubule assembly	Pyridine
2,4-D	4[(O)]	Synthetic Auxin	Phenoxy-carboxylic-acid
2,4-DB	4[(O)]	Synthetic Auxin	Phenoxy-carboxylic-acid
aminocyclopyrachlor	4[(O)]	Synthetic Auxin	Pyrimidine-carboxylic-acid
aminopyralid	4[(O)]	Synthetic Auxin	Pyridine carboxylic acid
clopyralid	4[(O)]	Synthetic Auxin	Pyridine carboxylic acid
dicamba	4[(O)]	Synthetic Auxin	Benzoic acid
dichlorprop	4[(O)]	Synthetic Auxin	Phenoxy-carboxylic-acid
fluroxypyr	4[(O)]	Synthetic Auxin	Pyridine carboxylic acid
halauxifen methyl	4[(O)]	Synthetic Auxin	
MCPA	4[(O)]	Synthetic Auxin	Phenoxy-carboxylic-acid
MCPB	4[(O)]	Synthetic Auxin	Phenoxy-carboxylic-acid
mecoprop	4[(O)]	Synthetic Auxin	Phenoxy-carboxylic-acid
picloram	4[(O)]	Synthetic Auxin	Pyridine carboxylic acid
quinclorac	4[(O)]	Synthetic Auxin	Quinoline carboxylic acid
triclopyr	4[(O)]	Synthetic Auxin	Pyridine carboxylic acid
ametryn	5[(C1)]	Inhibitor of photosynthesis at photosystem II site A	Triazine
amicarbazone	5[(C1)]	Inhibitor of photosynthesis at photosystem II site A	Triazolinone
atrazine	5[(C1)]	Inhibitor of photosynthesis at photosystem II site A	Triazine
bromacil	5[(C1)]	Inhibitor of photosynthesis at photosystem II site A	Uracil
cyanazine	5[(C1)]	Inhibitor of photosynthesis at photosystem II site A	Triazine
desmedipham	5[(C1)]	Inhibitor of photosynthesis at photosystem II site A	Phenyl-carbamate
desmetryn	5[(C1)]	Inhibitor of photosynthesis at photosystem II site A	Triazine
hexazione	5[(C1)]	Inhibitor of photosynthesis at photosystem II site A	Triazinone
metamitron	5[(C1)]	Inhibitor of photosynthesis at photosystem II site A	Triazinone
metoxuron	5[(C1)]	Inhibitor of photosynthesis at photosystem II site A	Urea
metribuzin	5[(C1)]	Inhibitor of photosynthesis at photosystem II site A	Triazinone
phenmedipham	5[(C1)]	Inhibitor of photosynthesis at photosystem II site A	Phenyl-carbamate
prometon	5[(C1)]	Inhibitor of photosynthesis at photosystem II site A	Triazine
prometryn	5[(C1)]	Inhibitor of photosynthesis at photosystem II site A	Triazine

Appendix 4

Weed Science Society of America - Herbicide Site of Action (SOA) Classification List (cont'd)
Date last modified: 5 December 2018
For questions, contact Dr. Scott Senseman at 'ssensema@utk.edu'
http://wssa.net/wssa/weed/herbicides/

propazine	5(C1)	Inhibitor of photosynthesis at photosystem II site A	Triazine
pyrazon	5(C1)	Inhibitor of photosynthesis at photosystem II site A	Pyridazinone
simazine	5(C1)	Inhibitor of photosynthesis at photosystem II site A	Triazine
simetryn	5(C1)	Inhibitor of photosynthesis at photosystem II site A	Triazine
terbacil	5(C1)	Inhibitor of photosynthesis at photosystem II site A	Uracil
terbumeton	5(C1)	Inhibitor of photosynthesis at photosystem II site A	Triazine
terbuthylazine	5(C1)	Inhibitor of photosynthesis at photosystem II site A	Triazine
trietazine	5(C1)	Inhibitor of photosynthesis at photosystem II site A	Triazine
bentazon	6(C3)	Inhibitor of photosynthesis at photosystem II site B	Benzothiadiazinone
bromoxynil	6(C3)	Inhibitor of photosynthesis at photosystem II site B	Nitrile
ioxynil	6(C3)	Inhibitor of photosynthesis at photosystem II site B	Nitrile
pyridate	6(C3)	Inhibitor of photosynthesis at photosystem II site B	Phenyl-pyridazine
chlorotoluron	7(C2)	Inhibitor of photosynthesis at photosystem II site A; different behavior from group 5	Urea
dimefuron	7(C2)	Inhibitor of photosynthesis at photosystem II site A; different behavior from group 5	Urea
diuron	7(C2)	Inhibitor of photosynthesis at photosystem II site A; different behavior from group 5	Urea
fluometuron	7(C2)	Inhibitor of photosynthesis at photosystem II site A; different behavior from group 5	Urea
isoproturon	7(C2)	Inhibitor of photosynthesis at photosystem II site A; different behavior from group 5	Urea
linuron	7(C2)	Inhibitor of photosynthesis at photosystem II site A; different behavior from group 5	Urea
methibenzuron	7(C2)	Inhibitor of photosynthesis at photosystem II site A; different behavior from group 5	Urea
monolinuron	7(C2)	Inhibitor of photosynthesis at photosystem II site A; different behavior from group 5	Urea
propanil	7(C2)	Inhibitor of photosynthesis at photosystem II site A; different behavior from group 5	Amide
siduron	7(C2)	Inhibitor of photosynthesis at photosystem II site A; different behavior from group 5	Urea
tebuthiuron	7(C2)	Inhibitor of photosynthesis at photosystem II site A; different behavior from group 5	Urea
bensulide	8(N)	Inhibitor of lipid synthesis; not ACCase inhibition	Phosphorodithioate
butylate	8(N)	Inhibitor of lipid synthesis; not ACCase inhibition	Thiocarbamate
cycloate	8(N)	Inhibitor of lipid synthesis; not ACCase inhibition	Thiocarbamate
EPTC	8(N)	Inhibitor of lipid synthesis; not ACCase inhibition	Thiocarbamate
esprocarb	8(N)	Inhibitor of lipid synthesis; not ACCase inhibition	Thiocarbamate
ethofumesate	8(N)	Inhibitor of lipid synthesis; not ACCase inhibition	Benzofuran
molinate	8(N)	Inhibitor of lipid synthesis; not ACCase inhibition	Thiocarbamate
pebulate	8(N)	Inhibitor of lipid synthesis; not ACCase inhibition	Thiocarbamate
prosulfocarb	8(N)	Inhibitor of lipid synthesis; not ACCase inhibition	Thiocarbamate
thiobencarb	8(N)	Inhibitor of lipid synthesis; not ACCase inhibition	Thiocarbamate

Appendix 4

Weed Science Society of America - Herbicide Site of Action (SOA) Classification List (cont'd)
Date last modified: 5 December 2018
For questions, contact Dr. Scott Senseman at 'ssensema@utk.edu'
http://wssa.net/wssa/weed/herbicides/

triallate	8(N)	Inhibitor of lipid synthesis; not ACCase inhibition	Thiocarbamate
vernolate	8(N)	Inhibitor of lipid synthesis; not ACCase inhibition	Thiocarbamate
glyphosate	9(G)	Inhibitor of 5-enolypyruvyl-shikimate-3-phosphate synthase (EPSPS)	Glycine
glufosinate	10(H)	Inhibitor of glutamine synthetase	Phosphinic acid
aclonifen	11(F3)	Inhibitor of carotenoid biosynthesis (unknown target)	Diphenylether
amitrole	11(F3)	Inhibitor of carotenoid biosynthesis (unknown target)	Triazole
beflubutamid	12(F1)	Inhibitor of phytoene desaturase (PDS)	
diflufenican	12(F1)	Inhibitor of phytoene desaturase (PDS)	Pyridinecarboxamide
fluridone	12(F1)	Inhibitor of phytoene desaturase (PDS)	
flurochloridone	12(F1)	Inhibitor of phytoene desaturase (PDS)	
flurtamone	12(F1)	Inhibitor of phytoene desaturase (PDS)	
norflurazon	12(F1)	Inhibitor of phytoene desaturase (PDS)	Pyridazinone
picolinafen	12(F1)	Inhibitor of phytoene desaturase (PDS)	Pyridinecarboxamide
clomazone	13(F3)	Inhibitor of 1-deoxy-D-xyulose 5-phosphate sunthatase (DOXP synthase)	Isoxazolidinone
aclifluorfen	14(E)	Inhibitor of protoporphyrinogen oxidase (Protox, PPO)	Diphenylether
azafenidin	14(E)	Inhibitor of protoporphyrinogen oxidase (Protox, PPO)	Triazolinone
bifenox	14(E)	Inhibitor of protoporphyrinogen oxidase (Protox, PPO)	Diphenylether
butafenacil	14(E)	Inhibitor of protoporphyrinogen oxidase (Protox, PPO)	Pyrimidinedione
carfentrazone-ethyl	14(E)	Inhibitor of protoporphyrinogen oxidase (Protox, PPO)	Triazolinone
flufenpyr-ethyl	14(E)	Inhibitor of protoporphyrinogen oxidase (Protox, PPO)	
flumiclorac	14(E)	Inhibitor of protoporphyrinogen oxidase (Protox, PPO)	N-phenylphthalimide
flumioxazin	14(E)	Inhibitor of protoporphyrinogen oxidase (Protox, PPO)	N-phenylphthalimide
fluoroglycofen	14(E)	Inhibitor of protoporphyrinogen oxidase (Protox, PPO)	Diphenylether
fluthiacet-methyl	14(E)	Inhibitor of protoporphyrinogen oxidase (Protox, PPO)	Thiadiazole
fomesafen	14(E)	Inhibitor of protoporphyrinogen oxidase (Protox, PPO)	Diphenylether
lactofen	14(E)	Inhibitor of protoporphyrinogen oxidase (Protox, PPO)	Diphenylether
oxadiargyl	14(E)	Inhibitor of protoporphyrinogen oxidase (Protox, PPO)	Oxadiazole
oxadiazon	14(E)	Inhibitor of protoporphyrinogen oxidase (Protox, PPO)	Oxadiazole
oxyfluorfen	14(E)	Inhibitor of protoporphyrinogen oxidase (Protox, PPO)	Diphenylether
pyraflufen-ethyl	14(E)	Inhibitor of protoporphyrinogen oxidase (Protox, PPO)	Phenylpyrazole
saflufenacil	14(E)	Inhibitor of protoporphyrinogen oxidase (Protox, PPO)	Pyrimidinedione

Appendix 4

Weed Science Society of America - Herbicide Site of Action (SOA) Classification List (cont'd)
Date last modified: 5 December 2018
For questions, contact Dr. Scott Senseman at 'ssensema@utk.edu'
http://wssa.net/wssa/weed/herbicides/

sulfentrazone	14(E)	Inhibitor of protoporphyrinogen oxidase (Protox, PPO)	Triazolinone
acetochlor	15(K3)	Mitosis Inhibitor	Chloroacetamide
alachlor	15(K3)	Mitosis Inhibitor	Chloroacetamide
anilofos	15(K3)	Mitosis Inhibitor	
butachlor	15(K3)	Mitosis Inhibitor	Chloroacetamide
dimethenamid	15(K3)	Mitosis Inhibitor	Chloroacetamide
fentrazamide	15(K3)	Mitosis Inhibitor	Tetrazolinone
flufenacet	15(K3)	Mitosis Inhibitor	Oxyacetamide
mefenacet	15(K3)	Mitosis Inhibitor	Oxyacetamide
metazachlor	15(K3)	Mitosis Inhibitor	Chloroacetamide
napropamide	15(K3)	Mitosis Inhibitor	Acetamide
pretilachlor	15(K3)	Mitosis Inhibitor	Chloroacetamide
propachlor	15(K3)	Mitosis Inhibitor	Chloroacetamide
pyroxasulfone	15(K3)	Mitosis Inhibitor	Isoxazoline
S-metolachlor	15(K3)	Mitosis Inhibitor	Chloroacetamide
thenylchlor	15(K3)	Mitosis Inhibitor	Chloroacetamide
asulam	18(I)	Inhibitor of 7,8-dihydro-preroate synthetase (DHP)	Carbamate
diflufenzopyr	19(P)	Inhibitor of indoleacetic acid transport	Phthalamate Semicarbazone
naptalam	19(P)	Inhibitor of indoleacetic acid transport	Phthalamate Semicarbazone
dichlobenil	20(L)	Inhibitor of cell wall synthesis site A	Nitrile
isoxaben	21(L)	Inhibitor of cell wall synthesis site B	Benzamide
diquat	22(D)	Photosystem I electron diverter	Bipyridylium
paraquat	22(D)	Photosystem I electron diverter	Bipyridylium
carbetamide	23(K2)	Inhibitor of mitosis	Carbamate
dinoterb	24(M)	Membrane disruptor (uncouplers)	Dinitrophenol
dazomet	26(Z)	Unknown site of action	
difenzoquat	26(Z)	Unknown site of action	Pyrazolium
metham	26(Z)	Unknown site of action	
pelargonic acid	26(Z)	Unknown site of action	
benzofenap	27(F2)	Inhibitor of 4-hydroxyphenyl-pyruvatedioxygenase (4-HPPD)	Pyrazole
benzobicyclon	27(F2)	Inhibitor of 4-hydroxyphenyl-pyruvatedioxygenase (4-HPPD)	Benzoylbicyclooctanedione
isoxaflutole	27(F2)	Inhibitor of 4-hydroxyphenyl-pyruvatedioxygenase (4-HPPD)	
mesotrione	27(F2)	Inhibitor of 4-hydroxyphenyl-pyruvatedioxygenase (4-HPPD)	Triketone
pyrazolynate	27(F2)	Inhibitor of 4-hydroxyphenyl-pyruvatedioxygenase (4-HPPD)	Pyrazole
pyrazoxyfen	27(F2)	Inhibitor of 4-hydroxyphenyl-pyruvatedioxygenase (4-HPPD)	Pyrazole
sulcotrione	27(F2)	Inhibitor of 4-hydroxyphenyl-pyruvatedioxygenase (4-HPPD)	Triketone
tembotrione	27(F2)	Inhibitor of 4-hydroxyphenyl-pyruvatedioxygenase (4-HPPD)	Triketone

Weed Science Society of America - Herbicide Site of Action (SOA) Classification List (cont'd)
Date last modified: 5 December 2018
For questions, contact Dr. Scott Senseman at 'ssensema@utk.edu'
http://wssa.net/wssa/weed/herbicides/

topramezone	27(F2)	Inhibitor of 4-hydroxyphenyl-pyruvatedioxygenase (4-HPPD)	
DSMA	28(Z)	Unknown site of action	Organoarsenical
fosamine	28(Z)	Unknown site of action	
MSMA	28(Z)	Unknown site of action	Organoarsenical
indaziflam	**29(L)**	**Inhibitor of cell wall synthesis site C**	
cinmethylin	30(R)	Tyrosine Aminotransferase	
methiozolin	30(R)	Tyrosine Aminotransferase	
acrolein	NC	Not Classified	
AMS	NC	Not Classified	
benazolin	NC	Not Classified	
benoxacor	NC	Not Classified	
cacodylic acid	NC	Not Classified	
cloquintocet-mexyl	NC	Not Classified	
copper chelate	NC	Not Classified	
copper sulfate	NC	Not Classified	
cyprosulfamide	NC		
dichlormid	NC	Not Classified	
dietholate	NC	Not Classified	
dimethipin	NC	Not Classified	
endothall	NC	Not Classified	
fenchlorazole-ethyl	NC	Not Classified	
fenclorim	NC	Not Classified	
fluxofenim	NC	Not Classified	
maleic hydrazide	NC	Not Classified	
mefenpyr-diethyl	NC	Not Classified	
mefluidide	NC	Not Classified	
metaborate	NC	Not Classified	
oxaziclomefone	NC	Not Classified	
sodium chlorate	NC	Not Classified	

Appendix 5

The IR-4 Project
Pest Management Solutions for Specialty Crops and Minor Uses

IR-4 Headquarters
Rutgers, The State University of New Jersey
500 College Road East, Suite 201 W
Princeton, NJ 08540
732.932.9575
fax: 609.514.2612
www.ir4.rutgers.edu

February 18, 2016

Ms. Barbara Madden
Minor Use Officer
US EPA OPP/Proc Desk (REGFEE)
Room S-4900
2777 S. Crystal Drive
Arlington, VA 22202

Dear Ms. Madden:

Submission of IR-4 indaziflam studies on coffee, caneberry, blueberry (highbush) and hops proposing a tolerance for indaziflam use in the production of Coffee, green bean, Caneberry subgroup 13-07A, Bushberry subgroup 13-07B, Hop, dried cones and crop group conversions and expansions

RE: Indaziflam
Indaziflam 200SC Herbicide, EPA Reg. No. 264-1106
(alternate brand name Alion Herbicide)
Indaziflam 500SC Herbicide, EPA Reg. No. 264-1105

IR-4 Public Interest Finding:

(1) The coffee, caneberry, blueberry (highbush) and hops data being submitted was developed by IR-4.
(2) The active ingredient, indaziflam, is already registered on other food crops.
(3) The active ingredient/crop combinations of PR 10654 indaziflam / coffee, PR 10882 indaziflam / blueberry, PR 10909 indaziflam / caneberry and PR 11071 indaziflam / hops were pre-screened by EPA because the studies were initiated in 2011 to 2013.
(4) The uses on coffee, caneberry, blueberry (highbush) and hops are from crops grown on less than 300,000 acres.

A Section 3 registration of indaziflam (marketed as Indaziflam 200SC Herbicide, Alion Herbicide and Indaziflam 500SC Herbicide) on coffee, caneberry, blueberry (highbush) and hops can provide many benefits for control of annual and perennial weeds. This Group 29 herbicide provides preemergence, residual control of both annual grasses and broadleaf weeds. Please see **Appendix 1** for an explanation of benefits of the proposed uses.

Major funding for IR-4 is provided by Special Research Grants and Hatch Act Funds from USDA-CSREES, in cooperation with the State Agricultural Experiment Stations and USDA-ARS.

THE STATE UNIVERSITY OF NEW JERSEY
RUTGERS

New Uses	Supporting Data	
Tolerance Requested	IR-4 PR Numbers	Source of New Tolerance
Coffee, green bean	10654	IR-4 coffee residue data
Caneberry subgroup 13-07A	10909	IR-4 blackberry and raspberry residue data
Bushberry subgroup 13-07B	10882	IR-4 blueberry (highbush) residue data
Hop, dried cones	11071	IR-4 hop residue data
Fruit, stone, group 12-12	11654	Conversion of the currently established tolerance on Fruit, stone, group 12 to Fruit, stone, group 12-12
Fruit, small, vine climbing, except fuzzy kiwifruit, subgroup 13-07F	11655	Expansion of the currently established tolerance on Grape to Fruit, small, vine climbing, except fuzzy kiwifruit, subgroup 13-07F
Nut, tree, group 14-12	11656	Conversion of the currently established tolerance on Nut, tree, group 14 to Nut, tree, group 14-12
Individual crops of proposed Crop Subgroup 23A. Small fruit, edible peel subgroup including: Acerola; African plum; agritos, almondette; appleberry; arbutus berry; bayberry, red; bignay; breadnut; cabeluda; carandas-plum; Ceylon iron wood; Ceylon olive; cherry-of-the-Rio-Grande; Chinese olive, black; Chinese olive, white; chirauli-nut; cocoplum; desert-date; false sandalwood; fragrant manjack; gooseberry, Abyssinian; gooseberry, Ceylon; gooseberry, otaheite; governor's plum; grumichama; guabiroba; guava berry; guava, Brazilian; guava, Costa Rican; guayabillo; illawarra plum; Indian-plum; Jamaica-cherry; jambolan; kaffir-plum; kakadu plum; kapundung; karnada; lemon aspen; mombin, yellow; monos plum; mountain cherry; olive; persimmon, black; pitomba; plum-of-Martinique; rukam; rumberry; sea grape; sete-capotes; silver aspen; water apple; water pear; water berry; wax jambu.	11868	Expansion from olive to individual crops of proposed Crop Subgroup 23A. Small fruit, edible peel subgroup

Fee Category:
R-190 - $396,742
R-175 - $66,124 (see following IR-4 Exemption Request)

Major funding for IR-4 is provided by Special Research Grants and Hatch Act Funds from USDA-CSREES, in cooperation with the State Agricultural Experiment Stations and USDA-ARS.

Regarding the conversion from Fruit, stone, group 12 to Fruit, stone, group 12-12, the conversion from Nut, tree, group 14 to Nut, tree, group 14-12, the expansion from grape to Fruit, small, vine climbing, except fuzzy kiwifruit, subgroup 13-07F, caneberry to Caneberry subgroup 13-07A, blueberry (highbush) to Bushberry subgroup 13-07B, and Olive to individual crops of proposed Crop Subgroup 23A. Small fruit, edible peel subgroup, IR-4 believes the that technically these submissions are "agency initiated actions" since in the Crop Grouping Final Rule (FRN 77 No.163, August 22, 2012), EPA requests that petitioners seek tolerances under the new crop grouping system or, alternatively, EPA will address the conversion on its own. Secondly, stakeholders and the public will benefit from actions such as these because many additional minor use crops will be covered by the new crop grouping system tolerances. Third, the new crop group structure will enhance maximum residue limit (MRL) enforcement efforts by FDA since the new naming system is more precise than the old naming convention.

The undersigned, Raymond C. Leonard, Coordinator, Interregional Research Project No. 4, The State University of New Jersey, Princeton, New Jersey 08540, on behalf of the IR-4 Project and the Agricultural Experiment Stations of the states of Hawaii (coffee), Georgia, Washington, New Jersey and Oregon (blueberry (highbush)), Utah, Arkansas, Georgia, Washington and Oregon (caneberry), Idaho, Washington and Oregon (hops) submits this petition pursuant to Section 408(e) of the Federal Food, Drug and Cosmetic Act, as amended, with respect to the pesticide chemical, indaziflam, (40 CFR 180.653).

As per the Pesticide Registration Improvement Act, the IR-4 tolerance petition for indaziflam (40 CFR 180.653) in/on coffee, blueberry (highbush), caneberry and hops are in the public interest and therefore exempt from the registration services fee. IR-4 in cooperation with the registrant, Bayer CropScience, requests an exemption of the registration services fee for this tolerance petition

List of Studies Submitted with this letter in Support of Proposed Tolerances for indaziflam (40 CFR 180.653) in/on coffee, blueberry (highbush), caneberry and hops.

Vol. #	Volume Title	MRID No. / PP No.
1	Indaziflam Petition (Administrative Volume) Proposing a Tolerance for Indaziflam Use in the Production of Coffee, green bean, Caneberry subgroup 13-07A, Bushberry subgroup 13-07B, Hop, dried cones and Crop Group Conversions and Expansions	---
2	Indaziflam: Magnitude of the Residue on Coffee	49752801
3	Indaziflam: Magnitude of the Residue on Blueberry (Highbush)	49752802
4	Indaziflam: Magnitude of the Residue on Caneberry	49752803
5	Indaziflam: Magnitude of the Residue on Hops	49752804

The entire submission is being made as an electronic submission only using EPA's CDX Pesticide Submission Portal (PSP).

Major funding for IR-4 is provided by Special Research Grants and Hatch Act Funds from USDA-CSREES, in cooperation with the State Agricultural Experiment Stations and USDA-ARS.

Enclosed in this submission are the Administrative Volume, the Data Volumes, Notice of Filing, the Letter of Authorization (dated January 22, 2016) and the following listed below:

For the technical product:

Indaziflam Technical

- EPA Form 8570-1 (Rev. 3-94) for Indaziflam Technical (EPA Reg. No. 264-1129)
- EPA Form 8570-34 (Rev. 12-2003) Certification with Respect to Citation of Data for Indaziflam Technical (EPA Reg. No. 264-1129)
- EPA Form 8570-35 (Rev. 12-2003) Data Matrix (EPA copy) for Indaziflam Technical (EPA Reg. No. 264-1129)
- EPA Form 8570-35 (Rev. 12-2003) Data Matrix (Public copy) for Indaziflam Technical (EPA Reg. No. 264-1129)
- Indaziflam Technical label (black and white copy) (EPA Reg. No. 264-1129)
- Indaziflam Technical label (highlighted copy) (EPA Reg. No. 264-1129)

For the end use product:

Indaziflam 200SC Herbicide (alternate brand name Alion Herbicide)

- EPA Form 8570-1 (Rev. 3-94) for Indaziflam 200SC Herbicide (EPA Reg. No. 264-1106)
- EPA Form 8570-34 (Rev. 12-2003) Certification with Respect to Citation of Data for Indaziflam 200 SC Herbicide (EPA Reg. No. 264-1106)
- EPA Form 8570-35 (Rev. 12-2003) Data Matrix (EPA copy) for Indaziflam 200SC Herbicide (EPA Reg. No. 264-1106)
- EPA Form 8570-35 (Rev. 12-2003) Data Matrix (Public copy) for Indaziflam 200SC Herbicide (EPA Reg. No. 264-1106)
- Proposed Section 3 label (black and white copy) for Indaziflam 200SC Herbicide (EPA Reg. No. 264-1106)
- Proposed Section 3 label (highlighted copy) for Indaziflam 200SC Herbicide (EPA Reg. No. 264-1106)
- Supplemental label for Indaziflam 200SC Herbicide; ABN: Alion Herbicide (EPA Reg. No. 264-1106)

For the end use product:

Indaziflam 500SC Herbicide

- EPA Form 8570-1 (Rev. 3-94) for Indaziflam 500SC Herbicide (EPA Reg. No. 264-1105)
- EPA Form 8570-34 (Rev. 12-2003) Certification with Respect to Citation of Data for Indaziflam 500SC Herbicide (EPA Reg. No. 264-1105)
- EPA Form 8570-35 (Rev. 12-2003) Data Matrix (EPA copy) for Indaziflam 500SC Herbicide (EPA Reg. No. 264-1105)
- EPA Form 8570-35 (Rev. 12-2003) Data Matrix (Public copy) for Indaziflam 500SC Herbicide (EPA Reg. No. 264-1105)

Major funding for IR-4 is provided by Special Research Grants and Hatch Act Funds from USDA-CSREES, in cooperation with the State Agricultural Experiment Stations and USDA-ARS.

- Proposed Section 3 label (highlighted copy) for Indaziflam 500SC Herbicide (EPA Reg. No. 264-1105)
- Proposed Section 3 label (black and white copy) for Indaziflam 500SC Herbicide (EPA Reg. No. 264-1105)

For the neurotoxicity study requirement, Bayer CropScience submitted neurotoxicity studies (MRID 47443310, 47443309, 47443289) for indaziflam. These studies were previously submitted by Bayer CropScience to EPA. MRID numbers were provided to IR-4 via email and not via the 8570-35 forms that were submitted with this petition.

For the immunotoxicity study requirement, Bayer CropScience submitted a immunotoxicity study (MRID 47443313) for indaziflam. This study was previously submitted by Bayer CropScience to EPA. These MRID numbers were provided to IR-4 via email and not via the 8570-35 forms that were submitted with this petition.

Please see the following table for a comparison of tolerances / MRLs (in ppm) for the U.S. and Canada. There are no Codex tolerances for indaziflam according to http://www.codexalimentarius.net.

Crop / Commodity	Current U.S. Tolerance (ppm)	Proposed U.S. Tolerance (ppm)	Canadian Tolerance (ppm)
Coffee, green bean	---	0.01[1]	---[1]
Caneberry subgroup 13-07A	---	0.01[2]	---[2]
Bushberry subgroup 13-07B	---	0.01[3]	Gooseberries-0.01[3]
Hop, dried cones	---	0.03[4]	---[4]
Fruit, stone, group 12-12	0.01	0.01[5]	There are tolerances of 0.01 ppm established for crops in Fruit, stone, group 12-12 including: sweet cherries, Japanese plums, capulins, Nanking cherries, damson plums, plums, Chickasaw plums, Canada plums, peaches, Japanese apricots, tart cherries, nectarines, American plums, Klamath plums, plumcots, beach plums, fresh prune plums, sloes, cherry plums, apricots, black cherries
Nut, tree, group 14-12	0.01	0.01[6]	There are tolerances of 0.01 ppm established for crops in Nut, tree, group 14-12 including: pistachio nuts, pili nuts, bur oak nuts, peach palm nuts, pine nuts, ginkgo nuts, mongongo nuts, monkey-pot nuts, Brazilian pine nuts, butternuts, pequi nuts, English walnuts, coconuts, Brazil nuts, cajou nuts, candlenuts, chestnuts, Guiana chestnuts, pachira nuts, pecan nuts, African tree nuts, cashew nuts, Japanese horse-chestnuts, monkey puzzle nuts, chinquapin nuts, sapucaia nuts, almond nuts, okari nuts, black walnuts, beechnuts, yellowhorn nuts, hazelnuts, heartnuts, hickory nuts, coquito nuts, tropical almond nuts, dika nuts, macadamia nuts, bunya nuts

Major funding for IR-4 is provided by Special Research Grants and Hatch Act Funds from USDA-CSREES, in cooperation with the State Agricultural Experiment Stations and USDA-ARS.

Fruit, small, vine climbing, except fuzzy kiwifruit, subgroup 13-07F	0.01	0.01[7]	There are tolerances of 0.01 ppm established for crops in Fruit, small, vine climbing, except fuzzy kiwifruit, subgroup 13-07F including: schisandra berries, hardy kiwifruit, maypop, Amur River grapes and grapes
Olive	0.01	0.01[8]	0.01[8]

[1] Tolerance based on calculation using the OECD Calculator on IR-4 coffee, green bean residue data. At this time, Bayer CropScience is not certain if they will ask for an import tolerance on coffee.
[2] Tolerance based on calculation using the OECD Calculator on IR-4 caneberry residue data. There were two Canadian trials conducted for this study (Jordan Station, Ontario (PMRA Region 5; Blackberry) and Langley, British Columbia (PMRA Region 12; Raspberry).
[3] Tolerance based on calculation using the OECD Calculator on IR-4 blueberry (highbush) residue data. There was one Canadian trial conducted for this study (Jordan Station, Ontario (PMRA Region 5).
[4] Tolerance based on calculation using the OECD Calculator on IR-4 hop, dried cones residue data. There was one Canadian trial conducted for this study (Dunham, Brome-Missisquoi, Quebec (PMRA Region 5B).
[5] Request for conversion of the currently established tolerance on Fruit, stone, group 12 to Fruit, stone, group 12-12.
[6] Request for conversion of the currently established tolerance on Nut, tree, group 14 to Nut, tree, group 14-12.
[7] Request for expansion of the currently established tolerance on Grape to Fruit, small, vine climbing, except fuzzy kiwifruit, subgroup 13-07F.
[8] Based on the current Olive tolerance at 0.01 ppm. Once the final rule is published, this crop will become the representative commodity for Crop Subgroup 23A. Small fruit, edible peel subgroup. Request to add all individual crops of Crop Subgroup 23A at a tolerance of 0.01 ppm and removing the current tolerance at 0.01 ppm of Olive as currently listed in e-CFR 180.653. The Pest Management Centre, Agriculture and Agri-Food Canada is not planning to submit for Crop Subgroup 23A.

Please note that the following studies were joint projects with the Pest Management Centre, Agriculture & Agri-food Canada: Indaziflam: Magnitude of the Residue on Blueberry (Highbush) (PR 10882), Indaziflam: Magnitude of the Residue on Caneberry (PR 10909) and Indaziflam: Magnitude of the Residue on Hops (PR 11071).

Please note that there is a difference in spray re-treatment intervals between the IR-4 residue protocol and the proposed label directions for Indaziflam 200SC, Alion, and Indaziflam 500SC. For all studies, a shorter spray interval was used in the IR-4 residue studies versus the proposed label directions (IR-4 residue protocols contained 30 day re-treatment intervals in hops and coffee and 60 day re-treatment intervals in caneberry and blueberry (highbush). Proposed label directions for Indaziflam 200SC, Alion, and Indaziflam 500SC list 90 day re-treatment intervals or greater). In order to further minimize the risk of crop response, Bayer CropScience extended the spray intervals and limited the rates to soil % organic matter content. These steps do not adversely affect the product's performance. Bayer CropScience has experience with this product and feels that these steps are prudent. Since the time the projects were nominated and the protocols were established, Bayer CropScience has mitigated crop response issues in several crops and now has better understanding of the compound's behavior. A lot of consultation with the Bayer CropScience field staff has gone into the Alion Herbicide (and by default also, the 500SC) label statements as they appear on the proposed label.

Please note that there is a request by Bayer CropScience to not include lowbush blueberry on the end use (Indaziflam 200SC, Alion, and Indaziflam 500SC) labels or technical label because the blueberry (highbush) study (PR 10882) consists of a separate residue protocol with a different use pattern compared to the blueberry (lowbush) study (PR 11412). In addition, the blueberry (lowbush) study was recently initiated in 2015.

Major funding for IR-4 is provided by Special Research Grants and Hatch Act Funds from USDA-CSREES, in cooperation with the State Agricultural Experiment Stations and USDA-ARS.

Regarding the individual crops of proposed Crop Subgroup 23A. Small fruit, edible peel subgroup, it is the intention of Bayer CropScience to print restrict this subgroup to only the representative commodity, olive on the commercial labels until Bayer CropScience has confirmatory information regarding crop safety on any of the other crops of interest. This is a standard practice for indaziflam and helps Bayer CropScience manage risk/liability.

For questions pertaining to the 8570 forms, the labels and the notice of filing, please contact Nancy Delaney, Bayer CropScience LP, Tel. No.: (919) 549 2080; email: Nancy.Delaney@bayer.com. For questions concerning the transmittal letter, petition and/or final study reports, please contact Raymond Leonard, IR-4, Tel. No.: (732) 932-9575 ext.4617; email: leonard@aesop.rutgers.edu.

Yours very truly,
Interregional Research Project No. 4
Petitioner

Per Raymond Leonard

Raymond Leonard
Coordinator, IR-4 Project Headquarters
Rutgers, The State University of New Jersey
500 College Road East, Suite 201 W
Princeton, NJ 08540

Copies: Jessica Fernandez, Jessica.fernandez@bayer.com; Nancy Delaney, Nancy.Delaney@bayer.com; Nicole Gentner, Nicole.Gentner@bayer.com; Shirley Archambault (Upload letter & administrative volume)
IR-4 Regional Coordinators (Upload letter & administrative volume)
Susan Bierbrunner, Ken Samoil, Debbie Carpenter, Dan Kunkel, Jennifer Selwyn (IR-4 letter only)

Major funding for IR-4 is provided by Special Research Grants and Hatch Act Funds from USDA-CSREES, in cooperation with the State Agricultural Experiment Stations and USDA-ARS.

Appendix 1-Benefits of Uses

Indaziflam (as Alion 200SC, and Alion 500SC) is a relatively new herbicide currently registered for preemergence control of grass and broadleaf weeds in established tree fruit, treenut, olive, and grape (TNV) crops. It is being introduced through IR-4 petition for registration in caneberry, blueberry, hops, and coffee. Indaziflam provides extended residual preemergence control of the most common and economically important annual grass and broadleaf weeds, including populations that are resistant to glyphosate, triazine and acetolactate synthase (ALS)-inhibiting herbicides. Indaziflam is an alkylazine herbicide. It controls weeds by inhibiting cellulose biosynthesis and meristematic cell growth. Indaziflam controls weeds prior to emergence from the soil, has limited postemergence (foliar) activity and may be mixed with postemergence herbicides to control existing vegetation.

Indaziflam offers significant advantages over other herbicides registered for established TNV crops. Research results and commercial use show that indaziflam provides excellent crop tolerance and extended residual control equal to or longer than all other registered products tested at recommended use rates. Growers now use indaziflam as the "base" herbicide to provide several months of residual broad spectrum weed control. Prescription weed control is achieved by using indaziflam alone or in tankmix combination with other preemergence and/or postemergence herbicides, depending on field needs. In many instances, indaziflam's extended, broad spectrum activity enable growers to reduce the number of preemergence and/or postemergence herbicide applications necessary to achieve season-long economic weed control.

Indaziflam is applied at lower application rates than many of the other registered preemergence herbicides. Displacement of these products simplifies mixing and loading operations and reduces the pounds of herbicide active ingredients applied to TNV crops. Crop safety from leaching on coarse-textured soils and groundwater restrictions are an issue with several of the other registered preemergence herbicide alternatives. Indaziflam has a lower leaching potential than most of the registered alternatives and poses less risk of crop injury on coarse textured soils. Consequently, indaziflam has minimal soil texture, or pH restrictions, and no groundwater restrictions.

Indaziflam will benefit the caneberry, blueberry, hops, and coffee industries because it will reduce overdependence and overuse of "at risk" herbicides such as glyphosate and rimsulfuron (an ALS-inhibitor herbicide). Fleabane, horseweed and Italian ryegrass have developed resistance to glyphosate in TNV crops in California and other areas. To control glyphosate-resistant weed populations, growers have increased use of residual herbicides such as flumioxazin and rimsulfuron, as well as, non-glyphosate postemergence herbicides. Unfortunately, repeated use of any herbicide mode of action increases the risk of resistance development which deprives growers of effective herbicide alternatives for control. ALS-inhibiting herbicides, such as rimsulfuron, in particular, are at high risk for resistance development, and weeds resistant to ALS, protoporphyrinogen (PPO), photosystem II (PSII) inhibitor, and bipyridilium herbicides have been identified in other crops in the U.S. Effective new herbicides are needed to manage serious resistance issues in TNV crops. Indaziflam will improve long-term resistance management and protect the longevity of all herbicides used in caneberry, blueberry, hops, and coffee.

Major funding for IR-4 is provided by Special Research Grants and Hatch Act Funds from USDA-CSREES, in cooperation with the State Agricultural Experiment Stations and USDA-ARS.

Broad spectrum control, effectiveness, extended control, novel mode-of-action with no known cross-resistance, and favorable human health and ecological profiles make indaziflam an excellent fit in Integrated Pest Management (IPM) and integrated weed management (IWM) programs. Indaziflam will be a welcome entry into the weed control arena for caneberry, blueberry, hops, and coffee.

Major funding for IR-4 is provided by Special Research Grants and Hatch Act Funds from USDA-CSREES, in cooperation with the State Agricultural Experiment Stations and USDA-ARS.

Appendix 6

Pest Management Solutions for
Specialty Crops and Minor Uses

IR-4 Headquarters
Rutgers, The State University of New Jersey
500 College Road East, Suite 201 W
Princeton, NJ 08540
732.932.9575
fax: 609.514.2612
www.ir4.rutgers.edu

May 11, 2018

Tawanda Maignan
Branch Chief (Acting)
Document Processing Desk (REGFEE)
Office of Pesticide Programs – (7504P)
2777 Crystal Drive
Arlington, VA 22202

Dear Ms. Maignan:

Submission of the Joint IR-4-Agriculture and Agri-Food Canada Indaziflam Study on Lowbush Blueberry and Uses on Fruit, tropical and subtropical, edible peel, group 23 and Fruit, tropical and subtropical, inedible peel, group 24 based on a ChemSAC decision

RE: Indaziflam
Indaziflam 200SC Herbicide (also known as Alion® Herbicide), EPA Reg. No. 264-1106
Indaziflam Technical, EPA Reg. No. 264-1129

IR-4 Public Interest Finding:

(1) The lowbush blueberry data being submitted was developed by IR-4 and Agriculture and Agri-Food Canada. The requests for uses on Fruit, tropical and subtropical, edible peel, group 23 and Fruit, tropical and subtropical, inedible peel, group 24 were based on an IR-4 ChemSAC proposal.
(2) The active ingredient, indaziflam, is already registered on other food crops.
(3) The active ingredient/crop combination of PR # 11412 indaziflam / lowbush blueberry was pre-screened by EPA in 2015 and received a "green light" by EPA. The residue study was initiated in 2015. To support the tropical crop group uses in this petition, PR # 11692 indaziflam / pomegranate was pre-screened by EPA in 2015 and received a "green light" by EPA. PR # 11546 indaziflam / fig was pre-screened by EPA in 2016 and received a "green light" by EPA. PR # 11088 indaziflam / banana, PR # 11089 indaziflam / plantain and PR # 11090 indaziflam / pineapple were not pre-screened by EPA, since at the time, the registrant did not support the use. Reasons for why the uses on lowbush blueberry and tropical fruits should be registered in the United States can be found below.
(4) The use on lowbush blueberry is for a crop grown on less than 300,000 acres. There were a total of 82,630 acres of blueberries during the 2014 season. The use on various tropical fruit are for crops grown on less than 300,000 acres. The exact acreage of many tropical fruit crops are unknown in the U.S.

Major funding for IR-4 is provided by Special Research Grants and Hatch Act Funds from USDA-CSREES, in cooperation with the State Agricultural Experiment Stations and USDA-ARS.

A registration of indaziflam (marketed as Alion® Herbicide) is needed to provide control of pre-emergent and early post-emergent grass and dicot weed species in tropical fruit production. The IR-4 Project Clearance Requests were also made in order to obtain control of resistant weeds in tropical orchards/groves and remove weed biomass for potential disease control of botrytis and aflatoxin that can be a problem in higher humidity (tropical) areas.

A registration of indaziflam (marketed as Alion® Herbicide) is needed to provide control of weed populations with established herbicide resistance (hexazinone-resistant weeds) in lowbush blueberry production. Also, since the lowbush blueberry residue study was a joint study, a registration in both the U.S. and Canada will provide harmonization of MRLs. Alion has a unique mechanism of action (Group 29) not found in other herbicides registered for lowbush blueberries. Applying Alion when blueberries are dormant and before bud break could control emerging resistant weeds not controlled by previous preemergence applications of herbicides such as Velpar, Velossa or Sinbar.

New Uses	**Supporting Data**	
Tolerance Requested	IR-4 PR Number	Source of New Tolerance
Lowbush blueberry (no tolerance requested since there is an established tolerance on Bushberry subgroup 13-07B at 0.01 ppm.)	11412	Joint IR-4-Agriculture and Agri-Food Canada residue study on lowbush blueberry
Fruit, tropical and subtropical, edible peel, group 23	12378	ChemSAC proposal
Fruit, tropical and subtropical, inedible peel, group 24	12379	ChemSAC proposal

Fee Categories: R-350 - $13,226; R-190 – $396.742

(See IR-4 Exemption Request Below)

Regarding the crop group conversions and expansions, IR-4 believes the that technically these submissions are "agency initiated actions" since in the Crop Grouping Final Rule (FRN 77 No.163, August 22, 2012), EPA requests that petitioners seek tolerances under the new crop grouping system or, alternatively, EPA will address the conversion on its own. Secondly, stakeholders and the public will benefit from actions such as these because many additional minor use crops will be covered by the new crop grouping system tolerances. Third, the new crop group structure will enhance maximum residue limit (MRL) enforcement efforts by FDA since the new naming system is more precise than the old naming convention.

The undersigned, Marija Arsenovic, Ph.D.,, Interregional Research Project No. 4, The State University of New Jersey, Princeton, New Jersey 08540, on behalf of the IR-4 Project and the Agricultural Experiment Stations of the states of California, Florida and Puerto Rico (tropical fruit) and Arkansas and Maine (lowbush blueberry) submits this petition pursuant to Section 408(e) of the Federal Food, Drug and Cosmetic Act, as amended, with respect to the pesticide chemical, indaziflam (40 CFR 180.653).

As per the Pesticide Registration Improvement Act, the IR-4 tolerance petition for indaziflam (40 CFR 180.653) in/on Fruit, tropical and subtropical, edible peel, group 23, Fruit, tropical and subtropical, inedible peel, group 24 and lowbush blueberry are in the public interest and therefore exempt from the registration services fee. IR-4 in cooperation with the registrant, Bayer CropScience LP (registrant for

Major funding for IR-4 is provided by Special Research Grants and Hatch Act Funds from USDA-CSREES, in cooperation with the State Agricultural Experiment Stations and USDA-ARS.

Indaziflam 200SC Herbicide (also known as Alion® Herbicide) and Indaziflam Technical) requests an exemption of the registration services fee for this tolerance petition.

List of Studies Submitted with this letter in Support of Proposed Tolerances for indaziflam (40 CFR 180.653) in/on Fruit, tropical and subtropical, edible peel, group 23, Fruit, tropical and subtropical, inedible peel, group 24 and lowbush blueberry.

Vol. #	Volume Title	MRID No. / PP No.
1	Petition (Administrative Volume) Proposing A Tolerance For Indaziflam Use in the Production of Fruit, tropical and subtropical, edible peel, group 23, Fruit, tropical and subtropical, inedible peel, group 24 and Lowbush Blueberry	---
2	Indaziflam: Magnitude of the Residue on Lowbush Blueberry (PR 11412)	50419401

The entire submission is being made as an electronic submission only using EPA's CDX Pesticide Submission Portal (PSP).

Enclosed in this submission are the Administrative Volume, the Data Volume, Notice of Filing, the Letter of Authorization from Bayer CropScience LP (dated April 25, 2018) and the following listed below:

For the Indaziflam Technical product:

- EPA Form 8570-1 for Indaziflam Technical (EPA Reg. No. 264-1129)
- EPA Form 8570-34 Certification with Respect to Citation of Data for Indaziflam Technical (EPA Reg. No. 264-1129)
- EPA Form 8570-35 Data Matrix (EPA copy) for Indaziflam Technical (EPA Reg. No. 264-1129)
- EPA Form 8570-35 Data Matrix (Public copy) for Indaziflam Technical (EPA Reg. No. 264-1129)
- Indaziflam Technical label Highlighted Copy (EPA Reg. No. 264-1129)
- Indaziflam Technical label Black Copy (EPA Reg. No. 264-1129)

For the Indaziflam 200SC Herbicide (also known as Alion® Herbicide) end use product:

- EPA Form 8570-1 Application for Pesticide for Indaziflam 200SC Herbicide (also known as Alion® Herbicide) (EPA Reg. No. 264-1106)
- EPA Form 8570-34 Certification with Respect to Citation of Data for Indaziflam 200SC Herbicide (also known as Alion® Herbicide) (EPA Reg. No. 264-1106)
- EPA Form 8570-35 Data Matrix (EPA copy) for Indaziflam 200SC Herbicide (also known as Alion® Herbicide) (EPA Reg. No. 264-1106)
- EPA Form 8570-35 Data Matrix (Public copy) for Indaziflam 200SC Herbicide (also known as Alion® Herbicide) (EPA Reg. No. 264-1106)
- Proposed Master label for Indaziflam 200SC Herbicide (also known as Alion® Herbicide) Highlighted Copy (EPA Reg. No. 264-1106)
- Proposed Master label for Indaziflam 200SC Herbicide (also known as Alion® Herbicide Black Copy (EPA Reg. No. 264-1106)

Major funding for IR-4 is provided by Special Research Grants and Hatch Act Funds from USDA-CSREES, in cooperation with the State Agricultural Experiment Stations and USDA-ARS.

For the neurotoxicity study requirement, Bayer CropScience LP submitted neurotoxicity studies (MRID 47443310, 47443309, 47443289) for indaziflam. These studies were previously submitted by Bayer CropScience to EPA. MRID numbers were provided to IR-4 via email and not via the 8570-35 forms that were submitted with this petition.

For the immunotoxicity study requirement, Bayer CropScience LP submitted a immunotoxicity study (MRID 47443313) for indaziflam. This study was previously submitted by Bayer CropScience to EPA. These MRID numbers were provided to IR-4 via email and not via the 8570-35 forms that were submitted with this petition.

Please see the following table for a comparison of indaziflam tolerances / MRLs (in mg/Kg or ppm) for the U.S., Canada and Codex:

Crop / Commodity	Proposed U.S. Tolerance (Sec. F, ppm)	Current U.S. Tolerance (ppm)	Canadian Tolerance (ppm)	Codex Tolerance (mg/kg)
Fruit, tropical and subtropical, edible peel, group 23	0.01[1]	0.01[2]	Olive-0.01	---
Fruit, tropical and subtropical, inedible peel, group 24	0.01[1]	---	---	---
Bushberry subgroup 13-07B	---	0.01[3]	Gooseberry-0.01	---

[1] Please see the ChemSAC meeting minutes from October 12, 2016 regarding the decision made from the ChemSAC proposal: "Allow broader extrapolations for indaziflam herbicide, from other tree fruit, vine and bush/cane crops to cover tropical fruits" for the establishment of tolerances of the herbicide indaziflam for the control of weeds in tropical fruit.

[2] Currently, there is an established U.S. tolerance on Fruit, tropical and subtropical, small fruit, edible peel, subgroup 23A at 0.01 ppm.

[3] Please note that there is an indaziflam established tolerance on Bushberry subgroup 13-07B at 0.01 ppm. This crop subgroup includes both highbush blueberry and lowbush blueberry. The use pattern for highbush blueberry differs from the use for lowbush blueberry. However, since all residues of lowbush blueberry samples were less than the LLMV of 0.005 ppm for both indaziflam and 1-fluoro triazinediamine and 0.01 ppm for total residues, IR-4 is not requesting a separate tolerance for lowbush blueberry

Please note that a ChemSAC proposal "Allow Broader Translations for Indaziflam Herbicide from Other Tree Fruits, Vine, Bushberry, and Caneberry Crops to Cover Tolerances in Tropical Fruits" was prepared and submitted to EPA on August 31, 2016. This proposal is contained in Section D of the IR-4 petition.

The ChemSAC meeting minutes from October 12, 2016 regarding the decision made from the ChemSAC proposal are also contained in Section D of the IR-4 petition. Overall, the ChemSAC concurred with IR-4's proposal for establishing indaziflam tolerances in commodities in tropical fruit groups 23 and 24.

Section D of the IR-4 petition also contains a white paper from Bayer CropScience that summarizes existing metabolism and residue data in support of extrapolating those data to establish indaziflam crop tolerances in other perennial crops.

There is an indaziflam established tolerance on Bushberry subgroup 13-07B at 0.01 ppm. This crop subgroup includes both highbush blueberry and lowbush blueberry. The use pattern for highbush blueberry differs from the use for lowbush blueberry. However, since all residues of lowbush blueberry

Major funding for IR-4 is provided by Special Research Grants and Hatch Act Funds from USDA-CSREES, in cooperation with the State Agricultural Experiment Stations and USDA-ARS.

samples were less than the LLMV of 0.005 ppm for both indaziflam and 1-fluoro triazinediamine and 0.01 ppm for total residues, IR-4 is not requesting a separate tolerance for lowbush blueberry.

As noted above, the lowbush blueberry data being submitted was developed by IR-4 and Agriculture and Agri-Food Canada. Canada is planning on submitting the lowbush blueberry data to PMRA within the same time period as the U.S. submitting the lowbush blueberry data to EPA, thus allowing for a joint submission.

For questions pertaining to the 8570 forms, the labels and the notice of filing, please contact Ian Murphy, Bayer CropScience, email: ian.murphy@bayer.com. For questions concerning the transmittal letter, petition and / or final study report, please contact Marija Arsenovic, Ph.D., IR-4, Tel. No.: (732) 932-9575 ext.4609; email: marija.arsenovic@rutgers.edu.

Yours very truly,
Interregional Research Project No. 4
Petitioner

Per Marija Arsenovic

Marija Arsenovic, Ph.D
IR-4 Project Headquarters
Rutgers, The State University of New Jersey
500 College Road East, Suite 201 W
Princeton, NJ 08540

Copies: Ian Murphy, ian.murphy@bayer.com, Jessica Fernandez, jessica.fernandez@bayer.com (Uploaded letter, administrative & data volumes)

IR-4 Regional Coordinators (Uploaded letter & administrative volume)

Susan Bierbrunner, Ken Samoil, Debbie Carpenter, Dan Kunkel, Nancy Fitz, Shirley Archambault (IR-4 letter only)

Major funding for IR-4 is provided by Special Research Grants and Hatch Act Funds from USDA-CSREES, in cooperation with the State Agricultural Experiment Stations and USDA-ARS.

UC CE University of California Cooperative Extension

Citrus Weed Control with Indaziflam and Rimsulfuron Herbicides

B. Faber[1], O. Daugovish[1], J. De Soto[1], A. Howell[1], and T. Bean[2]
[1] University of California Cooperative Extension Ventura County; [2] University of California Riverside.

Introduction

Weeds can impact cultural operations, tree growth, and yields by altering the spray pattern of low-volume irrigation systems, intercepting soil-applied chemicals (fertilizer and agricultural chemicals), reducing grove temperatures during freeze events, and interfering with pruning and harvest operations. The presence of weeds in a citrus grove can also affect insect populations. Weeds growing around tree trunks may also create a favorable environment for pathogens that infect the trunk and roots. Weed species compete with citrus trees in many ways and with varying intensities; management of more competitive weeds such as *Conyza bonariensis* and *C. canadensis*, *Sorghum halapensis*, *Paspallum dilatatum*, and *Ipomea purpurea* should be prioritized. While some weeds (e.g., *Tribulus terrestris, Xanthium strumarium, Urtica urens, Cirsium vulgare*, and *Picris echioides*) may have low competitive effects on citrus trees, they can hinder labor operations and may also rank high for active management.

Citrus integrated pest management (IPM) programs typically utilize a combination of control practices, like cultural, mechanical, and chemical, to minimize competitive effects of weeds on crop productivity. Weed management can be an expensive part of the total citrus production program, but resources invested here can provide significant economic returns.

Proper weed identification is a critical in developing an effective management program. Weed species will vary with location, climate, season, soil type, previous site history, and current and past management programs.

A photo gallery of weeds, weed seedlings, and various weed anatomical features is available online through UC IPM at: http://www.ipm.ucdavis.edu/PMG/weeds_intro.html.

Additionally, an online identification tool is available through the UC Weed Research and Information Center at: http://weedid.wisc.edu/ca/weedid.php.

Scouting for weeds should be conducted in all areas in and near the grove, including tree rows, row middles, water furrows, ditch banks, fence rows, and adjacent perimeter locations. These sites may receive different cultural practices which can facilitate the persistence and spread of different weed species. Look for small isolated weed patches and manage them before they spread to other areas of the grove. Since weeds emerge all year long, schedule weed surveys throughout the year, especially after rains or soil disturbances. Scouting should occur even if weeds are not easily visible or their above-ground parts appear to be dead. Re-growth from perennial plants is common. If weeds are correctly identified in the seedling or vegetative stage, then proper control can be achieved through: 1) optimal treatment timing; 2) possible reduced herbicide application rate; and 3) reduced environmental impact from treatments. The weed species present will vary with season and location, because weeds are typically not distributed uniformly. For further information about characteristics used to identify, see the Weeds section of the UC IPM Citrus Pest Management Guidelines, http://www.ipm.ucdavis.edu/PMG. When scouting for weeds, records should be developed and recorded as to species abundance, location, and identity.

Preventive programs are often overlooked, but are an important component of cultural practices and are cost-effective. Practices, such as sanitation, spot spraying, and/or hand removal of weed escapes before they produce new seed are examples of prevention. While preventive programs may not stop the spread of all weed

Figure 1. Indaziflam (2 fl. oz/A) in combination with rimsulfuron at 2 fl. oz/A applied in November provided excellent weed control for up to 4 months (front) while untreated checks had high weed densities (back).

ED_005138A_00000380-00151

species, these practices may slow the spread of undesirable species, thereby reducing long-term weed control costs.

Cultivation or tillage has been used in the past for many years in citrus production. Tillage is an effective method of controlling annual weeds effectively by severing weed stems and roots but is can be counterproductive for perennial weeds that can propagate vegetatively. Soil erosion concerns are cited as a reason why tillage use is decreasing as more groves are planted on raised berms. Also, citrus trees have a shallow fibrous root system and tillage increases risk of root and trunk damage. With the use of low-volume irrigation systems and closer in-row planting distances, tillage in both directions is no longer possible. Mechanical mowing is generally more expensive than tillage and can throw seed under the tree canopy, increasing weed pressure next to the tree trunk.

Herbicides used in a citrus are generally divided into two groups: 1) soil-applied (preemergence) herbicides that should be applied to fairly clean soil surfaces prior to weed emergence, and 2) foliar-applied (postemergence) herbicides that are applied after weeds have emerged. Preemergence herbicides are generally applied two to three times per year, so the maximum amount of herbicide is in the upper soil profile (0 to 2 inches) slightly before peak weed emergence. Herbicides applied too early, before weeds emerge, will not provide adequate weed control due to herbicide leaching or degradation on the soil surface or within the soil profile.

Preemergence herbicides must be incorporated (mainly by rainfall or irrigation) and are usually broadcast on the entire orchard floor since growers do not know where weeds will emerge and to reduce risk of frost damage. Growers using drip irrigation or micro-sprinkler irrigation have a difficult time adequately incorporating preemergence herbicides, so usually try to treat prior to predicted rainfall (Rector et al. 1998). Soil type can influence herbicide selection and rate used. Many preemergence herbicides including oxyfluorfen, pendimethalin, oryzalin, trifluralin, and metolachlor can be used on sandy soils without injuring citrus trees. Tree age is also an important consideration when selecting which herbicide(s) to use.

Table 1. Potential injury ratings (1= none to 10= most severe) from direct spray (50 gal/acre solution) of herbicides on Satsuma mandarins.

Treatments and rates per acre	1 week after treatment	5 weeks after treatment
Untreated	1	1
Indaziflam, low concentration at 5 fl. oz	1.58	3.25
Indaziflam, low concentration at 5 fl. oz + rimsulfuron at 2 oz	2.13	3.5
Indaziflam, high concentration at 2 oz	1.54	3
Indaziflam, high concentration at 2 oz + rimsulfuron at 2 oz	1.25	2.25
Rimsulfuron at4 oz	1.75	1.75

Figure 2. Slight curling and brown spotting of new leaves from a direct spray (drift simulation) of combination of rimsulfuron with indaziflam (left) compared to untreated leaves (right) at 1 week after treatment.

Postemergence herbicides are used to control weeds that escape control by preemergence herbicides or mechanical cultivation. Postemergence herbicides can be systemic or contact in activity. Systemic herbicides are moved within the target plant, killing the foliage and root system of the treated plant. Contact herbicides are active only on those parts of the weeds the herbicide comes into contact with. Hence, adequate spray coverage of the weeds is more critical than with systemic materials. These herbicides are effective on small annual weeds and usually only suppress growth of perennials. It should be noted that the majority of organic herbicides are contact herbicides. Glyphosate is a systemic postemergence herbicide in widely used in citrus due to its efficacy on many weed species and relatively low cost. However, continuous use of the same mode of action over time will likely lead to the development of resistant populations in some weeds species. Amongst other weed species, *Conyza canadensis* and *C. bonariensishave* both been reported to be resistant to glyphosate in California citrus.

To help reduce the likelihood of herbicide resistance development, herbicides with different modes of action should be rotated and/or mixed. New herbicides and rotations are needed to address the increasing occurrence of resistance among weeds in citrus orchards, and provide more effective and economic, season-long control while minimizing crop injury.

Rimsulfuron is a relatively new pre-post emergence herbicide registered for use in California citrus. It has both grass and broadleaf weed activity. Indaziflam, also recently introduced to

California citrus, has a pre-emergence activity against many common grasses and broadleaves. Both of these materials would fit into a rotation and/or herbicide mix. In 2016 and 2017 we conducted trials evaluating the efficacy and safety of these two materials in a citrus orchard.

Materials and Methods

Weed control. At a clay loam site (pH =7.4) near Santa Paula, CA, the weed control efficacy of two product formulations of the indaziflam, (at 2 and 5 fl. oz/A)) was evaluated. These were applied alone or in combination with rimsulfuron at 2 fl. oz/A, which was also applied alone at 4 fl.oz/A, for a total of 5 treatments plus an untreated control. All of the treatments were applied to 90ft ^{2} plots either in November 2015 and 2016 or in February 2016 and 2017. Herbicide treatments were applied with a CO_2-pressurized backpack sprayer delivering spray solution via three flat nozzles in a volume equivalent to 50 gal/acre. Treatment plots in row middles had been previously treated with glyphosate and shallow cultivation. In November, no weeds germinated prior to application, while in February weeds germinated after winter rains in all plots. We evaluated weed densities at two, four, and six months after treatment (MAT).

Citrus injury potential. Even though the tested herbicides are applied to soil and should not come in contact with citrus foliage when applied properly we evaluated potential impact of herbicidal drift on citrus. In 2017 we have simulated severe drift by spraying all treatments (as described previously) to halves (aprox. 20 ft^2) of the foliage of 6-8 ft tall Satsuma mandarins. Again, treatments were arranged according to a RCBD with four replications. At one and five weeks after treatment (WAT) we rated foliar injury on a scale from 1 (none) to 10 (most severe). Averages of four independent ratings on the same date were used to conduct statistical analyses as described previously.

Results and Discussion

Weed control. The most common weeds in the plots were little mallow (*Malva parviflora*), horseweed and hairy fleabane (*Conyza* spp.), field bindweed (*Convolvulus arvensis*), spurge (*Euphorbia* spp.), common lambsquarters (*Chenopodium album*), burning nettle (*Urtica urens*) and common purslane (*Portulaca oleracea*). All of the herbicide treatments were consistently effective in controlling broadleaf weeds compared to the untreated control regardless of the evaluation period (combined weed densities shown in Fig. 4). Indaziflam at both rates plus rimsulfuron provided superior control over other treatments for most weeds in both seasons and application timings. Although spurge was not controlled with this herbicide combination, we suspect that performance may be improved with the addition of a surfactant. Common purslane and field bindweed were least susceptible to herbicide treatments. Even though there was partial control of above-ground bindweed shoots, new growth regenerated from below-ground buds was not affected. Purslane seed bank in soil provided multiple germination cohorts and the seed germinated 2-4 MAT were likely not exposed to lethal herbicide concentrations and germinated and established. The efficacy of all treatments greatly diminished between two and six MAT. Additional herbicide applications and integrated control might have provided longer-term control.

Figure 3. Significant chlorosis and discoloration, particularly on new foliage observed at 5 weeks after direct spray (drift simulation) with indaziflam (left) compared to untreated leaves (right).

Citrus injury potential. Even with direct spray to foliage all treatments resulted in very low injury ratings at 1 WAT (Table 1). Rimsulfuron alone or in combination with indaziflam had slightly greater levels of injury that indaziflam at that time. However, at 5 WAT significant injury symptoms developed in treatments containing indaziflam and injury was greater at increased rate (Table 1). However, in all cases the drift that would result from soil application of any treatments is unlikely to cause significant injury, let alone negative effects on fruit production. Thus, we conclude that these herbicides can be applied safely in young citrus groves when drift is prevented.

In summary:

- Rimsulfuron, indaziflam and their combinations controlled most broadleaf weeds germinating from soil seedbank and those dispersed by wind to citrus furrows for up to 4 months. The higher rates were slightly more efficacious than lower rates. Rimsulfuron provided some control of field bindweed (above-ground parts).
- These herbicides control germinating weeds and do not have much activity on established weeds, and may need 'burn-down' partner for complete weed management program.
- Rimsulfuron and indaziflam have different mode of action than glyphosate (controls established weeds) and therefore are good tools in both weed and resistance management in citrus orchards.
- Both herbicides were safe to citrus when applied to soil but caution should be exercised to prevent drift to crop foliage. When in contact with young leaves rimsulfuron caused minimal injury but indaziflam caused extensive chlorosis in crop canopy.
- Application prior to rainy season (November) was very effective and may be preferred to application after rains (February) when many germinated weeds are established. ■

References

Futch, S.H., M. Singh, M. 2010. 2010 Florida citrus pest management guide, Florida citrus pest management guide: Weeds, eds Rogers M.E., Dewdney M.M., Spann T.M. (Inst. Food Arg. Sci., Univ. of Florida, Gainesville), pp 125–137.

Futch S.H and M. Singh. 2014. 2014 Florida Citrus Pest Management Guide: Weeds. Cooperative Extension Service, University of Florida, Institute of Food and Agricultural Sciences.

Heap, I. 2005. International survey of herbicide resistant weeds. Available online: www.weedscience.org

McCloskey W. B. and G.C Wright. 1998. Applying Roundup to the Base of Lemon Tree Canopies: Preliminary Effects on Leaves, Flowers, Fruitlets, and Yield. Citrus and Deciduous Fruit and Nut Research Report

Rector, R. J., W. B McCloskey, G. C. Wright, and C. Sumner. 2003. Citrus Orchard Floor Management 2001-2003: Comparison of a Disk, "Perfecta" Cultivator, and Weed Sensing Sprayer. Citrus Research Report.

Sharma S.D. and M. Singh. 2007. Effect of Timing and Rates of Application of Glyphosate and Carfentrazone Herbicides and Their Mixtures on the Control of Some Broad- leaf Weeds. HortScience, Vol. 42, No. 5, 2007, pp. 1221-1226.

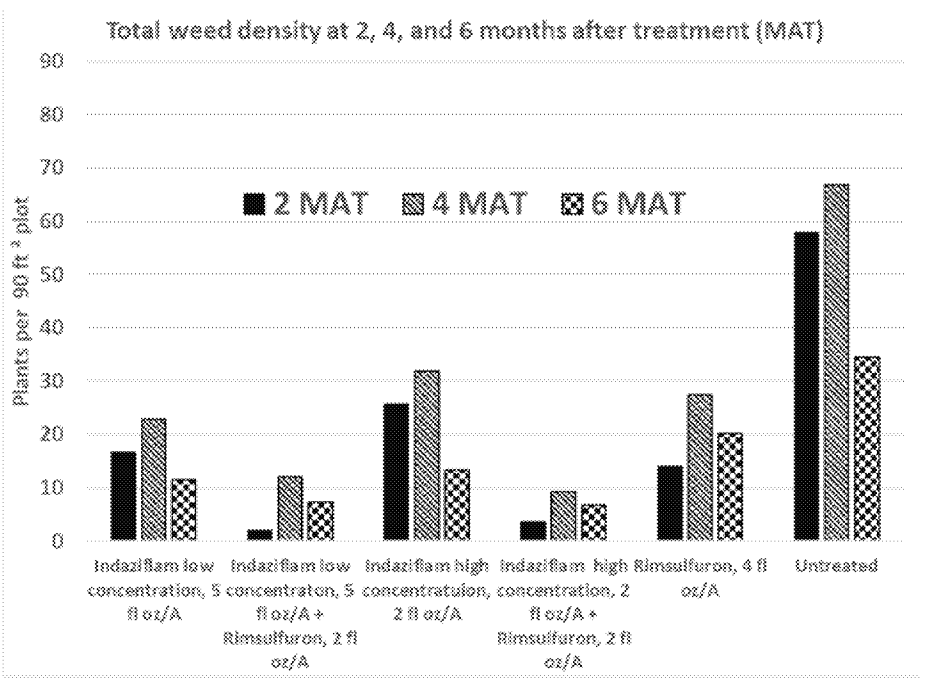


Figure 4. Total weed density per 90 ft² plot at two, four, and six months after treatment (MAT).

Message

From: Steven Callen [steven.callen@bayer.com]
Sent: 10/14/2020 7:59:16 PM
To: Meadows, Sarah [Meadows.Sarah@epa.gov]; Thomas Orr [thomas.orr@bayer.com]; Thomas Marvin [thomas.marvin@bayer.com]
CC: Schmid, Emily [Schmid.Emily@epa.gov]; Crawford, Lydia [Crawford.Lydia@epa.gov]; Hathaway, Margaret [Hathaway.Margaret@epa.gov]; Kenny, Daniel [Kenny.Dan@epa.gov]; BCSReg_Archive [esepamailbox@bayer.com]
Subject: RE: Xtendimax Proposed Labeling
Attachments: MASTER LABEL_XtendiMax_264-RERN_20201014.pdf

Hi Sarah,

Apologies for a bit of a delay, but we were making some final edits. While certain additional, minor refinements may be necessary before finalization, attached is Bayer's most up-to-date proposed XtendiMax label.

Thanks,
Steven

From: Meadows, Sarah <Meadows.Sarah@epa.gov>
Sent: Wednesday, October 14, 2020 2:19 PM
To: Thomas Orr <thomas.orr@bayer.com>; Steven Callen <steven.callen@bayer.com>; Thomas Marvin <thomas.marvin@bayer.com>
Cc: Schmid, Emily <Schmid.Emily@epa.gov>; Crawford, Lydia <Crawford.Lydia@epa.gov>; Hathaway, Margaret <Hathaway.Margaret@epa.gov>; Kenny, Daniel <Kenny.Dan@epa.gov>
Subject: RE: Xtendimax Proposed Labeling

Hi, all. I'm reaching out again for a copy of the new proposed Xtendimax label. Please send us an updated copy ASAP.

Thanks,

Sarah

From: Meadows, Sarah
Sent: Tuesday, October 13, 2020 9:29 AM
To: ORR, THOMAS B [AG/1005] <thomas.b.orr@monsanto.com>; Steven Callen <steven.callen@bayer.com>; MARVIN, THOMAS [AG/1920] <thomas.marvin@bayer.com>
Cc: Schmid, Emily <Schmid.Emily@epa.gov>; Crawford, Lydia <Crawford.Lydia@epa.gov>; Hathaway, Margaret <Hathaway.Margaret@epa.gov>; Kenny, Daniel <Kenny.Dan@epa.gov>
Subject: Xtendimax Proposed Labeling

Hi, all. Please send us a clean copy of your most up-to-date proposed Xtendimax label. I know there may be some things to still discuss and finalize, but we'd like to have a fresh copy to review ASAP.

Thanks,

Sarah

Sarah True Meadows, PhD
US Environmental Protection Agency
Office of Pesticide Programs
Registration Division – Herbicide Branch
(703) 347-0505
meadows.sarah@epa.gov

RESTRICTED USE PESTICIDE
Only for retail sale to and use by Certified Applicators

This labeling expires on XX/XX/2025. DO NOT use or distribute this product after XX/XX/2025.

DICAMBA	GROUP	4	HERBICIDE

XtendiMax® With VaporGrip® Technology

ABN: M1768 Herbicide

For weed control in cotton with XtendFlex® Technology and soybean with Roundup Ready 2 Xtend® Technology or XtendFlex® Technology.

XtendiMax® With VaporGrip® Technology is approved by U.S. EPA for use in these dicamba-tolerant crops only in the following states, subject to county restrictions as noted: Alabama, Arkansas, Arizona, Colorado, Delaware, Florida (excluding Palm Beach County), Georgia, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maryland, Michigan, Minnesota, Mississippi, Missouri, Nebraska, New Jersey, New Mexico, New York, North Carolina, North Dakota, Oklahoma, Ohio, Pennsylvania, South Carolina, South Dakota, Tennessee (excluding Wilson County), Texas, Virginia, West Virginia, Wisconsin.

Check the registration status of each product in each state before using.

ACTIVE INGREDIENT: Dicamba
Diglycolamine salt of dicamba (3,6-dichloro-*o*-anisic acid)* **42.80%**
OTHER INGREDIENTS: **57.20%**
TOTAL: **100.00%**
*Contains 29.0% 3,6-dichloro-*o*-anisic acid (2.9 pounds acid equivalent per U.S. gallon or 350 grams per liter)

EPA Reg. No. 264-RERN **EPA Est. No.**

CAUTION
KEEP OUT OF REACH OF CHILDREN

For MEDICAL and TRANSPORTATION Emergencies ONLY Call 24 Hours a Day 1-800-334-7577

For PRODUCT USE Information Call 1-866-99BAYER (1-866-992-2937)

For Incidence of Non-performance or Off-Target Movement or for Questions Regarding Buffer Requirements or Sensitive Crop Registries Call 1-844-RRXTEND (1-844-779-8363)

Please refer to [back panel] [booklet] for additional precautionary statements and directions for use. [Note to reviewer: Location of additional precautionary statements and directions for use will vary between those listed, depending on container type/size.]

Net Contents:

FIRST AID	
IF IN EYES:	• Hold eye open and rinse slowly and gently with water for 15 to 20 minutes. • Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. • Call a poison control center or doctor for treatment advice.

IF SWALLOWED:	• Call a poison control center or doctor immediately for treatment advice. • Have person sip a glass of water if able to swallow. • DO NOT induce vomiting unless told to do so by a poison control center or doctor. • DO NOT give anything by mouth to an unconscious person.
IF ON SKIN OR CLOTHING:	• Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15 to 20 minutes. • Call a poison control center or doctor for treatment advice.
In case of emergency, call the toll-free Bayer Emergency Response telephone number: 1-800-334-7577. Have the product container or label with you when calling a poison control center or doctor or when going for treatment.	

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION

- Causes moderate eye irritation.
- Avoid contact with eyes or clothing.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

All mixers, loaders, applicators, and other handlers must wear:

- Long-sleeved shirt and long pants
- Waterproof gloves
- Shoes plus socks

Follow the manufacturer's instructions for cleaning and maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

ENGINEERING CONTROLS

When handlers use closed systems, or enclosed cabs in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240 (d) (4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

IMPORTANT: When reduced PPE is worn because a closed system is being used, handlers must be provided all PPE specified above for "all mixers, loaders, applicators, and other handlers" and have such PPE immediately available for use in an emergency, such as a spill or equipment breakdown.

USER SAFETY RECOMMENDATIONS

User should:

- Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet.
- Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

ENVIRONMENTAL HAZARDS

DO NOT apply directly to water, or to areas where surface water is present, or to intertidal areas below the mean high-water mark. DO NOT contaminate water when disposing of equipment washwaters or rinsate. Apply this product only as directed on the label.

Ground Water Advisory: This chemical is known to leach through soil into ground water under certain conditions as a result of agricultural use. Use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in ground water contamination.

GROUND AND SURFACE WATER PROTECTION

Point source contamination: To prevent point source contamination, DO NOT mix or load this pesticide product within 50 feet of wells (including abandoned wells and drainage wells), sink holes, perennial or intermittent streams and rivers, and natural or impounded lakes and reservoirs. DO NOT apply pesticide product within 50 feet of wells. This setback does not apply to properly capped or plugged abandoned wells and does not apply to impervious pad or properly diked mixing/loading areas as described below.

Mixing, loading, rinsing, or washing operations performed within 50 feet of a well are allowed only when conducted on an impervious pad constructed to withstand the weight of the heaviest load that may be on or move across the pad. The pad must be self-contained to prevent surface water flow over or from the pad. The pad capacity must be maintained at 110% that of the largest pesticide container or application equipment used on the pad and have sufficient capacity to contain all product spills, equipment or container leaks, equipment washwaters, and rainwater that may fall on the pad. The containment capacity does not apply to vehicles delivering pesticide shipments to the mixing/loading site. States may have in effect additional requirements regarding wellhead setbacks and operational containment.

Care must be taken when using this product to prevent: a) back siphoning into wells, b) spills, or c) improper disposal of excess pesticide, spray mixtures, or rinsates. Check valves or anti-siphoning devices must be used on all mixing equipment.

Movement by surface runoff or through soil: DO NOT apply if soil is saturated with water or when rainfall that may exceed soil field capacity is forecasted to occur within 48 hours.

Under some conditions, dicamba has the potential for runoff several days after application. Poorly draining, wet, or erodible soils with readily visible slopes toward adjacent sensitive areas are more prone to produce runoff. When used on erodible soils, best management practices for minimizing runoff should be employed. Consult your local Soil Conservation Service for recommendations in your use area.

Ground water contamination may occur in areas where soils are permeable or coarse and ground water is near the surface. DO NOT apply to impervious substrates such as paved or highly compacted surfaces in areas with high potential for ground water contamination. DO NOT apply to soils classified as sand with less than 3% organic matter and where ground water depth is shallow.

Movement by water erosion of treated soil: DO NOT apply or incorporate this product through any type of irrigation equipment nor by flood or furrow irrigation. Ensure treated areas have received at least one-half inch rainfall (or irrigation) before using tailwater for subsequent irrigation of other fields.

PROTECTING ENDANGERED SPECIES / PESTICIDE USE LIMITATION AREAS

Use of this product in a manner inconsistent with its labeling may pose a hazard to endangered or threatened species. When using this product, you must follow the measures contained in the Endangered Species Protection Bulletin for the area in which you are applying the product. To obtain Bulletins, no more than six months before using this product, consult https://www.epa.gov/endangered-species/bulletins-live-two-view-bulletins or call 1-844-447-3813. You must use the Bulletin valid for the month in which you will apply the product.

It is a Federal offense to use any pesticide in a manner that results in the death of an endangered species.

PHYSICAL OR CHEMICAL HAZARDS

DO NOT store or heat near oxidizing agents as a hazardous chemical reaction may occur.

DIRECTIONS FOR USE

RESTRICTED USE PESTICIDE

It is a violation of Federal law to use this product in any manner inconsistent with its labeling. This labeling must be in the user's possession during application. Read the entire label before using this product.

DO NOT apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

For important crop safety information, refer to the Use Directions section under the specific crop.

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. This standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses and of handlers of agricultural pesticides. It contains requirements for training, decontamination, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about Personal Protective Equipment (PPE), notification to workers, and restricted-entry intervals. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

DO NOT enter or allow worker entry into treated areas during the restricted-entry interval **(REI) of 24 hours.**

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water is:

- Coveralls worn over short-sleeved shirt and short pants
- Chemical-resistant footwear plus socks
- Waterproof gloves
- Chemical-resistant headgear for overhead exposure
- Protective eyewear

NON-AGRICULTURAL USE REQUIREMENTS

The requirements in this box apply to uses of this product that are NOT within the scope of the Worker Protection Standard for agricultural pesticides (40 CFR Part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries, or greenhouses.

DO NOT enter or allow people (or pets) to enter the treated area until sprays have dried.

PRODUCT INFORMATION

XtendiMax® With VaporGrip® Technology is:

- a water-soluble formulation intended for control and suppression of many annual, biennial, and perennial broadleaf weeds listed in the Weeds Controlled section of this label. This product may be used for control of these weeds in cotton with XtendFlex® Technology and soybean with Roundup Ready 2 Xtend® Technology or XtendFlex® Technology.
- a contact, systemic herbicide, with limited soil activity on small seeded broadleaf weeds, including waterhemp, lambsquarters, and Palmer pigweed, depending on rainfall and soil type.
- readily absorbed by plants through shoot and root uptake, translocates throughout the plant's system, and accumulates in areas of active growth. XtendiMax® With VaporGrip® Technology interferes with plant growth hormones (auxins) resulting in death of many broadleaf weeds.

Additional state restrictions and requirements may apply. The applicator must comply with any additional state requirements and restrictions.

Refer to the specific use directions and restrictions in each Crop, Crop Group, or Crop Subgroup table. Follow all requirements and restrictions on www.xtendimaxapplicationrequirements.com.

APPLICATION REQUIREMENTS OVERVIEW

Read and follow all applicable restrictions, precautions, and directions on the container label and booklet and at www.xtendimaxapplicationrequirements.com. For product questions or inquiries and/or to report any nonperformance of this product against any particular weed species, call 1-844-RRXTEND (1-844-779-8363). It is recommended that the certified applicator visit www.xtendimaxapplicationrequirements.com to obtain a copy of the Summary of Application Requirements for reference prior to and during application.

REQUIREMENTS	LABEL SECTIONS
Mandatory Training: ☐ Prior to applying, applicator must complete dicamba or auxin-specific training. Only certified applicators may apply this product.	➢ Training (p. 5)
Record Keeping: ☐ Certified applicators must keep records for a period of two years.	➢ Record Keeping (p. 6)
Application: ☐ For EVERY application of XtendiMax® With VaporGrip® Technology, both an approved **Drift Reduction Adjuvant (DRA)** and **Volatility Reduction Adjuvant (VRA)** must be included in the spray solution. Refer to www.xtendimaxapplicationrequirements.com for a list of approved DRAs and VRAs. ☐ *Rate and Timing*: Apply 22 fluid ounces per acre (0.5 lb. a.e. dicamba) for any single pre-emergent or in-crop application in: ○ Cotton with XtendFlex® Technology up to and including July 30, and ○ Soybean with Roundup Ready 2 Xtend® Technology or XtendFlex® Technology up to and including June 30 or R1 growth stage, whichever comes first. ○ For details and other crop uses, see Specific Use Directions. ☐ *Spray volume:* Apply in a minimum of 15 gallons of spray solution per acre. ☐ *Tank mixing*: Use only approved tank-mix partners found at www.xtendimaxapplicationrequirements.com. ○ Refer to all product labels to determine mix order or perform a mix compatibility test.	➢ Tank Mix Partners and Compatibility Testing (p. 9) ➢ Specific Use Directions (pp. 12-14) ➢ Specific Use Directions (pp. 12-14) ➢ Tank Mix Partners and Compatibility Testing (p. 9)

Application Equipment: ☐ *Spray system equipment cleanout*: Ensure entire sprayer system is properly cleaned before and after application. ☐ *Nozzles*: Use only approved nozzles within specified pressures found at www.xtendimaxapplicationrequirements.com. ☐ *Spray boom height*: Maximum boom height is 24 inches above target pest or crop canopy. ☐ *Ground speed*: DO NOT exceed 15 mph.	➢ Equipment Requirements (p. 7)
Environmental Conditions: ☐ *Wind speed*: Apply when wind speed, measured at boom height, is 3-10 mph when using broadcast open-boom equipment. ☐ *Inversions*: DO NOT spray during an inversion; only spray between one hour after sunrise and two hours before sunset when using broadcast open-boom equipment. ☐ *Temperature/humidity*: When making applications in hot and dry conditions, use larger droplets to reduce effects of evaporation. ☐ *Rainfall*: DO NOT apply this product if rain that may exceed soil field capacity and result in soil runoff is forecasted in the next 48 hours.	➢ Environmental Requirements (p. 7)
Downwind Requirements: ☐ *Sensitive crops and certain plants downwind*: DO NOT apply if sensitive crops and/or certain plants, as defined below in this label, are planted on an adjacent downwind field or area when using broadcast open-boom equipment. ☐ *Downwind buffer*: After determining no adjacent sensitive crops and/or certain plants are downwind, maintain a 240-ft downwind buffer when applying with broadcast open-boom equipment.	➢ Adjacent Sensitive Crops and Certain Plants (p. 8) ➢ Buffer Requirements (p. 8)
Drift Reduction Technology: ☐ See Optional Use of Drift Reduction Technology section for details on application requirements and the potential to qualify for reduced use restrictions.	➢ Optional Use of Drift Reduction Technology (p. 8)

USE RESTRICTIONS

- DO NOT USE ANY TANK MIX PRODUCT OR ANY NOZZLE AND PRESSURE COMBINATION WITH XTENDIMAX® WITH VAPORGRIP® TECHNOLOGY THAT IS NOT IDENTIFIED ON THE LIST OF APPROVED PRODUCTS FOUND AT www.xtendimaxapplicationrequirements.com.
- DO NOT TANK MIX AMMONIUM SULFATE (AMS) WITH THIS PRODUCT.
- DO NOT EXCEED 88 FLUID OUNCES (2 POUNDS ACID EQUIVALENT (A.E.) DICAMBA) OF XTENDIMAX® WITH VAPORGRIP® TECHNOLOGY PER ACRE PER YEAR.
- DO NOT EXCEED 88 FLUID OUNCES (2 POUNDS A.E. DICAMBA) PER ACRE PER YEAR FROM ALL DICAMBA APPLICATIONS IF MORE THAN ONE DICAMBA-CONTAINING PRODUCT IS APPLIED TO THE SAME SITE WITHIN THE SAME YEAR.
- DO NOT MAKE APPLICATION OF THIS PRODUCT IF RAIN IS EXPECTED IN THE NEXT 48 HOURS THAT MAY EXCEED SOIL FIELD CAPACITY AND RESULT IN SOIL RUNOFF.
- DO NOT APPLY THROUGH ANY TYPE OF IRRIGATION EQUIPMENT. DO NOT TREAT IRRIGATION DITCHES OR WATER USED FOR CROP IRRIGATION OR DOMESTIC PURPOSES.
- DO NOT APPLY TO CROPS UNDER STRESS DUE TO LACK OF MOISTURE, HAIL DAMAGE, FLOODING, HERBICIDE INJURY, MECHANICAL INJURY, INSECTS, OR WIDELY FLUCTUATING TEMPERATURES AS INJURY MAY RESULT.
- DO NOT APPLY THIS PRODUCT IF SENSITIVE CROPS AND CERTAIN PLANTS ARE PLANTED ON AN ADJACENT DOWNWIND FIELD OR AREA.
- DO NOT APPLY THIS PRODUCT AERIALLY.
- Restricted Entry Interval (REI): 24 hours.

USE PRECAUTIONS

- In case material is released or spilled: dike and contain the spill with inert material (sand, earth, etc.) and transfer liquid and solid diking material to separate containers for disposal. Remove contaminated clothing and wash affected skin areas with soap and water. Wash clothing before re-use. Keep the spill out of all sewers and open bodies of water.
- Rainfast period: Rainfall or irrigation occurring within 4 hours after postemergence applications may reduce the effectiveness of this product.

TRAINING

Prior to applying this product, dicamba- or auxin-specific training must be completed to obtain certification. Once completed, dicamba- or auxin-specific training is then required every other year for all applicators of this product. If state-specific training is required by the state where the applicator intends to apply this product, the applicator must complete training from the state or state-authorized provider. Otherwise, the applicator may complete dicamba- or auxin-specific training provided either by the state/state-authorized provider or by a registrant of a dicamba product approved for in-crop use with dicamba-tolerant crops.

RECORD KEEPING

The following records must be generated as soon as practical but **no later than 72 hours after application**. The certified applicator must keep these records for a period of **two years**. Records must be made available to State Pesticide Control Official(s), USDA, and EPA upon request. See www.xtendimaxapplicationrequirements.com for an example form summarizing record keeping requirements.

Keep records of the following items for each application of XtendiMax® With VaporGrip® Technology:

1. All Items required by 7 CFR Part 110 (RECORDKEEPING ON RESTRICTED USE PESTICIDES BY CERTIFIED APPLICATORS), including:
    a. The brand or product name
    b. The EPA registration number
    c. The total amount applied
    d. The month, day, and year of application
    e. The location of the application
    f. The crop, commodity, stored product, or site of application
    g. The size of treated area
    h. The name of the certified applicator
    i. The certification number of the certified applicator
2. *Training*: Completion date and provider of required training and proof of completion.
3. *Receipts of Purchase*: Receipts or copies for the purchase of this product.
4. *Product Label*: A copy of this product label and any state special local needs label that supplements this label.
5. *Crop Planting Date*: Record of the date at which the crop was planted.
6. *Sensitive Crops and Certain Plants Awareness*:
    a. Document that a sensitive crop registry was consulted. At a minimum, documentation must include the name of the sensitive crop registry and the date it was consulted.
    b. Record of a survey of adjacent areas documenting the sensitive crops and/or certain plants (as defined below in this label) surrounding the field prior to application. At a minimum, records must include documentation of adjacent sensitive crops and/or certain plants and the date the survey was conducted.
7. *Buffer Requirement*: Record of the buffer distance calculation and any areas included within the buffer distance calculations as allowed in the Spray Drift Management and Optional Use of Drift Reduction Technology sections of this label.
8. *Start and Finish Times of Each Application*: Record of the time at which the application started and finished.
9. *Application Timing*: Record of the type of application (for example: preemergence, postemergence) and the number of days after planting if postemergence.
10. *Air Temperature*: Record of the air temperature in degrees Fahrenheit at the start and completion of each application.
11. *Wind Speed and Direction*: Record of the wind speed and direction (the direction from which the wind is blowing) at boom height at the start and completion of each application.
12. *Nozzle and Pressure*: Record of the spray nozzle manufacturer/brand, type, orifice size, and operating pressure used during each application of this product.
13. *Tank Mix Products*: Record of the brand names and EPA registration numbers (if applicable) for all products that were tank mixed with this product for each application.
14. *Mandatory Drift and Volatility Reduction Adjuvants*: Receipts or copies for the purchase of both an approved DRA and VRA, as well as a record of the volume of each added to the tank prior to application.
15. *Spray System Cleanout*: At a minimum, records must include confirmation that the spray system was clean before using this product and that the post-application cleanout was completed in accordance with the Proper Spray System Equipment Cleanout section of this label.

HERBICIDE RESISTANCE MANAGEMENT RECOMMENDATIONS

The dicamba active ingredient in XtendiMax® With VaporGrip® Technology is a Group 4 herbicide. Any weed population may contain or develop plants naturally resistant to XtendiMax® With VaporGrip® Technology and other Group 4 herbicides. The resistant biotypes may dominate the weed population if these herbicides are used repeatedly in the same field. Appropriate resistance management strategies should be followed.

To delay herbicide resistance, take one or more of the following steps:

- Limit cultivation and/or mechanical tillage within 7 days after application, as this may result in reduced efficacy and promote regrowth of treated weeds.
- Rotate the use of XtendiMax® With VaporGrip® Technology or other Group 4 herbicides within a growing season sequence or among growing seasons with different herbicide groups that control the same weeds in a field.
- Use tank mixtures with herbicides from a different herbicide Group if such use is permitted.
- Adopt an integrated weed-management program for herbicide use that includes scouting and uses historical information related to herbicide use and crop rotation and that considers tillage (or other mechanical control methods), cultural (*e.g.*, higher crop seeding rates; precision fertilizer application method and timing to favor the crop and not the weeds), biological (weed-competitive crops or varieties), and other management practices.
- Scout after herbicide application to monitor weed populations for early signs of resistance development. Indicators of possible herbicide resistance include: (1) failure to control a weed species normally controlled by the herbicide at the dose applied, especially if control is achieved on adjacent weeds; (2) a spreading patch of non-controlled plants of a particular weed species; (3) surviving plants mixed with controlled individuals of the same species. If resistance is suspected, prevent weed seed production in the affected area by an alternative herbicide from a different group or by a mechanical method such as hoeing or tillage. Prevent movement of resistant weed seeds to other fields by cleaning harvesting and tillage equipment when moving between fields and by planting clean seed.

- If a weed pest population continues to progress after treatment with this product, switch to another management strategy or herbicide with an effective mode of action, if available, and contact Bayer at 1-844-RRXTEND (1-844-779-8363).
- Contact your local extension specialist or certified crop advisors for additional pesticide resistance-management and/or integrated weed-management recommendations for specific crops and weed biotypes.
- For further information or to report suspected resistance contact Bayer at 1-844-RRXTEND (1-844-779-8363).

Management of Dicamba-Resistant Biotypes

Appropriate testing is critical in order to determine if a weed is resistant to dicamba. Contact your Bayer representative to determine if resistance in any particular weed biotype has been confirmed in your area or visit www.iwilltakeaction.com or www.weedscience.org.

Bayer is not responsible for any losses that result from the failure of this product to control dicamba-resistant weed biotypes.

The following good agronomic practices can reduce the spread of confirmed dicamba-resistant biotypes:

- If a naturally occurring resistant biotype is present in your field, this product may be tank mixed or applied sequentially with an appropriately labeled herbicide with a different mode of action to achieve control (read Tank Mixing section for more information).
- Cultural and mechanical control practices (*e.g.*, crop rotation or tillage) can also be used as appropriate.
- Scout treated fields after herbicide application and control weed escapes, including resistant biotypes, before they set seed.
- Thoroughly clean equipment, as practical, for all weed seeds before leaving fields known to contain resistant biotypes.

SPRAY DRIFT MANAGEMENT

THE APPLICATOR IS RESPONSIBLE FOR AVOIDING OFF-SITE SPRAY DRIFT. The applicator is responsible for compliance with state and local pesticide regulations, including any state or local pesticide drift regulations.

Applications using larger droplets reduces drift potential but will not prevent drift if the application is made improperly or under unfavorable environmental conditions. The interaction of weather-related factors and equipment must be monitored to maximize performance and on-target spray deposition. The applicator is responsible for considering all these factors when making a spray decision. BE AWARE OF NEARBY NON-TARGET SITES AND CHANGING ENVIRONMENTAL CONDITIONS.

Environmental Requirements

Wind Speed

Wind speed must be measured in the field of application at boom height prior to and after application.

Only apply when wind speed at boom height is between 3 MPH and 10 MPH during application.

Temperature Inversions

DO NOT apply this product during a temperature inversion as the off-target movement potential is high.

Applications of this product may ONLY occur one hour after sunrise through two hours before sunset. In general, temperature inversions are more likely during nighttime hours.

- Temperature inversions are characterized by increasing temperature with altitude and are common on nights with limited cloud cover and light to no wind.
- The presence of an inversion can be indicated by ground fog or by the movement of smoke from a ground source or an aircraft smoke generator. Smoke that layers and moves laterally in a concentrated cloud (under low wind conditions) indicates an inversion, while smoke that moves upward and rapidly dissipates indicates good vertical air mixing.

Temperature and Humidity

When making applications in hot and dry conditions, use larger droplets to reduce effects of evaporation (for example: increase orifice size and/or increase spray volume as directed on www.xtendimaxapplicationrequirements.com).

Equipment Requirements

Nozzle Type

To produce minimal amounts of fine spray particles, the applicator must use an approved nozzle within a specified pressure range as found at www.xtendimaxapplicationrequirements.com.

Equipment Ground Speed

DO NOT exceed a ground speed of 15 miles per hour. Select a ground speed that will deliver the desired spray volume while maintaining the desired spray pressure. Slower speeds generally result in better spray coverage and deposition on the target area. Provided the applicator can maintain the required nozzle pressure, it is recommended that tractor speed is reduced to 5 miles per hour at field edges.

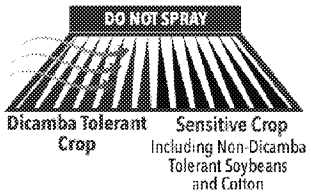
Spray Boom Height

Maximum boom height is 24 inches above target pest or crop canopy.

Adjacent Sensitive Crops and Certain Plants

DO NOT SPRAY this product when wind is blowing toward adjacent sensitive crops and certain plants, as defined immediately below.

It is important for the applicator to be aware that wind direction may vary during the application. If wind direction shifts such that the wind is blowing toward adjacent sensitive crops and/or certain plants, the applicator **must STOP** the application.



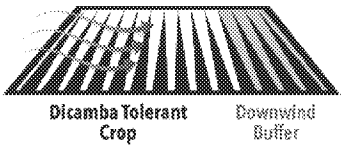
Before making an application, 1) consult a sensitive crop registry (such as FieldWatch or state/federal registry), 2) survey adjacent fields and areas, and 3) confirm the type or variety of plants and crops surrounding the field prior to application. At a minimum, records must include the name of the sensitive crop registry, the date it was consulted, documentation of adjacent plants and crops/areas surrounding the field of application, and the date the survey was conducted.

Dicamba-sensitive crops and/or certain plants include, but are not limited to, non-dicamba-tolerant soybeans and cotton, tomatoes and other fruiting vegetables (EPA crop group 8), fruit trees, cucurbits (EPA crop group 9), grapes, beans, flowers, ornamentals, peas, potatoes, sunflower, tobacco, and other broadleaf plants, including if these plants are in a greenhouse. Severe injury or destruction could occur if any contact between this product and these plants occurs.

If you have questions regarding sensitive crop registries contact Bayer at 1-844-RRXTEND (1-844-779-8363) **prior to application**.

Buffer Requirements

After determining no adjacent sensitive crops and/or certain plants are downwind, the applicator must always maintain a 240-foot downwind buffer between the last treated row and the nearest downwind field edge when applying using broadcast open-boom equipment. For reduced downwind buffer distances, refer to Optional Use of Drift Reduction Technology section of this label.



The following areas may be included in the buffer distance calculation when directly adjacent to the treated field edges:

- Roads, paved or gravel surfaces, mowed and/or managed areas adjacent to field such as rights of way
- Planted agricultural fields containing: corn, dicamba-tolerant cotton, dicamba-tolerant soybean, sorghum, proso millet, small grains, or sugarcane. If the applicator intends to include such crops as dicamba-tolerant cotton and/or dicamba-tolerant soybeans in the buffer distance calculation, the applicator must confirm the crops are in fact dicamba-tolerant.
- Agricultural fields that have been prepared for planting
- Areas covered by the footprint of a building, silo, or other man-made structure with walls and/or roof

If you have questions regarding Buffer Requirement, contact Bayer at 1-844-RRXTEND (1-844-779-8363) **prior to application**.

Optional Use of Drift Reduction Technology

This product may be optionally applied using hooded/shielded broadcast, hooded/shielded in-row, or directed layby equipment for postemergence weed control as well as residual control of susceptible weeds. The applicator must use an approved nozzle within a specified pressure range as found at www.xtendimaxapplicationrequirements.com. Using a hooded sprayer or other drift reduction technology (DRT) in combination with approved nozzles is recommended to further reduce drift potential. Applications of this product may qualify for reduced use restrictions, such as a reduced buffer distance, provided a **qualified DRT** listed on www.xtendimaxapplicationrequirements.com is used.

Hooded/Shielded Broadcast Sprayer:

For hooded/shielded sprayers, all application nozzles must be contained within the enclosed area. Shielding the boom or individual nozzles can reduce the effects of wind. However, it is the responsibility of the applicator to verify that the shields are preventing drift and not interfering with uniform deposition of the product. Applicators must ensure the sprayer system is off or controlled during turns to further prevent spray drift. Refer to the hooded/shielded sprayer manufacturer use specifications prior to use.

If using a **qualified** hooded/shielded sprayer listed on www.xtendimaxapplicationrequirements.com, the following apply:

- *Reduced Buffer Distance*: The applicator must always maintain a [minimum 30-foot] downwind buffer between the last treated row and the nearest downwind field edge.
- *Adjacent Sensitive Crops and Certain Plants*: The applicator must utilize the [minimum 30-foot] downwind buffer between the last treated row and the nearest downwind field edge.

TANK MIX PARTNERS AND COMPATIBILITY TESTING

Tank Mixing

All applications of this product require the inclusion of both a drift reduction adjuvant (DRA) and a volatility reduction adjuvant (VRA), such as a VaporGrip® Xtra Agent product or an approved VRA equivalent, in the tank mix. Only tank mix products that have been tested and found to not adversely affect the offsite movement potential of XtendiMax® With VaporGrip® Technology may be tank mixed with XtendiMax® With VaporGrip® Technology. The applicator must check the website found at www.xtendimaxapplicationrequirements.com for a list of approved tank mix products no more than 7 days before applying XtendiMax® With VaporGrip® Technology.

Compatibility

XtendiMax® With VaporGrip® Technology is physically and biologically compatible with many registered pesticides, fertilizers, micronutrients, and spray adjuvants. However, as many components, may be present in a tank mix combination, there is potential for adverse chemical reactions. It is impossible to determine physical, biological, and plant compatibility for all scenarios that may be encountered; therefore, it is recommended that users determine the chemical, physical, biological, and plant compatibility of such mixes prior to application on a broad commercial scale.

NOTE: DO NOT use PVA (polyvinyl acetate) packets in a tank mix with products that contain boron or release free chlorine. The resultant reaction of PVA and boron or free chlorine is a plastic that is not soluble in water or solvents.

APPLICATION INSTRUCTIONS

APPLY THIS PRODUCT USING PROPERLY MAINTAINED AND CALIBRATED EQUIPMENT CAPABLE OF DELIVERING THE REQUIRED VOLUMES.

XtendiMax® With VaporGrip® Technology can be applied to actively growing weeds as broadcast, band, or spot spray applications using water as a carrier. For best results, treat weeds early when they are relatively small (less than 4 inches). Timely application to small weeds early in the season will improve control and reduce weed competition.

Ground Application (Broadcast)

Water Volume: Use a minimum of 15 gallons of spray solution per broadcast acre for optimal performance. Use 20 gallons per acre or greater when treating dense weed canopy/vegetation.

Ground Application (Hooded In-Row and Directed Layby)

When applying XtendiMax® With VaporGrip® Technology by hooded in-row or layby sprayers, determine the amount of herbicide and water volume needed using the following formula:

$$\frac{\text{band width (inches)}}{\text{row width (inches)}} * \text{broadcast rate per acre} = \text{rate per treated acre}$$

$$\frac{\text{band width (inches)}}{\text{row width(inches)}} * \text{broadcast spray volume per acre} = \text{spray volume per treated acre}$$

SPRAY SYSTEM EQUIPMENT CLEANOUT

You must ensure that the spray system used to apply this product is clean before using this product. Failure to properly clean the entire spray system can result in inadvertent contamination of the spray system. Contamination of the spray system may cause injury to non-dicamba-tolerant soybeans and other sensitive crops.

Inadvertent contamination can also occur in equipment used for bulk product handling and mixing prior to use in the spray system. Care should be taken to reduce contamination not only in the spray system but in any equipment used to transfer or deliver product. For example, bulk handling and mixing equipment containing this product should be segregated when possible to reduce potential for cross-contamination. Consider using block and check valves to avoid backflow during transfer. Piping should be reviewed to ensure there is not potential for product build-up. Dedicated nurse trucks and tender equipment should be used when possible.

Clean equipment **immediately after using** this product, using a **triple rinse** procedure as follows:

1. After spraying, drain the sprayer (including boom and lines) immediately. DO NOT allow the spray solution to remain in the spray boom lines overnight prior to flushing.
2. Flush tank, hoses, boom, and nozzles with clean water. If equipped, open boom ends and flush.
3. Inspect and clean all strainers, screens, and filters.
4. Prepare a cleaning solution with a commercial detergent or sprayer cleaner or ammonia according to the manufacturer's directions.
5. Take care to wash all parts of the tank, including the inside top surface. Start agitation in the sprayer and thoroughly recirculate the cleaning solution for at least 15 minutes. All visible deposits must be removed from the spraying system.
6. Flush hoses, spray lines, and nozzles for at least 1 minute with the cleaning solution.
7. Remove nozzles, screens, and strainers and clean separately in the cleaning solution after completing the above procedures.
8. Drain pump, filter, and lines.
9. Rinse the complete spraying system with clean water.
10. Clean and wash off the outside of the entire sprayer and boom.
11. All rinse water must be disposed of in compliance with local, state, and federal guidelines.

ROTATIONAL CROPS

When counting days from the application of this product, do not count days when the ground is frozen. Moisture is essential for the degradation of this herbicide in soil. If dry weather prevails, use cultivation to allow herbicide contact with moist soil.

No rotational cropping restrictions apply when rotating to soybean with Roundup Ready 2 Xtend® Technology or XtendFlex® Technology or to cotton seed with XtendFlex® Technology (including Bollgard® 3 XtendFlex® Cotton, Bollgard II® XtendFlex® Cotton, or XtendFlex® Cotton). For other crops, the interval between application and planting rotational crop is given below. Planting at intervals less than specified below may result in crop injury.

For application rates of this product of **22 fluid ounces per acre per season:**

- No planting restrictions apply beyond 120 days after application.
- East of the Mississippi River:
  - Wait a minimum of 30 days for 22 fluid ounces applied per acre before planting.
- West of the Mississippi River:
  - Wait a minimum of 45 days for 22 fluid ounces applied per acre before planting.
  - In areas with less than 30 inches of annual rainfall wait a minimum of 100 days before planting (furrow and/or overhead irrigation can be included in rainfall determination).

For application rates of this product of **44 to 88 fluid ounces per acre per season:**

- In areas with less than 30 inches of annual rainfall:
  - Wait a minimum of 180 days before planting crops (furrow and/or overhead irrigation can be included in rainfall determination).
- In areas with 30 inches or more annual rainfall:
  - Wait a minimum of 120 days after application before planting.

WEEDS CONTROLLED OR SUPPRESSED

General Weed List, Including ALS-, Glyphosate-, and Triazine-Resistant Biotypes

ANNUAL WEEDS		
Alkanet	Flixweed	Pusley, Florida
Amaranth, Palmer, Powell, Spiny	Fumitory	Radish, Wild
Aster, Slender	Goosefoot, Nettleleaf	Ragweed, Common, Giant (Buffaloweed), Lance-Leaf
Bedstraw, Catchweed	Hempnettle	Rocket, London, Yellow
Beggarweed, Florida	Henbit	Rubberweed, Bitter (Bitterweed)
Broomweed, Common	Jacobs-Ladder	Salsify
Buckwheat, Tartary, Wild	Jimsonweed	Senna, Coffee
Buffalobur	Knawel (German Moss)	Sesbania, Hemp
Burclover, California	Knotweed, Prostrate	Shepherdpurse
Burcucumber	Kochia	Sicklepod
Buttercup, Corn, Creeping, Roughseed, Western Field	Ladysthumb	Sida, Prickly (Teaweed)
Carpetweed	Lambsquarters Common	Smartweed, Green, Pennsylvania
Catchfly, Nightflowering	Lettuce, Miners, Prickly	Sneezeweed, Bitter
Chamomile, Corn	Mallow, Common, Venice	Sowthistle, Annual, Spiny
Chevil, Bur	Marestail (Horseweed)	Spanish Needles
Chickweed, Common	Mayweed	Spikeweed, Common
Clovers	Morningglory, Ivyleaf, Tall	Spurge, Prostrate, Leafy
Cockle, Corn, Cow, White	Mustard, Black, Blue, Tansy, Treacle, Tumble, Wild, Yellowtops	Spurry, Corn
Cocklebur, Common	Nightshade, Black, Cutleaf	Starbur, Bristly
Copperleaf, Hophornbeam	Pennycress, Field (Fanweed, Frenchweed, Stinkweed)	Starwort, Little
Cornflower (Bachelor Button)	Pepperweed, Virginia (Peppergrass)	Sumpweed, Rough
Croton, Tropic, Woolly	Pigweed, Prostrate, Redroot (Carelessweed), Rough, Smooth, Tumble	Sunflower, Common (Wild), Volunteer
Daisy, English	Pineappleweed	Thistle, Russian
Dragonhead, American	Poorjoe	Velvetleaf
Eveningprimrose, Cutleaf	Poppy, Red-horned	Waterhemp, Common, Tall
Falseflax, Smallseed	Puncturevine	Waterprimrose, Winged
Fleabane, Annual	Purslane, Common	Wormwood

BIENNIAL WEEDS		
Burdock, Common	Gromwell	Starthistle, Yellow
Carrot, Wild (Queen Anne's Lace)	Knapweed, Diffuse, Spotted	Sweetclover
Cockle, White	Mallow, Dwarf	Teasel
Eveningprimrose, Common	Plantain, Bracted	Thistle, Bull, Milk, Musk, Plumeless
Geranium, Carolina	Ragwort, Tansy	

PERENNIAL WEEDS		
Alfalfa	Garlic, Wild	Smartweed, Swamp
Artichoke, Jerusalem	Goldenrod, Canada, Missouri	Snakeweed, Broom
Aster, Spiny, Whiteheath	Goldenweed, Common	Sorrel, Red (Sheep Sorrel)
Bedstraw, Smooth	Hawkweed	Sowthistle, Perennial
Bindweed, Field, Hedge	Henbane, Black	Spurge, Leafy
Blueweed, Texas	Horsenettle, Carolina	Sundrops
Bursage, Woollyleaf (Bur Ragweed, Povertyweed)	Ironweed	Thistle, Canada, Scotch
Buttercup, Tall	Knapweed, Black, Diffuse, Russian, Spotted	Toadflex, Dalmatian
Campion, Bladder	Milkweed, Climbing, Common, Honeyvine, Western Whorled	Tropical Soda Apple
Chickweed, Field, Mouseear	Nettle, Stinging	Trumpetcreeper (Buckvine)
Chicory	Nightshade, Silverleaf (White Horsenettle)	Vetch
Clover, Hop	Onion, Wild	Waterhemlock, Spotted
Dandelion, Common	Plantain, Broadleaf, Buckhorn	Waterprimrose, Creeping
Dock Broadleaf (Bitterdock), Curly	Pokeweed	Woodsorrel, Creeping, Yellow
Dogbane, Hemp	Ragweed, Western	Wormwood, Absinth, Louisiana
Dogfennel (Cypressweed)	Redvine	Yankeeweed
Fern, Bracken	Sericia Lespedeza	Yarrow, Common

SPECIFIC USE DIRECTIONS

BETWEEN CROP APPLICATIONS Preplant application (postharvest, fallow, crop stubble, set-aside) for broadleaf weed control only	
Application Rates	• Apply 22 fluid ounces of XtendiMax® With VaporGrip® Technology per acre.
Maximum Rates	• Per treated acre per application: 22 fluid ounces (0.5 lb. a.e. dicamba per acre). • Per treated acre per year: 88 fluid ounces (2.0 lb. a.e. dicamba per acre).
Application Timing	• XtendiMax® With VaporGrip® Technology can be applied either postharvest in the fall, spring, or summer during the fallow period or to crop stubble/set-aside acres. • For best performance, apply XtendiMax® With VaporGrip® Technology when annual weeds are less than 4 inches tall, when biennial weeds are in the rosette stage, and to perennial weed regrowth in late summer or fall following a mowing or tillage treatment. • The most effective control of upright perennial broadleaf weeds such as Canada thistle and Jerusalem artichoke occurs if XtendiMax® With VaporGrip® Technology is applied when the majority of weeds have at least 4 – 6 inches of regrowth or for weeds such as field bindweed and hedge bindweed that are in or beyond the full bloom stage.
Application Method	• Apply XtendiMax® With VaporGrip® Technology as a broadcast or spot treatment to emerged and actively growing weeds after crop harvest (postharvest) and before a killing frost or in the fallow cropland or crop stubble the following spring or summer.
Livestock Grazing or Feeding	• Permitted.
Use Precautions	• Avoid disturbing treated areas following application. • Treatments may not kill weeds that develop from seed or underground plant parts, such as rhizomes or bulblets, after the effective period for XtendiMax® With VaporGrip® Technology. For seedling control, a follow-up program or other cultural practices could be instituted. • Refer to the Rotational Crops section of this label for the recommended interval between application and planting to prevent crop injury.

CROPS WITH XTEND® TECHNOLOGY

Cotton with XtendFlex® Technology (including Bollgard II® XtendFlex® COTTON, Bollgard® 3 XtendFlex® COTTON, or XtendFlex® COTTON) and soybean with Roundup Ready 2 Xtend® Technology or XtendFlex® Technology CONTAIN A PATENTED GENE THAT PROVIDES TOLERANCE TO DICAMBA, THE ACTIVE INGREDIENT IN THIS PRODUCT. THIS PRODUCT WILL CAUSE SEVERE CROP INJURY OR DESTRUCTION AND YIELD LOSS IF APPLIED TO COTTON AND SOYBEAN THAT ARE NOT DICAMBA TOLERANT, INCLUDING COTTON AND SOYBEAN WITH A TRAIT ENGINEERED TO CONFER TOLERANCE TO AUXIN HERBICIDES OTHER THAN DICAMBA. FOLLOW THE REQUIREMENTS SET FORTH HEREIN TO PREVENT SEVERE CROP INJURY OR DESTRUCTION AND YIELD LOSS. CONTACT WITH FOLIAGE, GREEN STEMS, OR FRUIT OF CROPS, OR ANY DESIRABLE PLANTS THAT DO NOT CONTAIN A DICAMBA TOLERANCE GENE OR ARE NOT NATURALLY TOLERANT TO DICAMBA, COULD RESULT IN SEVERE PLANT INJURY OR DESTRUCTION.

XtendiMax® With VaporGrip® Technology is approved by U.S. EPA for use in cotton with XtendFlex® Technology and in soybean with Roundup Ready 2 Xtend® Technology or XtendFlex® Technology only in the following states, subject to county restriction as noted: Alabama, Arkansas, Arizona, Colorado, Delaware, Florida (excluding Palm Beach County), Georgia, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maryland, Michigan, Minnesota, Mississippi, Missouri, Nebraska, New Jersey, New Mexico, New York, North Carolina, North Dakota, Oklahoma, Ohio, Pennsylvania, South Carolina, South Dakota, Tennessee (excluding Wilson County), Texas, Virginia, West Virginia, Wisconsin.

Information on cotton with XtendFlex® Technology and on soybean with Roundup Ready 2 Xtend® Technology or XtendFlex® Technology can be obtained from your seed supplier or Bayer representative. Cotton with XtendFlex® Technology and soybean with Roundup Ready 2 Xtend® Technology or XtendFlex® Technology must be purchased from an authorized licensed seed supplier.

Cotton with XtendFlex® Technology, soybean with Roundup Ready 2 Xtend® Technology or XtendFlex® Technology, and methods of controlling weeds and applying dicamba in cotton with XtendFlex® Technology and in soybean with Roundup Ready 2 Xtend® Technology or XtendFlex® Technology are protected under U.S. patent law. No license to use cotton with XtendFlex® Technology or soybean with Roundup Ready 2 Xtend® Technology or XtendFlex® Technology is granted or implied with the purchase of this herbicide product. Cotton with XtendFlex® Technology and soybean with Roundup Ready 2 Xtend® Technology or XtendFlex® Technology are owned by Bayer and a license must be obtained from Bayer before using it. Contact your Authorized Bayer Retailer for information on obtaining a license to use cotton with XtendFlex® Technology and soybean with Roundup Ready 2 Xtend® Technology or XtendFlex® Technology.

COTTON WITH XTENDFLEX® TECHNOLOGY	
Application Rate	• Using the appropriate application rate may reduce the selection for resistant weeds. • **Burndown/Early Preplant, Preplant, At-Planting, Preemergence:** Apply a maximum of 22 fluid ounces (0.5 lb. acid equivalent (a.e.) dicamba) per acre for a single burndown/early preplant, preplant, at-planting, or preemergence application. • **Postemergence (in-crop):** For any single, in-crop application, apply 22 fluid ounces (0.5 lb. a.e. dicamba) per acre.
Maximum Rates	• *Maximum single application*: 22 fluid ounces per acre (0.5 lb. a.e. dicamba per acre) • *Total of all Burndown/Early Preplant, Preplant, At-Planting, and Preemergence applications*: 44 fluid ounces per acre (1.0 lb. a.e. dicamba per acre) • *Total of all in-crop applications*: 44 fluid ounces per acre (1.0 lb. a.e. dicamba per acre) • *Combined total per year for all applications*: 88 fluid ounces per acre (2.0 lb. a.e. dicamba per acre)
Application Timing	• **Burndown/Early Preplant, Preplant, At-Planting, Preemergence:** This product may be applied before, during, or immediately after planting. • **Postemergence (in-crop):** This product may be applied in-crop up to and including July 30.
Number of Applications	• Sequential applications of this product may be necessary to control new flushes of weeds or on tough-to-control weeds. Allow at least 7 days between applications. • A maximum of **two** burndown/early preplant, preplant, at-planting, and preemergence and **two** in-crop applications may be made.
Spray Volume	• Apply this product in a minimum of 15 gallons of spray solution per acre as a broadcast application. • Use 20 gallons per acre or greater when treating dense weed canopy/vegetation.
Livestock Grazing or Feeding	• Permitted.
Use Precautions	• Refer to the Weeds Controlled or Suppressed section of this label for specific weeds controlled. • Postemergence applications of this product mixed with adjuvants may cause a leaf response to cotton with XtendFlex® Technology. The symptoms usually appear as necrotic spots on fully expanded leaves. EC-based products that are tank mixed with products containing dicamba may increase the severity of the leaf damage. • For postemergence applications with a hooded in-row sprayer, cotton must be a minimum of 15 inches tall at the time of application. • For postemergence applications with a directed layby sprayer, the release point for the herbicide must not be more than 10 inches from the soil and cotton must be at least 20 inches in height. Spray tip must be angled downward to the soil making sure no spray droplets remain in the air.
Use Restrictions	• DO NOT apply less than 22 fluid ounces (0.5 lb. a.e. dicamba) per acre.

SOYBEAN WITH ROUNDUP READY 2 XTEND® TECHNOLOGY OR XTENDFLEX® TECHNOLOGY	
Application Rate	• Using the appropriate application rate may reduce the selection for resistant weeds. • **Burndown/Early Preplant, Preplant, At-Planting, Preemergence:** Apply a maximum of 22 fluid ounces (0.5 lb. acid equivalent (a.e.) dicamba) per acre for a single burndown/early preplant, preplant, at-planting, or preemergence application. • **Postemergence (in-crop):** For any single, in-crop application, apply 22 fluid ounces (0.5 lb. a.e. dicamba) per acre.
Maximum Rates	• *Maximum single application*: 22 fluid ounces per acre (0.5 lb. a.e. dicamba per acre) • *Total of all Burndown/Early Preplant, Preplant, At-Planting, and Preemergence applications*: 44 fluid ounces per acre (1.0 lb. a.e. dicamba per acre) • *Total of all in-crop applications*: 44 fluid ounces per acre (1.0 lb. a.e. dicamba per acre) • *Combined total per year for all applications*: 88 fluid ounces per acre (2.0 lb. a.e. dicamba per acre)
Application Timing	• **Burndown/Early Preplant, Preplant, At-Planting, Preemergence:** This product may be applied before, during, or immediately after planting. • **Postemergence (in-crop):** This product may only be applied in-crop up to and including June 30. Applications occurring after R1 are prohibited as crop response may occur.
Number of Applications	• A second application may be necessary to control new flushes of weeds. Allow at least 7 days between applications. For best results, apply after some weed re-growth has occurred. • A maximum of maximum of **two** burndown/early preplant, preplant, at-planting, and preemergence and **two** in-crop applications may be made.
Spray Volume	• Apply this product in a minimum of 15 gallons of spray solution per acre as a broadcast application. • Use 20 gallons per acre or greater when treating dense weed canopy/vegetation.
Livestock Grazing or Feeding	• Permitted.
Use Precautions	• Refer to the Weeds Controlled or Suppressed section of this label for specific weeds controlled. • Postemergence application under stressful environments may cause temporary loss of turgor, a response commonly described as leaf droop in soybean with Roundup Ready 2 Xtend® Technology or XtendFlex® Technology. Typically, affected plants recover in 1-3 days depending on the level of droop and environmental conditions. • For postemergence applications with a hooded in-row sprayer, soybeans must be a minimum of 15 inches tall at the time of application. • For postemergence applications with a directed layby sprayer, the release point for the herbicide must not be more than 10 inches from the soil and soybeans must be at least 20 inches in height. Spray tip must be angled downward to the soil making sure no spray droplets remain in the air
Use Restrictions	• DO NOT apply less than 22 fluid ounces (0.5 lb. a.e. dicamba) per acre.

STORAGE AND DISPOSAL

Proper pesticide storage and disposal are essential to protect against exposure to people and the environment due to leaks and spills, excess product or waste, and vandalism. Do not allow this product to contaminate water, foodstuffs, feed or seed by storage or disposal.

Pesticide storage
Store pesticides away from food, pet food, feed, seed, fertilizers, and veterinary supplies. Keep container closed to prevent spills and contamination.

Pesticide disposal
To avoid wastes, use all material in this container, including rinsate, by application according to label directions. If wastes cannot be avoided, offer remaining product to a waste disposal facility or pesticide disposal program. Such programs are often run by state or local governments or by industry. All disposal must be in accordance with applicable federal, state, and local regulations and procedures.

Container handling and disposal
[*Insert appropriate Container Handling and Disposal Statement and Refilling Limitation from the following options*]

[*CONTAINER HANDLING AND DISPOSAL STATEMENT AND REFILLING LIMITATION FOR NONREFILLABLE RIGID CONTAINERS OF LESS THAN 1-GALLON CAPACITY*]
Nonrefillable container. Do not reuse or refill this container.

[*Alternative container statement:* Nonrefillable container. Do not reuse this container to hold materials other than pesticides or dilute pesticides (rinsate). After emptying and cleaning, it may be allowable to temporarily hold rinsate or other pesticide-related materials in this container. Contact your state regulatory agency to determine allowable practices in your state.]

Triple rinse this container promptly after emptying.

Triple rinse as follows: Empty the remaining contents into application equipment or mix-tank and continue to drain for 10 seconds after the flow begins to drip. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or mix-tank, or store rinsate for later use or disposal. Continue to drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times.

Once properly rinsed, some plastic [*Optional text:* agricultural] pesticide containers can be taken to a container collection site or picked up for recycling. [*Alternative container disposal statement:* Then offer the container for recycling, if available.]

[*Optional container disposal statement:* To find the nearest collection site, contact your chemical dealer or Bayer at 1-866-99BAYER (1-866-992-2937).]

If recycling is not available, dispose of in accordance with federal, state and local regulations and procedures, which may include puncturing the properly rinsed container and disposing in a sanitary landfill.

[*CONTAINER HANDLING AND DISPOSAL STATEMENT AND REFILLING LIMITATION FOR NONREFILLABLE RIGID PLASTIC 2.5-GALLON CONTAINER AND OTHER NONREFILLABLE CONTAINERS OF GREATER THAN 1-GALLON BUT EQUAL TO OR LESS THAN 5-GALLON CAPACITY*]
Nonrefillable container. Do not reuse this container to hold materials other than pesticides or dilute pesticides (rinsate). After emptying and cleaning, it may be allowable to temporarily hold rinsate or other pesticide-related materials in this container. Contact your state regulatory agency to determine allowable practices in your state.

[*Alternative container statement:* Nonrefillable container. Do not reuse or refill this container.]

Triple rinse or pressure rinse (or equivalent) this container promptly after emptying.

Triple rinse as follows: Empty the remaining contents into application equipment or mix-tank and continue to drain for 10 seconds after the flow begins to drip. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or mix-tank, or store rinsate for later use or disposal. Continue to drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times.

Pressure rinse as follows: Empty the remaining contents into application equipment or mix-tank and continue to drain for 10 seconds after the flow begins to drip. Place container so that it can drain directly into application equipment or mix-tank while rinsing, or collect rinsate for later use or disposal. Insert pressure rinsing nozzle into the side of the container and rinse at about 40 PSI for at least 30 seconds. Continue to drain for 10 seconds after the flow begins to drip.

Once properly rinsed, some plastic [*Optional text:* agricultural] pesticide containers can be taken to a container collection site or picked up for recycling. [*Alternative container disposal statement:* Then offer the container for recycling, if available.]

[*Optional container disposal statement:* To find the nearest collection site, contact your chemical dealer or Bayer at 1-866-99BAYER (1-866-992-2937).]

If recycling is not available, dispose of in accordance with federal, state and local regulations and procedures, which may include puncturing the properly rinsed container and disposing in a sanitary landfill.

[*CONTAINER HANDLING AND DISPOSAL STATEMENT AND REFILLING LIMITATION FOR NONREFILLABLE RIGID PLASTIC 30-GALLON CONTAINER AND OTHER NONREFILLABLE CONTAINERS OF GREATER THAN 5-GALLON CAPACITY*]
Nonrefillable container. Do not reuse or refill this container.

[*Alternative container statement:* Nonrefillable container. Do not reuse this container to hold materials other than pesticides or dilute pesticides (rinsate). After emptying and cleaning, it may be allowable to temporarily hold rinsate or other pesticide-related materials in this container. Contact your state regulatory agency to determine allowable practices in your state.]

Triple rinse or pressure rinse (or equivalent) this container promptly after emptying.

[*Optional label text:* For containers not equipped with pumping systems,] Triple rinse as follows: Empty the remaining contents into application equipment or mix-tank. Fill the container ¼ full with water. Replace and tighten closures. Tip the container on its side and roll it back and forth for 30 seconds, ensuring at least one complete revolution. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or mix-tank, or store rinsate for later use or disposal. Repeat this procedure two more times.

[*Alternative or additional triple rinsing instructions for large containers equipped with pumping systems:* [*Optional label text:* For large containers equipped with pumping systems,] Triple rinse as follows: Empty the remaining contents into application equipment or mix-tank. Fill the container about 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times. Repeat this procedure two more times.]

Pressure rinse as follows: Empty the remaining contents into application equipment or mix-tank and continue to drain for 10 seconds after the flow begins to drip. Place container so that it can drain directly into application equipment or mix-tank while rinsing, or collect rinsate for later use or disposal. Insert pressure rinsing nozzle into the side of the container and rinse at about 40 PSI for at least 30 seconds. Continue to drain for 10 seconds after the flow begins to drip.

Once properly rinsed, some plastic [*Optional text:* agricultural] pesticide containers can be taken to a container collection site or picked up for recycling. [*Alternative container disposal statement:* Then offer the container for recycling, if available.]

[*Optional container disposal statement:* Some container manufacturers offer container recycling. See additional information regarding manufacturer recycling programs attached to this container, if available. If no recycling information is available on this container, contact your chemical dealer or Bayer at 1-866-99BAYER (1-866-992-2937) to find the nearest recycling location.]

[*Optional container disposal statement:* To find the nearest collection site, contact your chemical dealer or Bayer at 1-866-99BAYER (1-866-992-2937).]

If recycling is not available, dispose of in accordance with federal, state and local regulations and procedures, which may include puncturing the properly rinsed container and disposing in a sanitary landfill.

[*Optional container disposal statement:* Return Properly Rinsed Container to Bayer for Recycling – Call 1-866-99BAYER (1-866-992-2937).]

[*Optional additional container disposal statement:* IBC EMPTY? – FREE CALL – 1-888-SCHUETZ (1-888-724-8389) www.schuetz.net/ticket; Schuetz ticket service]

[*Optional additional container disposal statement:* FREE IBC PICKUP] [For continental USA and Canada only.]

[*Optional additional container disposal statement:* RETURNnet SYSTEM – To return empty IBC's Email or Call – www.returnnetsystem.com – 1-888-758-SHIP (1-888-758-7447) – United States and Canada – IBCNA – Clarkston, Michigan – USA]

[*CONTAINER HANDLING AND DISPOSAL STATEMENT AND REFILLING LIMITATION FOR ALL REFILLABLE CONTAINERS, EXCEPT TRANSPORT VEHICLES*]
Refillable container. Refill this container with pesticide only. Do not reuse this container for any other purpose.

Cleaning this container before refilling is the responsibility of the refiller. Cleaning this container before final disposal is the responsibility of the person disposing of the container.

To clean this container before final disposal, empty the remaining contents from the container into application equipment or mix-tank. Fill the container about 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times.

[*Optional container disposal statement:* Then offer the container for recycling, if available.]

[*Optional container disposal statement:* Some container manufacturers offer container recycling. See additional information regarding manufacturer recycling programs attached to this container, if available. If no recycling information is available on this container, contact your chemical dealer or Bayer at 1-866-99BAYER (1-866-992-2937) to find the nearest recycling location.]

[*Optional additional container disposal statement:* IBC EMPTY? – FREE CALL – 1-888-SCHUETZ (1-888-724-8389) www.schuetz.net/ticket; Schuetz ticket service]

[*Optional additional container disposal statement:* FREE IBC PICKUP] [For continental USA and Canada only.]

[*Optional additional container disposal statement:* RETURNnet SYSTEM – To return empty IBC's Email or Call – www.returnnetsystem.com – 1-888-758-SHIP (1-888-758-7447) – United States and Canada – IBCNA – Clarkston, Michigan – USA]

[*Optional container disposal statement:* To obtain information about recycling refillable containers, contact Bayer at 1-866-99BAYER (1-866-992-2937).]

[*Optional container disposal statement:* Return Properly Rinsed Container to Bayer for Recycling – Call 1-866-99BAYER (1-866-992-2937).]

[*Optional additional container label statements for the CUBE refillable packaging system only:*
CUBE Bayer Refillable Delivery System
FEATURES INCLUDE:
- Automatic Venting
- Heavy duty one-way 2-inch camloc ball valve with protective shield door
- Complete coated steel protective enclosure
- Durable 4-way plastic pallet
- Lift door to access one-way valve]

CONDITIONS OF SALE AND LIMITATIONS OF WARRANTY AND LIABILITY

Read the entire Directions for Use, Conditions, Disclaimer of Warranties, and Limitations of Liability before buying or using this product. If terms are not acceptable, return the unopened product container at once.

By using this product, user or buyer accepts the following Conditions, Disclaimer of Warranties, and Limitations of Liability.

CONDITIONS: The directions for use of this product are believed to be adequate and must be followed carefully. However, it is impossible to eliminate all risks associated with the use of this product. Crop injury, ineffectiveness, or other unintended consequences may result because of such factors as weather conditions, presence of other materials, or the manner of use or application inconsistent with this label (including conditions noted on the label , such as unfavorable soil conditions, unfavorable climate conditions, etc.), all of which are beyond the control of Bayer CropScience LP ("Bayer") or the seller. To the extent consistent with applicable law, all such risks shall be assumed by the user or buyer. Buyer and all users shall promptly notify Bayer of any claims whether based in contract, negligence, strict liability, other tort or otherwise

DISCLAIMER OF WARRANTIES: Subject to risks as set forth in the Conditions above, Bayer warrants that this product is reasonably fit for the purposes stated on the label when used for the purposes stated on the label when used in accordance with directions. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, BAYER MAKES NO OTHER WARRANTIES, EXPRESS OR IMPLIED, OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE OR OTHERWISE. BAYER MAKES NO RECOMMENDATION OR WARRANTY HEREIN REGARDING THE USE OF ANY PRODUCTS THAT MAY APPEAR ON THE WEBSITE REFERENCED IN THE TANK MIXING INSTRUCTIONS HEREIN, REGARDLESS OF WHETHER SUCH PRODUCT IS USED ALONE OR IN A TANK MIX WITH XtendiMax® With VaporGrip® Technology. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, BAYER DISCLAIMS ANY LIABILITY WHATSOEVER FOR SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT. FOR IN-CROP (OVER-THE-TOP) USES ON CROPS WITH XTEND® TECHNOLOGY, CROP SAFETY AND WEED CONTROL PERFORMANCE ARE NOT WARRANTED BY BAYER WHEN THIS PRODUCT IS USED IN CONJUNCTION WITH "BROWN BAG" OR "BIN RUN" SEED SAVED FROM PREVIOUS YEAR'S PRODUCTION AND REPLANTED.

LIMITATIONS OF LIABILITY: To the extent consistent with applicable law, the exclusive remedy of the user or buyer for any and all losses, injuries, or damages resulting from the use or handling of this product, whether in contract, warranty, tort, negligence, strict liability or otherwise, shall not exceed the purchase price paid, or at Bayer's election, the replacement of product.

These Conditions of Sales, Disclaimer of Warranties and Limitations of Liability cannot be varied by any written or verbal statements or agreements. No employee or sales agent of Bayer or seller is authorized to vary or exceed the terms of the Disclaimer of Warranties or Limitations of Liability in any manner.

Bollgard II®, Bollgard®, Degree Xtra®, Field Master®, Harness®, Roundup Ready®, Roundup Ready 2 Xtend®, Roundup PowerMAX®, RT 3®, Roundup WeatherMAX®, XtendiMax®, XtendFlex®, and VaporGrip® are registered trademarks of Bayer Technology LLC. All other trademarks are the property of their respective owners.

PRODUCED FOR

Bayer CropScience

Bayer CropScience LP
800 N. Lindbergh Blvd.
St. Louis, MO 63167
1-866-99BAYER (1-866-992-2937)

XTENDIMAX® WITH VAPORGRIP® TECHNOLOGY (PENDING) 10/14/2020

Message

From: George Sabbagh [george.sabbagh@bayer.com]
Sent: 8/13/2020 1:00:19 PM
To: Kenny, Daniel [Kenny.Dan@epa.gov]
CC: BCSReg_Archive [esepamailbox@bayer.com]; BCSReg_Archive [esepamailbox@bayer.com]
Subject: FW: Bayer CropScience VaporGrip Xtra White Paper Submission in Support of 2020 Registration of XtendiMax (264-RERN)
Attachments: Summary of VaporGrip Xtra Research_264-RERN_20200807.pdf; 8570-1_Application.264-RERN_20200806.pdf; Cover letter_XtendiMax_264-RERN_20200807.pdf; VGX_Study.List.with.Data_20200501.pdf

Hi Dan,

Here is the information that was provided last week to the Agency (and sent to Emily) regarding the list of studies submitted.

I tried yesterday to include a file (VGX....pdf) with a table summarizing the list of studies and spreadsheets with actual data (also provided to the Agency). It did not go through due to the size. I removed the data spreadsheets and I am sending just the text with the list. Emily received a link to download the file, and she should have that data.

Freundliche Grüße / Best regards,

George Sabbagh, Ph.D.
Head Regulatory Engagements

Regulatory Engagement
Collaborating Across Organizations

Bayer US LLC
801 Pennsylvania Avenue, NW
Suite 745
Washington, DC 20004
Cel: +1 913 231 6291
E-mail: george.sabbagh@bayer.com
Web: http://www.bayercropscience.com

From: Steven Callen <steven.callen@bayer.com>
Sent: Friday, August 7, 2020 2:13 PM
To: Schmid, Emily <Schmid.Emily@epa.gov>
Cc: Thomas Orr <thomas.orr@bayer.com>; George Sabbagh <george.sabbagh@bayer.com>; BCSReg_Archive <esepamailbox@bayer.com>
Subject: Bayer CropScience VaporGrip Xtra White Paper Submission in Support of 2020 Registration of XtendiMax (264-RERN)

Good afternoon, Emily,

In support of the 2020 registration decision for XtendiMax® With VaporGrip® Technology (M1768 Herbicide), EPA Reg. No. 264-RERN, Bayer Crop Science (EPA Company Number 264) is providing here a courtesy copy of the 8570-1 form, cover letter, and white paper (MRID 51226701) summarizing the VaporGrip Xtra studies that were previously submitted to the Agency on or before May 1, 2020. These documents, along with others, were submitted earlier today through the electronic portal.

Please reach out to me or George Sabbagh if you have any questions or concerns.

Have a great weekend!

Sincerely,
Steven

Steven T. Callen, Ph.D.
Crop Protection Regulatory Manager
Broad Acre and Trait Uses

////////////////////

Bayer U.S. – Crop Science
North America Crop Protection Regulatory Affairs
700 Chesterfield Parkway West
Mail Zone: FF4B
Chesterfield, MO 63017, USA
Tel: +1 (636) 737-1133
Cell: +1 (314) 302-9391
E-mail: steven.callen@bayer.com
Web: http://www.bayer.com

/// Follow Bayer on:
/// Twitter /// Facebook /// Instagram /// LinkedIn /// YouTube

/// Follow me on:
/// Twitter /// LinkedIn

The information contained in this e-mail is for the exclusive use of the intended recipient(s) and may be confidential, proprietary, and/or legally privileged. Inadvertent disclosure of this message does not constitute a waiver of any privilege. If you receive this message in error, please do not directly or indirectly use, print, copy, forward, or disclose any part of this message. Please also delete this e-mail and all copies and notify the sender. Thank you.

Please read instructions on reverse before completing form. Form Approved. OMB No. 2070-0060.

EPA

United States
Environmental Protection Agency
Washington, DC 20460

☐ **Registration**
☐ **Amendment**
☒ **Other**

OPP Identifier Number

Application for Pesticide – Section I

1. Company/Product Number	2. EPA Product Manager	3. Proposed Classification
Bayer CropScience LP / 264-RERN	Emily Schmid	☐ None ☒ Restricted
4. Company/Product (Name) Bayer CropScience LP / XtendiMax® With VaporGrip® Technology (M1768 Herbicide)	PM # 25	
5. Name and Address of Applicant *(Include ZIP Code)* Bayer CropScience LP, 801 Pennsylvania Ave, NW – Suite 745, Washington, DC 20004 ☐ Check if this is a new address	6. **Expedited Review.** In accordance with FIFRA Section 3(c)(3) (b)(i), my product is similar or identical in composition and labeling to: EPA Reg. No. ____ Product Name ____	

Section – II

☐ Amendment – Explain below.
☐ Resubmission in response to Agency letter dated
☐ Notification – Explain below.
☐ Final printed labels in response to Agency letter dated
☐ "Me Too" Application.
☒ Other – Explain below.

Explanation: Use additional page(s) if necessary. (For section I and Section II.)
Bayer Crop Science is submitting a summary/reference list of the 19 VaporGrip Xtra (MON 51817) volatility studies conducted or supported by Bayer that were previously submitted to the EPA to support the 2020 registration decision for XtendiMax® With VaporGrip® Technology (M1768 Herbicide), EPA Reg. No. 264-RERN.

Section – III

1. Material This Product Will Be Packaged In:

Child-Resistant Packaging	Unit Packaging	Water Soluble Packaging	2. Type of Container
☐ Yes* ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Metal ☐ Plastic ☐ Glass ☐ Paper ☐ Other (Specify)
***Certification must be submitted**	If "Yes" Unit Packaging wgt. / No. per Container	If "Yes" Package wgt. / No. per Container	

3. Location of Net Contents Information	4. Size(s) Retail Container	5. Location of Label Directions
☐ Label ☐ Container		☐ On Label ☐ On Labeling accompanying product

6. Manner in Which Label is Affixed to Product ☐ Lithograph ☐ Paper glued ☐ Stenciled ☐ Other ____

Section – IV

1. Contact Point *(Complete items directly below for identification of individual to be contacted, if necessary, to process this application.)*

Name	Title	Telephone No. *(Include Area Code)*
George Sabbagh	Head Regulatory Engagement	913-231-6291

Certification
I certify that the statements I have made on this form and all attachments thereto are true, accurate and complete. I acknowledge that any knowingly false or misleading statement may be punishable by fine or imprisonment or both under applicable law.

6. Date Application Received **(Stamped)**

2. Signature	3. Title
Steven T. Callen	Federal Regulatory Manager
4. Typed Name	5. Date
Steven T. Callen	**August 6, 2020**

EPA Form 8570-1 (Rev. 8-94) Previous editions are obsolete.

U.S. Environmental Protection Agency
Document Processing Desk (NOTIF)
Office of Pesticide Programs (7504P)
Room S4900, One Potomac Yard
2777 Crystal Drive Arlington, VA 22202

Attention:
Emily Schmid
Registration Division
Herbicide Branch

August 7, 2020

Steven T. Callen, Ph.D.

Bayer U.S.
Crop Science
Regulatory Affairs

700 Chesterfield Parkway West
Chesterfield, Missouri 63017
United States

Tel. +1 314 302 9391
steven.callen@bayer.com

www.bayer.com

Subject: Submission of a summary/reference list of VaporGrip Xtra® volatility studies previously submitted to EPA in support of 2020 registration of XtendiMax® With VaporGrip® Technology (Alternate Brand Name: M1768 Herbicide), EPA Reg. No. 264-RERN

Dear Emily Schmid,

On July 29, 2020, Bayer CropScience LP (Bayer) and the U.S. EPA engaged in discussions regarding the 2020 registration of XtendiMax® With VaporGrip® Technology (M1768 Herbicide), EPA Reg. No. 264-RERN. In those discussions, it appeared the Agency may not be aware of certain submissions that Bayer made on and before May 1, 2020 regarding our volatility reduction agent VaporGrip Xtra® (MON 51817). For convenience and to ensure EPA is aware of the body of data submitted to date, Bayer herein provides a reference list and summary of those prior submissions. As previously discussed and in light of the data contained in those submissions, which collectively consist of nineteen volatility studies, Bayer requests EPA mandate the addition of VaporGrip Xtra (and other volatility-reducing agents) to dicamba tank mixes in the upcoming registration.

This application is being submitted electronically and contains the following documents:

- This cover letter
- Application for Pesticide Registration – EPA Form 8570-1
- Public Data Matrix (8570-35)
- Agency Data Matrix (8570-35)
- Transmittal Document
- Report: Reference List of Nineteen VaporGrip Xtra® Volatility Studies, MRID No. **51226701**

Should you require any additional information or have any questions or concerns regarding this submission, please contact me (contact information on page 1) or George Sabbagh in our Washington D.C. office at (913) 231-6291 or george.sabbagh@bayer.com.

Sincerely,

Bayer U.S. – Crop Science

Steven T. Callen, Ph.D.
Federal Regulatory Manager

Message

From: ORR, THOMAS B [AG/1005] [thomas.orr@bayer.com]
Sent: 7/11/2019 10:03:09 PM
To: Kenny, Daniel [Kenny.Dan@epa.gov]
CC: Corbin, Mark [Corbin.Mark@epa.gov]; Schmid, Emily [Schmid.Emily@epa.gov]; opptankmixrequests [opptankmixrequests@epa.gov]; CALLEN, STEVEN THOMAS [AG/1005] [steven.thomas.callen@monsanto.com]
Subject: URL amendments for Xtendimax with VaporGrip Technology (EPA Reg. No. 524-617) _ 07/11/2019
Attachments: 8570-1.pdf; Cover letter_M1768_URLamendments_AU243LFP13.pdf; ConfidentialAttachment_M1768_URLamendment_AU243LFP13.pdf; RAR-2019-0285_MSL0030492_06142019_Final.pdf

Dear Dan,

Please find attached the 8570-1 form, cover letter, confidential attachment, and data report notifying the EPA of amendments to be made to XtendiMax's URL. With this submission, Bayer intends to post the referenced products to www.xtendimaxapplicationrequirements.com as approved tank mix products.

Best regards,

Tom Orr
Global Regulatory Affairs Manager

///////////////////

Bayer Crop Science
Monsanto Company
Regulatory Science
Building FF
Chesterfield, 63017, USA
Tel: +1 636-737-9347
Cell: +1 314-422-1748
E-mail: thomas.orr@bayer.com
Web: http://www.bayer.com

/// **Follow Bayer on:**
/// Twitter /// Facebook /// Instagram /// LinkedIn /// YouTube

The information contained in this e-mail is for the exclusive use of the intended recipient(s) and may be confidential, proprietary, and/or legally privileged. Inadvertent disclosure of this message does not constitute a waiver of any privilege. If you receive this message in error, please do not directly or indirectly use, print, copy, forward, or disclose any part of this message. Please also delete this e-mail and all copies and notify the sender. Thank you.

Please read instructions on reverse before completing form. Form Approved. OMB No. 2070-0060.

EPA

United States
Environmental Protection Agency
Washington, DC 20460

☐ **Registration**
☐ **Amendment**
☒ **Other**

OPP Identifier Number

Application for Pesticide – Section I

1. Company/Product Number	2. EPA Product Manager	3. Proposed Classification
Monsanto Company/524-617	Emily Schmid	☐ None ☐ Restricted
4. Company/Product (Name) Monsanto Company / M1768 Herbicide (XtendiMax® With VaporGrip® Technology)	PM # 25	

5. Name and Address of Applicant *(Include ZIP Code)*
Monsanto Company
1300 I (Eye) Street, NW – Suite 450 East
Washington, DC 20005
☐ Check if this is a new address

6. **Expedited Review.** In accordance with FIFRA Section 3(c)(3) (b)(i), my product is similar or identical in composition and labeling to:
EPA Reg. No. _____
Product Name _____

Section – II

☐ Amendment – Explain below.
☐ Resubmission in response to Agency letter dated
☐ Notification – Explain below.
☐ Final printed labels in response to Agency letter dated
☐ "Me Too" Application.
☒ Other – Explain below.

Explanation: Use additional page(s) if necessary. (For section I and Section II.)
Monsanto is submitting information to make an amendment to the URL for XtendiMax With VaporGrip Technology uses (EPA Reg. No 524-617, Decision No. 522837, 516207, 511766, and 534662).

Section – III

1. Material This Product Will Be Packaged In:

Child-Resistant Packaging	Unit Packaging	Water Soluble Packaging	2. Type of Container
☐ Yes* ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Metal ☐ Plastic ☐ Glass ☐ Paper ☐ Other (Specify)
Certification must be submitted	If "Yes" Unit Packaging wgt. / No. per Container	If "Yes" Package wgt. / No. per Container	

3. Location of Net Contents Information	4. Size(s) Retail Container	5. Location of Label Directions
☐ Label ☐ Container		☐ On Label ☐ On Labeling accompanying product

6. Manner in Which Label is Affixed to Product ☐ Lithograph ☐ Paper glued ☐ Stenciled ☐ Other _____

Section – IV

1. Contact Point *(Complete items directly below for identification of individual to be contacted, if necessary, to process this application.)*

Name	Title	Telephone No. *(Include Area Code)*
Thomas Marvin	Director, US Regulatory Affairs	202-383-2851

Certification
I certify that the statements I have made on this form and all attachments thereto are true, accurate and complete. I acknowledge that any knowingly false or misleading statement may be punishable by fine or imprisonment or both under applicable law.

2. Signature	3. Title	6. Date Application Received **(Stamped)**
	Regulatory Affairs Manager	
4. Typed Name Thomas B. Orr	5. Date July 11, 2019	

EPA Form 8570-1 (Rev. 8-94) Previous editions are obsolete.

Material	Batch	Date	Time	Material ID	Battelle_ID
76980	1	12/17/18	7:57	11117	W1835101A
76980	1	12/17/18	7:57	11117	W1835101A
76980	1	12/17/18	7:57	11117	W1835101A
76980	1	12/17/18	8:02	11116	W1835101B
76980	1	12/17/18	8:02	11116	W1835101B
76980	1	12/17/18	8:02	11116	W1835101B
76980	1	12/17/18	8:06	11115	W1835101C
76980	1	12/17/18	8:06	11115	W1835101C
76980	1	12/17/18	8:06	11115	W1835101C
76980	1	12/17/18	8:09	11114	W1835101D
76980	1	12/17/18	8:09	11114	W1835101D
76980	1	12/17/18	8:09	11114	W1835101D
76980	1	12/17/18	8:12	11113	W1835101E
76980	1	12/17/18	8:12	11113	W1835101E
76980	1	12/17/18	8:12	11113	W1835101E
76980	1	12/17/18	8:16	11112	W1835101F
76980	1	12/17/18	8:16	11112	W1835101F
76980	1	12/17/18	8:16	11112	W1835101F
76980	1	12/17/18	8:20	11117	W1835102A
76980	1	12/17/18	8:20	11117	W1835102A
76980	1	12/17/18	8:20	11117	W1835102A
76980	1	12/17/18	8:24	11116	W1835102B
76980	1	12/17/18	8:24	11116	W1835102B
76980	1	12/17/18	8:24	11116	W1835102B
76980	1	12/17/18	8:27	11115	W1835102C
76980	1	12/17/18	8:27	11115	W1835102C
76980	1	12/17/18	8:27	11115	W1835102C
76980	1	12/17/18	8:31	11114	W1835102D
76980	1	12/17/18	8:31	11114	W1835102D
76980	1	12/17/18	8:31	11114	W1835102D
76980	1	12/17/18	8:35	11113	W1835102E
76980	1	12/17/18	8:35	11113	W1835102E
76980	1	12/17/18	8:35	11113	W1835102E
76980	1	12/17/18	8:38	11112	W1835102F
76980	1	12/17/18	8:38	11112	W1835102F
76980	1	12/17/18	8:38	11112	W1835102F
76980	1	12/17/18	8:42	76980	W1835103
76980	1	12/17/18	8:42	76980	W1835103
76980	1	12/17/18	8:42	76980	W1835103
76980	1	12/17/18	8:46	89870	W1835104
76980	1	12/17/18	8:46	89870	W1835104
76980	1	12/17/18	8:46	89870	W1835104
76980	1	12/17/18	8:50	40973	W1835105
76980	1	12/17/18	8:50	40973	W1835105
76980	1	12/17/18	8:50	40973	W1835105
76980	1	12/17/18	8:54	38238	W1835106

Spray_solution_name	Nozzle	Pressure	Rep	DV10
Water+6515+21.7	6515	21.7	1	374.3301697
Water+6515+21.7	6515	21.7	2	372.8527527
Water+6515+21.7	6515	21.7	3	372.9777222
Water+6510+29.0	6510	29.0	1	262.9677124
Water+6510+29.0	6510	29.0	2	263.8839417
Water+6510+29.0	6510	29.0	3	261.1115417
Water+8008+36.3	8008	36.3	1	202.8940582
Water+8008+36.3	8008	36.3	2	202.7936249
Water+8008+36.3	8008	36.3	3	201.6820526
Water+11006+29.0	11006	29.0	1	162.5404663
Water+11006+29.0	11006	29.0	2	163.8603363
Water+11006+29.0	11006	29.0	3	162.8842163
Water+11003+43.5	11003	43.5	1	104.4509659
Water+11003+43.5	11003	43.5	2	105.5072403
Water+11003+43.5	11003	43.5	3	103.9060135
Water+11001+65.3	11001	65.3	1	53.72903061
Water+11001+65.3	11001	65.3	2	54.27001572
Water+11001+65.3	11001	65.3	3	54.31216431
Water+NIS+6515+21.7	6515	21.7	1	327.5637512
Water+NIS+6515+21.7	6515	21.7	2	325.9438477
Water+NIS+6515+21.7	6515	21.7	3	325.0233154
Water+NIS+6510+29.0	6510	29.0	1	238.6926727
Water+NIS+6510+29.0	6510	29.0	2	239.1169586
Water+NIS+6510+29.0	6510	29.0	3	240.405838
Water+NIS+8008+36.3	8008	36.3	1	185.4297943
Water+NIS+8008+36.3	8008	36.3	2	185.6546936
Water+NIS+8008+36.3	8008	36.3	3	184.7648621
Water+NIS+11006+29.0	11006	29.0	1	154.1723328
Water+NIS+11006+29.0	11006	29.0	2	153.8367615
Water+NIS+11006+29.0	11006	29.0	3	154.0630646
Water+NIS+11003+43.5	11003	43.5	1	99.79108429
Water+NIS+11003+43.5	11003	43.5	2	99.75189972
Water+NIS+11003+43.5	11003	43.5	3	100.5948105
Water+NIS+11001+65.3	11001	65.3	1	52.60668182
Water+NIS+11001+65.3	11001	65.3	2	52.66830063
Water+NIS+11001+65.3	11001	65.3	3	53.07239151
XtendiMax	TTI11004	63	1	373.3119202
XtendiMax	TTI11004	63	2	371.1645813
XtendiMax	TTI11004	63	3	371.6644592
XtendiMax+Induce	TTI11004	63	1	281.2141113
XtendiMax+Induce	TTI11004	63	2	280.2897949
XtendiMax+Induce	TTI11004	63	3	280.6170654
XtendiMax+24DLV4+AU-243LFP13	TTI11004	63	1	381.9494629
XtendiMax+24DLV4+AU-243LFP13	TTI11004	63	2	380.362793
XtendiMax+24DLV4+AU-243LFP13	TTI11004	63	3	380.2010193
XtendiMax+4-Barrel+AU-243LFP13	TTI11004	63	1	448.2895508

VMD	DV90	%_141	18	22	26	30	36
785.1821899	1531.523682	1.167161942	3.89099E-06	8.98743E-05	0.000125275	0.000116196	0.000117569
780.6480103	1515.971558	1.18397963	3.89099E-06	9.04083E-05	0.000126877	0.000119019	0.000123367
781.0098267	1512.959961	1.184254169	3.8147E-06	8.93402E-05	0.000127563	0.000122757	0.000132904
573.2488403	1123.505249	2.849616766	9.08E-06	0.000194016	0.000228271	0.000186844	0.000220718
572.7259521	1107.491455	2.866157055	9.23E-06	0.000198975	0.000236588	0.000196762	0.000235443
567.6728516	1109.48584	2.904168367	9.23E-06	0.000198135	0.000233994	0.000193939	0.000235291
445.930542	847.0452881	4.725631237	1.21E-05	0.000247726	0.000270004	0.000230865	0.000406036
445.6018372	838.703186	4.736672401	1.18E-05	0.000242157	0.000263977	0.000225754	0.000397339
442.8468323	830.7098999	4.825815201	1.21E-05	0.000246582	0.000268097	0.000229797	0.000410385
359.633667	657.0627441	7.385390282	1.40E-05	0.000291443	0.000354614	0.000392075	0.000832748
361.2070313	661.0664063	7.2371521	1.38E-05	0.000287323	0.000349121	0.00038414	0.00081131
360.0479126	658.6187134	7.333987236	1.39E-05	0.000289841	0.000354767	0.000392151	0.000825958
239.6366425	444.3528442	19.08079147	2.95E-05	0.000690079	0.0011219	0.00150162	0.00306679
240.3358154	444.8648071	18.78406143	2.90E-05	0.000682449	0.00112923	0.00152351	0.00309959
239.217392	443.4975281	19.2156086	3.00E-05	0.000700531	0.00114151	0.00153122	0.00313187
111.8235092	222.8137665	66.4331665	1.44E-04	0.00515343	0.00654121	0.00699249	0.0125534
112.7478867	222.5952301	66.02586365	1.46E-04	5.20E-03	0.00657524	0.00693306	0.012197
112.7325058	221.7458344	66.06499481	1.43E-04	0.00511391	0.00647896	0.00686516	0.0121551
708.2982788	1422.670654	0.845862329	0	0	0	0	0
697.4221191	1382.03772	0.835509419	0	0	0	0	0
698.7382202	1389.126587	0.855723619	0	0	0	0	0
524.5315552	1019.130371	2.638234615	4.65E-06	0.00009758	0.000104523	6.69861E-05	4.24194E-05
523.0685425	1005.611145	2.611796379	4.81E-06	0.000100937	0.000107574	6.75201E-05	3.84521E-05
524.5848999	1003.389587	2.576751947	4.96E-06	0.000103607	0.00011055	6.83594E-05	3.20435E-05
406.6512146	770.6952515	5.170017719	6.10E-06	0.000119247	0.000114136	9.17816E-05	0.000206528
407.3592224	774.8846436	5.131837845	6.10E-06	0.00011879	0.000111618	8.56018E-05	0.000189209
406.1402283	769.3561401	5.202376366	6.10E-06	0.000120468	0.000121613	0.000105438	0.000231018
335.4396362	617.9981079	8.024661064	5.42E-06	0.000103989	0.000108032	0.000125122	0.00036972
335.3235474	618.3339233	8.058074951	5.72E-06	0.000113754	0.000127335	0.000147705	0.000393829
335.1401367	618.013916	8.031002998	5.11E-06	9.93347E-05	0.000106201	0.000128326	0.000379105
223.6962891	415.3052368	21.72434235	2.24E-05	0.000550232	0.00100914	0.0014579	0.00308784
223.9472656	416.526947	21.73705864	2.33E-05	0.000569916	0.00102051	0.00144844	0.00303757
225.0893555	417.0166626	21.39004517	2.19E-05	0.000538483	0.000981293	0.00141365	0.00299515
109.1830673	214.5769653	68.37336731	1.57E-04	5.65E-03	7.26E-03	7.76E-03	1.36E-02
109.4634399	216.0638275	68.12458801	1.51E-04	5.46E-03	7.07E-03	7.65E-03	1.36E-02
109.5196152	216.54422	68.12162018	1.49E-04	5.34E-03	6.83E-03	7.32E-03	1.31E-02
835.5396118	1635.610107	0.741414905	0.00E+00	4.04E-06	2.50E-05	3.93E-05	6.04E-05
832.4625244	1629.362793	0.721160412	0	2.82E-06	2.24E-05	3.88E-05	6.61E-05
829.1307373	1627.458984	0.731616199	7.62939E-08	5.49E-06	2.67E-05	3.95E-05	5.93E-05
551.7384033	1031.066528	1.356258631	0	0	0	0	0
550.3099976	1015.341614	1.364985108	0	0	0	0	0
549.892334	1013.124207	1.364007354	0	0	0	0	0
776.9395752	1489.699951	0.814102769	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
778.4794922	1501.187134	0.805574	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
772.5093994	1488.912354	0.80358392	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
929.0973511	1715.807495	0.584248543	0	0	0	0	0

44	52	62	74	86	100	120	150
6.31714E-05	5.20325E-05	0.000215225	0.000672531	0.00117317	0.00189041	0.00333656	0.00547569
7.19452E-05	5.98145E-05	0.000222702	0.000679398	0.00118126	0.0019062	0.00337608	0.00557121
8.50677E-05	0.000065918	0.000216827	0.000657806	0.00115555	0.00188484	0.00337807	0.00564247
0.000370865	0.000682678	0.00150101	0.00267189	0.00341187	0.00451889	0.00691978	0.010979
0.000386581	0.000694046	0.00151237	0.00268883	0.00343452	0.00454849	0.00694969	0.0109467
0.000400085	0.000722733	0.00156158	0.00274933	0.00348518	0.00459274	0.00700348	0.0110891
0.000971298	0.00173477	0.00320198	0.00492538	0.00559944	0.00691917	0.0104646	0.0181826
0.000954971	0.00171478	0.00318108	0.00491814	0.00561562	0.0069606	0.0105405	0.018269
0.000993576	0.00178116	0.00329079	0.00506317	0.00575203	0.00709282	0.0106765	0.0184097
0.00196342	0.00303391	0.0050296	0.00719315	0.00795059	0.0100028	0.0162019	0.0308361
0.00190765	0.00294746	0.00488869	0.00699959	0.00775192	0.00978256	0.0159187	0.030465
0.00192955	0.00297256	0.00492874	0.00706703	0.00784546	0.00992409	0.0161699	0.0308915
0.00569359	0.00733727	0.0111081	0.0158542	0.0187331	0.0257163	0.0444748	0.0815059
0.00567421	0.00720512	0.0107948	0.0153452	0.0181853	0.0251368	0.0438733	0.0811365
0.0058149	0.00748299	0.0112993	0.016067	0.0189104	0.0258735	0.0446177	0.0815955
0.0244006	0.0352341	0.0576267	0.0821189	0.0880679	0.101264	0.130919	0.154098
0.0234453	0.0339615	0.0560229	0.0806531	0.0873175	0.1012	0.131826	0.156209
0.0234612	0.0340084	0.0560829	0.0807101	0.0873676	0.101273	0.131986	0.156541
0	8.39233E-07	5.21851E-05	0.000342026	0.000697708	0.00122902	0.00255402	0.00541733
0	2.5177E-06	6.08063E-05	0.000350494	0.000697556	0.00121536	0.00250801	0.00532928
0	1.52588E-07	4.63867E-05	0.000327148	0.00068573	0.00122818	0.00259499	0.00556183
8.07953E-05	0.000286331	0.000858231	0.00177292	0.00261826	0.00395569	0.00716011	0.0139368
6.98853E-05	0.000273743	0.000843887	0.00175613	0.00259789	0.00392204	0.00709091	0.0138079
4.63867E-05	0.000238342	0.000795364	0.00170296	0.0025589	0.00389	0.00704742	0.0136845
0.000704193	0.00137909	0.00267586	0.00438232	0.00539932	0.0073761	0.0127007	0.0247949
0.00066803	0.00133324	0.00261345	0.00431	0.00533783	0.00732391	0.0126667	0.024818
0.000727997	0.00138313	0.00265686	0.0043457	0.00537521	0.00738808	0.0128094	0.02511
0.0011705	0.00210762	0.00390976	0.00633003	0.00793907	0.0112225	0.020125	0.0399988
0.00116257	0.00205643	0.00381752	0.00623306	0.00790077	0.0112675	0.020327	0.0404278
0.00117714	0.002099	0.00387962	0.00628242	0.0079007	0.0112089	0.0201791	0.0402081
0.00579483	0.00755722	0.0117686	0.017523	0.0215128	0.0301933	0.0524071	0.0940401
0.00570129	0.00748444	0.0117446	0.0175852	0.021628	0.0303255	0.0525004	0.0939156
0.00564034	0.00738503	0.0115363	0.0172116	0.0211542	0.0297195	0.0516752	0.0930331
2.57E-02	3.66E-02	0.0595161	0.0847202	0.0907762	0.104095	0.133643	0.15484
2.58E-02	3.67E-02	0.059475	0.0844415	0.0903551	0.103581	0.133066	0.154452
2.52E-02	3.64E-02	0.0594884	0.0848187	0.0908734	0.104132	0.133553	0.154566
6.97E-05	8.62E-05	0.000198364	0.000439148	0.00068512	0.00109634	0.00203438	0.00399796
8.67E-05	1.05E-04	0.000210419	0.000426407	0.00064476	0.00102905	0.00194489	0.0039608
6.76E-05	8.51E-05	0.00019722	0.000435181	0.000675964	0.00107857	0.0020018	0.00395515
0.00E+00	3.59344E-05	0.000515137	0.00130737	0.00180016	0.00235832	0.00351349	0.00603828
0.00E+00	3.53241E-05	0.000502472	0.00127556	0.00176895	0.00234459	0.00356056	0.00624283
0.00E+00	3.32642E-05	0.000486832	0.00126213	0.00176514	0.00235085	0.00357605	0.00623993
0	0	0	0.000207291	0.000710297	0.00135315	0.00267662	0.00461082
0	0	0	0.000242157	0.000734177	0.00135353	0.00262009	0.00448669
0	0	0	0.000233459	0.000736313	0.00136086	0.0026239	0.00444038
0.00E+00	0	0	6.87408E-05	0.000385132	0.000863647	0.00196404	0.00373787

180	210	250	300	360	410	500	600
0.00564453	0.00625542	0.0107273	0.0195462	0.0345224	0.0375418	0.0826665	0.103317
0.00576546	0.00638016	0.0108801	0.0197166	0.0347399	0.0377728	0.083246	0.104162
0.00587448	0.00647377	0.0109284	0.0196383	0.0345068	0.0375455	0.082929	0.104058
0.0126881	0.0159921	0.0283868	0.0475397	0.071902	0.0675401	0.126276	0.13118
0.0125317	0.015731	0.0279646	0.0470738	0.0716592	0.0676695	0.127154	0.132671
0.0128409	0.016237	0.028887	0.0484095	0.0731553	0.0686062	0.127915	0.132279
0.0237766	0.0311333	0.0530411	0.0805504	0.107229	0.0896082	0.146824	0.130308
0.0237914	0.0310869	0.0529429	0.0804777	0.107329	0.0898664	0.14758	0.131305
0.023949	0.0313273	0.0534172	0.0812448	0.108302	0.0905668	0.148376	0.131465
0.0411531	0.051461	0.0809611	0.111054	0.132047	0.0997281	0.145457	0.110833
0.0408138	0.0511409	0.0805752	0.11067	0.131757	0.0996242	0.145531	0.111196
0.0412254	0.0514849	0.0808991	0.110878	0.131806	0.0995706	0.145326	0.110876
0.093232	0.0969313	0.124037	0.134358	0.123468	0.0734758	0.0808357	0.0406352
0.0933353	0.0972818	0.124615	0.134992	0.123969	0.0737138	0.0810524	0.0407845
0.0932358	0.0968945	0.123964	0.134258	0.123346	0.0733688	0.0806192	0.0403623
0.105695	0.0684165	0.0523682	0.0295203	0.0106225	0.000958908	0	0
0.107613	0.0697999	0.0534849	0.030181	0.0108984	0.00101605	0	0
0.107962	0.0700997	0.0537848	0.0304326	0.011103	0.00113006	0	0
0.00762314	0.0103208	0.01869	0.0317217	0.0495143	4.87E-02	0.0975369	0.111867
0.0075737	0.0103677	0.0189566	0.0324004	0.0507643	5.00E-02	0.100091	1.15E-01
0.00784187	0.0105872	0.0191055	0.03235	0.0504623	4.96E-02	0.0994679	1.14E-01
0.0183494	0.0233932	0.0393285	0.0606663	0.0846575	0.0750634	0.133262	0.131602
0.0182378	0.0233398	0.0393756	0.0609035	0.0851344	0.0755552	0.134234	0.132662
0.0180015	0.0230054	0.0388617	0.0603172	0.0847004	0.0754627	0.134568	0.133433
0.0331218	0.0416022	0.0665452	0.0942217	0.117369	0.0932056	0.145277	0.12203
0.033187	0.0416536	0.0665288	0.0940305	0.116946	0.0927891	0.144614	0.121636
0.0334953	0.041919	0.0667892	0.0942426	0.117138	0.092954	0.144938	0.12193
0.0518731	0.0616845	0.0919248	0.11938	0.134908	0.0978699	0.136916	0.0990194
0.0522421	0.0618765	0.0918867	0.119007	0.134308	0.0974608	0.136639	0.0993477
0.0521409	0.0619167	0.0920977	0.119364	0.134666	0.097618	0.136596	0.099
0.103682	0.103847	0.127668	0.132025	0.115128	0.065095	0.0672093	0.030216
0.103349	0.103463	0.127242	0.131727	0.115077	0.0652173	0.0675911	0.0306548
0.103009	0.103584	0.127847	0.132734	0.116164	0.0658624	0.068188	0.0307899
0.103447	0.0647893	0.0473004	0.0244236	0.00670724	7.26938E-06	0	0
0.103491	0.0650491	0.0477371	0.0248927	0.00704722	7.89642E-06	0	0
0.103226	0.0647287	0.0474604	0.0248311	0.00721625	8.33988E-06	0	0
0.00532913	0.00706276	0.01277	0.0219686	0.0351734	0.0355881	0.0743755	0.0906492
0.00544395	0.00729362	0.0131575	0.0224318	0.0355803	0.0358015	0.074592	0.0908245
0.00532211	0.00710922	0.0129252	0.0223041	0.0357452	0.0361577	0.0754771	0.0917773
0.00908005	0.0144185	0.0296019	0.0533279	0.0824332	0.0771426	0.141693	0.142806
0.00936249	0.0146862	0.0298526	0.0534613	0.0824685	0.0772095	0.142118	0.143731
0.0093045	0.0145877	0.0297162	0.0533756	0.0825538	0.0774081	0.142588	0.144174
0.00491051	0.00563034	0.0100915	0.0191641	0.0347839	0.0383477	0.0851868	0.107027
0.00484169	0.00567719	0.01033	0.0196218	0.0353146	0.0386182	0.0851299	0.106273
0.00472504	0.00552643	0.0101665	0.0196144	0.0356994	0.0392345	0.0866312	0.107999
0.00404343	0.00421707	0.00652069	0.011286	0.0206367	0.0239388	0.0574696	0.079547

720	860	1020	1220	1460	1740	2060	2460
0.123799	0.128875	0.11919	0.109072	0.0866414	0.0609886	0.0375748	0.0198155
0.124883	0.129898	0.119775	0.108909	0.0855931	0.0593938	0.03607	0.018819
0.125059	0.130302	0.120241	0.10927	0.0856613	0.0591717	0.0357475	0.0185732
0.130821	0.1129	0.0856346	0.0627474	0.0387167	0.0208559	0.0101978	0.004618
0.132608	0.114385	0.0863624	0.0625257	0.0375959	0.0193052	0.00897924	0.00357516
0.131072	0.112141	0.0841177	0.0608109	0.0370114	0.0197784	0.00970863	0.00445102
0.110323	0.0797569	0.0493578	0.0279259	0.0119749	0.00375065	0.00101567	0.000248651
0.111357	0.0804847	0.0495487	0.0274701	0.0109366	0.00245539	7.15845E-05	0
0.110818	0.0793999	0.0482699	0.0262306	0.0102543	0.00215181	0	0
0.0780502	0.0439531	0.0180191	0.0031865	0	0	0	0
0.0787022	0.0448062	0.018931	0.00374574	0	0	0	0
0.0782421	0.0442458	0.0183817	0.00345866	0	0	0	0
0.0149842	0.00120847	0	0	0	0	0	0
0.0151766	0.00126415	0	0	0	0	0	0
0.0146389	0.00111557	0	0	0	0	0	0
4.76837E-09	1.52111E-06	8.92878E-05	0.00111955	0.00536153	0.0111946	0.0084047	0.00112787
2.14338E-06	0.000150111	0.000738921	0.00212419	0.00429538	0.00650973	0.00695302	0.00444023
2.84147E-05	0.000393927	0.00112166	0.00233007	0.00382105	0.00520342	0.00561129	0.0046534
0.125279	0.123264	0.108373	0.0943599	0.0712822	0.0478454	0.0283896	0.014618
1.28E-01	0.125093	0.108872	0.0931385	0.0683495	0.0440341	0.0250049	0.0124425
1.27E-01	0.124761	0.108671	0.093132	0.0686579	0.0446222	0.0256221	0.0128693
0.125396	0.103309	0.0742885	0.0507644	0.0283355	0.0131729	0.00541633	0.00192101
0.126468	0.104124	0.0745881	0.0503609	0.0272349	0.0117416	0.0041387	0.00117085
0.127452	0.104983	0.0750976	0.0504785	0.0270174	0.0113992	0.00386236	0.00103397
0.0977893	0.0664359	0.0378447	0.0185839	0.00578182	0.000241367	0	0
0.0978415	0.0669576	0.0386117	0.0193163	0.00614063	0.000164822	0	0
0.0979274	0.0666567	0.0379347	0.0183866	0.00524229	0.000064789	0	0
0.0655206	0.0337493	0.011645	0.00109513	0	0.00E+00	0.00046425	0.000434464
0.0663207	0.0344148	0.0116264	0.000889585	0	0.00E+00	0	0
0.0658417	0.0341016	0.0116964	0.00115973	0	0.00E+00	0	0.000132292
0.00793428	0.000271514	0	0	0	0	0	0
0.00831765	0.000376203	0	0	0	0	0	0
0.00819778	0.000318297	0	0	0	0	0	0
7.62939E-08	8.34036E-05	0.000628219	0.00241513	0.0058405	0.00915372	0.00824143	0.00253089
0	2.48384E-05	0.000375736	0.00217155	0.00660445	0.0109404	0.00829184	0.00153704
0	2.19345E-07	2.50244E-05	0.000897202	0.00807364	0.016497	0.00510583	0.000180227
0.109615	0.118392	0.116052	0.114442	0.0987107	0.0749861	0.048858	0.0266263
0.109864	0.118681	0.116221	0.114299	0.0981616	0.0741877	0.0481215	0.0261478
0.110592	0.118888	0.11588	0.113556	0.0973665	0.0736465	0.0478873	0.0260867
0.136983	0.112636	0.0803176	0.0540687	0.0294871	0.0132718	0.00526344	0.00181806
0.13833	0.113911	0.0809707	0.0537596	0.0282179	0.0115726	0.00357641	0.00102257
0.138589	0.113911	0.0807838	0.0534818	0.0279553	0.011384	0.00347559	0.000978983
0.128388	0.133206	0.122042	0.1096	0.0843513	0.0568317	0.0334438	0.0170215
0.127026	0.131706	0.120969	0.10931	0.0849837	0.0580061	0.034567	0.0177536
0.128572	0.132525	0.120833	0.10825	0.0833836	0.0564411	0.0334482	0.0171356
0.105795	0.122587	0.126651	0.130157	0.116025	0.0903973	0.0599119	0.0329708

2740	3000
0.000490248	0
0.000463872	0
0.000457145	0
0.000108914	0
0.000169586	0
0.000105652	0
1.04984E-05	0
0	0
0	0
0.00E+00	0
0	0
0	0
0	0
0	0
0.00E+00	0
5.25659E-06	0
0.000103767	0
0.000137519	0
0.000358924	0
0.000301883	0
0.000313285	0
8.80673E-05	0
0.000049168	0
4.24426E-05	0
0	0
0.00E+00	0
0	0
0	0
0	0
0.000016317	0
0.00E+00	0
0	0
0.00E+00	0
7.82466E-05	0
2.36536E-05	0
0	0
0.000665281	0
0.000652719	0
0.000651845	0
8.28084E-05	0
1.97466E-05	0
1.84322E-05	0
0.000415865	0
0.000435083	0
0.000419713	0
0.000826219	0

76980	1	12/17/18	8:54	38238	W1835106
76980	1	12/17/18	8:54	38238	W1835106
76980	1	12/17/18	8:58	43991	W1835107
76980	1	12/17/18	8:58	43991	W1835107
76980	1	12/17/18	8:58	43991	W1835107
76980	1	12/17/18	9:01	27195	W1835108
76980	1	12/17/18	9:01	27195	W1835108
76980	1	12/17/18	9:01	27195	W1835108
76980	1	12/17/18	9:05	48595	W1835109
76980	1	12/17/18	9:05	48595	W1835109
76980	1	12/17/18	9:05	48595	W1835109
76980	1	12/17/18	9:08	46618	W1835110
76980	1	12/17/18	9:08	46618	W1835110
76980	1	12/17/18	9:08	46618	W1835110
76980	1	12/17/18	9:12	60464	W1835111
76980	1	12/17/18	9:12	60464	W1835111
76980	1	12/17/18	9:12	60464	W1835111
76980	1	12/17/18	9:16	37761	W1835112
76980	1	12/17/18	9:16	37761	W1835112
76980	1	12/17/18	9:16	37761	W1835112
76980	1	12/17/18	9:19	58838	W1835113
76980	1	12/17/18	9:19	58838	W1835113
76980	1	12/17/18	9:19	58838	W1835113
76980	1	12/17/18	9:22	66169	W1835114
76980	1	12/17/18	9:22	66169	W1835114
76980	1	12/17/18	9:22	66169	W1835114
76980	1	12/17/18	9:26	39778	W1835115
76980	1	12/17/18	9:26	39778	W1835115
76980	1	12/17/18	9:26	39778	W1835115
76980	1	12/17/18	9:30	61715	W1835116
76980	1	12/17/18	9:30	61715	W1835116
76980	1	12/17/18	9:30	61715	W1835116
76980	1	12/17/18	9:33	49168	W1835117
76980	1	12/17/18	9:33	49168	W1835117
76980	1	12/17/18	9:33	49168	W1835117
76980	1	12/17/18	9:37	28868	W1835118
76980	1	12/17/18	9:37	28868	W1835118
76980	1	12/17/18	9:37	28868	W1835118
76980	1	12/17/18	9:40	66092	W1835119
76980	1	12/17/18	9:40	66092	W1835119
76980	1	12/17/18	9:40	66092	W1835119
76980	1	12/17/18	9:43	32580	W1835120
76980	1	12/17/18	9:43	32580	W1835120
76980	1	12/17/18	9:43	32580	W1835120
76980	1	12/17/18	9:47	74340	W1835121
76980	1	12/17/18	9:47	74340	W1835121
76980	1	12/17/18	9:47	74340	W1835121

XtendiMax+4-Barrel+AU-243LFP13	TTI11004	63	2	447.7424316
XtendiMax+4-Barrel+AU-243LFP13	TTI11004	63	3	452.5324402
XtendiMax+60-40MSO+AU-243LFP13	TTI11004	63	1	380.178894
XtendiMax+60-40MSO+AU-243LFP13	TTI11004	63	2	380.2000122
XtendiMax+60-40MSO+AU-243LFP13	TTI11004	63	3	379.7443237
XtendiMax+ABSIL+AU-243LFP13	TTI11004	63	1	378.2629089
XtendiMax+ABSIL+AU-243LFP13	TTI11004	63	2	379.5910034
XtendiMax+ABSIL+AU-243LFP13	TTI11004	63	3	375.615509
XtendiMax+Absorb100+AU-243LFP13	TTI11004	63	1	379.7552795
XtendiMax+Absorb100+AU-243LFP13	TTI11004	63	2	378.7019043
XtendiMax+Absorb100+AU-243LFP13	TTI11004	63	3	378.5574951
XtendiMax+Activator90+AU-243LFP13	TTI11004	63	1	407.3686829
XtendiMax+Activator90+AU-243LFP13	TTI11004	63	2	407.5856628
XtendiMax+Activator90+AU-243LFP13	TTI11004	63	3	404.3984375
XtendiMax+Affiance+AU-243LFP13	TTI11004	63	1	401.6908875
XtendiMax+Affiance+AU-243LFP13	TTI11004	63	2	401.8074646
XtendiMax+Affiance+AU-243LFP13	TTI11004	63	3	399.5483398
XtendiMax+AimEC+AU-243LFP13	TTI11004	63	1	418.4796143
XtendiMax+AimEC+AU-243LFP13	TTI11004	63	2	415.578064
XtendiMax+AimEC+AU-243LFP13	TTI11004	63	3	417.2565002
XtendiMax+Anova+AU-243LFP13	TTI11004	63	1	443.6043701
XtendiMax+Anova+AU-243LFP13	TTI11004	63	2	444.4043274
XtendiMax+Anova+AU-243LFP13	TTI11004	63	3	441.9936829
XtendiMax+AnthemFlex+AU-243LFP13	TTI11004	63	1	439.6506958
XtendiMax+AnthemFlex+AU-243LFP13	TTI11004	63	2	435.4039917
XtendiMax+AnthemFlex+AU-243LFP13	TTI11004	63	3	438.8065796
XtendiMax+Antifoam(Rosen's)+AU-243LFP13	TTI11004	63	1	450.190979
XtendiMax+Antifoam(Rosen's)+AU-243LFP13	TTI11004	63	2	449.17276
XtendiMax+Antifoam(Rosen's)+AU-243LFP13	TTI11004	63	3	449.4125061
XtendiMax+AP910+AU-243LFP13	TTI11004	63	1	358.9159241
XtendiMax+AP910+AU-243LFP13	TTI11004	63	2	362.5453796
XtendiMax+AP910+AU-243LFP13	TTI11004	63	3	361.4468079
XtendiMax+APSA-80+AU-243LFP13	TTI11004	63	1	397.6807556
XtendiMax+APSA-80+AU-243LFP13	TTI11004	63	2	390.8231201
XtendiMax+APSA-80+AU-243LFP13	TTI11004	63	3	394.9356384
XtendiMax+APSimmer+AU-243LFP13	TTI11004	63	1	439.1188965
XtendiMax+APSimmer+AU-243LFP13	TTI11004	63	2	439.8282776
XtendiMax+APSimmer+AU-243LFP13	TTI11004	63	3	439.4415588
XtendiMax+AssureII+AU-243LFP13	TTI11004	63	1	423.2036133
XtendiMax+AssureII+AU-243LFP13	TTI11004	63	2	428.1747437
XtendiMax+AssureII+AU-243LFP13	TTI11004	63	3	423.9846191
XtendiMax+Astute+AU-243LFP13	TTI11004	63	1	440.8814697
XtendiMax+Astute+AU-243LFP13	TTI11004	63	2	445.4736023
XtendiMax+Astute+AU-243LFP13	TTI11004	63	3	445.7876587
XtendiMax+AU-355+AU-243LFP13	TTI11004	63	1	382.6980896
XtendiMax+AU-355+AU-243LFP13	TTI11004	63	2	385.7828369
XtendiMax+AU-355+AU-243LFP13	TTI11004	63	3	385.9506226

914.7942505	1692.33667	0.600867391	0	0	0	0	0
937.8096924	1725.764404	0.561269045	0	0	0	0	0
771.9827271	1492.550415	0.816695809	0	0	0	0	0
777.1488647	1510.582886	0.779366612	0	0.00E+00	0.00E+00	0.00E+00	0.00E+00
773.2023926	1497.964233	0.786656976	0	0	0	0.00E+00	0
759.9634399	1465.442627	0.830538511	0	0	0	0	0
761.9711304	1461.906372	0.830038667	0	0	0	0	0
753.9723511	1449.7854	0.846146226	0	0	0	0	0
758.4407959	1455.343994	0.874068558	0	0	0	0	0
753.8859253	1438.528809	0.886226594	0	0.00E+00	0.00E+00	0.00E+00	0.00E+00
751.8591919	1435.08728	0.90578711	0	0.00E+00	0.00E+00	0.00E+00	0.00E+00
826.4165649	1571.91626	0.696417332	0	0	0	0	0
829.2518311	1580.461182	0.689408064	0	0	0	0	0
829.2922363	1584.434814	0.678366661	0	0	0	0	0
864.0617676	1658.846558	0.610235214	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
860.4671631	1648.252686	0.61317724	0	0.00E+00	0.00E+00	0.00E+00	0.00E+00
854.6831665	1644.80188	0.64424479	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
849.7319336	1603.932739	0.655870974	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
842.6660156	1594.419189	0.671008646	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
840.9419556	1589.376709	0.684996009	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
944.4542847	1743.437012	0.572030962	0	0	0	0	0
935.8036499	1728.240356	0.576399267	0	0	0	0	0
935.9793091	1730.125122	0.573289692	0	0	0	0	0
907.8255615	1688.313354	0.587779403	0	0	0	0	0
908.0983276	1695.046021	0.576117158	0	0	0	0	0
903.4015503	1683.040405	0.584667861	0	0	0	0	0
939.3671875	1730.481323	0.566164315	0	0	0	0	0
931.7788696	1721.9646	0.574748516	0	0	0	0	0
939.3255615	1729.891113	0.542779505	0	0	0	0	0
749.6577148	1470.824219	0.884203076	0	0	0	0	0
758.0744019	1490.818237	0.845856488	0	0	0	0	0
758.1985474	1490.852051	0.868357897	0	0	0	0	0
892.6089478	1706.067139	0.72405827	0	0	0	0	0
883.9197998	1701.810425	0.737977624	0	0	0	0	0
884.4908447	1699.041626	0.756772816	0	0	0	0	0
901.4044189	1679.913696	0.572834432	0	0	0	0	0
893.491333	1664.023071	0.578541875	0	0	0	0	0
890.8444824	1660.651855	0.593717277	0	0	0	0	0
843.9603271	1587.685181	0.695470572	0	0	0	0	0
856.022644	1605.112183	0.673704863	0	0	0	0	0
851.2739868	1601.598877	0.692743778	0	0	0	0	0
925.9174805	1717.939331	0.571240366	0	0	0	0	0
929.0172119	1716.408569	0.561127305	0	0	0	0	0
936.067749	1727.7146	0.553014815	0	0	0	0	0
805.746582	1571.220581	0.719143689	0	0	0	0	0
809.0134277	1566.168213	0.713879347	0	0	0	0	0
812.3844604	1581.338745	0.712039232	0	0	0	0	0

0.00E+00	0	0	0.000039978	0.00037117	0.000882187	0.00204933	0.00388069
0.00E+00	0	0	4.79889E-05	0.000350494	0.000817108	0.00189774	0.00365303
0	0	0	1.39E-04	0.000661392	0.00134537	0.00273933	0.00473335
0.00E+00	0.00E+00	0.00E+00	1.74E-04	0.000675888	0.00130867	0.00258018	0.00440804
0.00E+00	0	0.00E+00	1.59E-04	0.000664215	0.00131073	0.00261711	0.00449615
0	0	0	2.40E-04	0.000774384	0.00143059	0.00272545	0.00449471
0	0	0	2.40E-04	0.000774536	0.00143051	0.00272446	0.00448738
0	0	0	2.56E-04	0.000787277	0.00149666	0.00275032	0.00454353
0.00E+00	0.00E+00	0	0.000239334	0.000799255	0.00155563	0.0028701	0.0046714
0.00E+00	0.00E+00	0	0.000257721	0.000827255	0.00158646	0.00290131	0.00468506
0.00E+00	0.00E+00	0	0.000253448	0.000842667	0.00162933	0.00297775	0.00476738
0.00E+00	0	0	4.70734E-05	0.000477829	0.0010894	0.00238655	0.00428619
0.00E+00	0	0	5.56183E-05	0.000482864	0.00108437	0.00235603	0.00421562
0.00E+00	0	0	8.27789E-05	0.000495758	0.00106857	0.0022892	0.00413116
0.00E+00	0.00E+00	0	0.000120926	0.000467987	0.000939484	0.00199188	0.0038028
0.00E+00	0.00E+00	0	0.000115051	0.000458908	0.000933304	0.00200424	0.00386292
0.00E+00	0.00E+00	0	0.000121994	0.000492859	0.000997086	0.00211327	0.00399071
0.00E+00	0	0	6.67572E-05	0.000454788	0.00101402	0.0022287	0.00404861
0.00E+00	0	0	6.84357E-05	0.000466614	0.00103928	0.00228035	0.00413597
0	0	0	6.46973E-05	0.000479813	0.00107277	0.00234001	0.00417442
0	0	0.00E+00	9.08661E-05	0.000392685	0.000841827	0.00189217	0.00367531
0	0	0.00E+00	0.00008461	0.000387115	0.000842972	0.00191307	0.00372276
0	0	0.00E+00	8.62122E-05	0.00038887	0.000841064	0.00189957	0.00369713
0	0	0.00E+00	0.000041275	0.000363922	0.000858994	0.00199501	0.00382545
0	0	0.00E+00	8.00323E-05	0.000400925	0.000868988	0.00192574	0.00362968
0	0	0.00E+00	4.27246E-05	0.000372391	0.000868683	0.00198792	0.00375252
0	0	0.00E+00	6.79016E-05	0.000375214	0.000837021	0.00189926	0.00362778
0	0	0.00E+00	5.21088E-05	0.000365982	0.000844955	0.00194374	0.0037085
0	0	0.00E+00	6.56128E-05	0.000343246	0.000813293	0.00178413	0.00354919
0	0.00E+00	2.98E-06	0.000297546	0.00079361	0.00149124	0.00281235	0.00502075
0	0	6.56E-06	0.000301666	0.000773773	0.00143425	0.0026796	0.00475449
0	0.00E+00	5.65E-06	0.00029747	0.000775375	0.00145569	0.00275558	0.00495277
0.00E+00	0	1.44958E-05	0.000226974	0.000580826	0.00109352	0.00229446	0.00448242
0.00E+00	0.00E+00	2.46429E-05	0.000260162	0.000613632	0.00112381	0.00231438	0.00450554
0.00E+00	0.00E+00	1.50299E-05	0.000250778	0.000633698	0.00117287	0.0023999	0.00455841
0.00E+00	0.00E+00	0	4.23431E-05	0.000367584	0.000855789	0.00195023	0.003657
0	0.00E+00	0	1.27411E-05	0.000337906	0.000844803	0.00199196	0.00378372
0.00E+00	0.00E+00	0	2.27356E-05	0.000362473	0.0008815	0.00204216	0.00381744
0.00E+00	0	0	6.14166E-05	0.000490112	0.0011013	0.00239006	0.0041819
0.00E+00	0	0	4.92096E-05	0.000455933	0.00104782	0.00231766	0.00412827
0.00E+00	0	0	6.96564E-05	0.000490646	0.00109116	0.00236938	0.0041832
0.00E+00	0.00E+00	0	7.59888E-05	0.000380783	0.000839157	0.00190475	0.00368217
0.00E+00	0.00E+00	0	5.64575E-05	0.000354004	0.000812302	0.00188438	0.00367195
0.00E+00	0.00E+00	0	0.000058136	0.000337753	0.000819244	0.00181938	0.00366447
0	0.00E+00	0	0.000147324	0.000564651	0.00112648	0.00235703	0.00439056
0	0.00E+00	0	0.000119324	0.000530701	0.00110001	0.00235893	0.0044426
0	0.00E+00	0	0.000157928	0.000577393	0.0011322	0.00232986	0.00427361

0.0040947	0.00413696	0.006269	0.0109521	0.020546	0.0242764	0.0590274	0.0822192
0.00397285	0.00413895	0.00636497	0.0109621	0.0200401	0.0233047	0.0561781	0.0781629
0.00498734	0.00566078	0.0101426	0.0193945	0.03541	0.0390987	0.0866729	0.108263
0.00472816	0.00556503	0.0102583	0.0197327	0.0357305	0.0391011	0.0859801	0.106788
0.00480621	0.00560616	0.0102629	0.0197232	0.0358113	0.039298	0.0866278	0.107773
0.00463707	0.00537048	0.0100336	0.0198254	0.0366832	0.0405824	0.0897015	0.111358
0.00461266	0.00531616	0.00989914	0.0195538	0.0362457	0.0401879	0.0890942	0.11102
0.00469292	0.00547455	0.0102853	0.0203196	0.0374594	0.0412912	0.0909319	0.11248
0.00463348	0.00519386	0.00963326	0.0192745	0.0362096	0.0404406	0.0900008	0.112229
0.00462463	0.00519066	0.00967758	0.0194456	0.0365905	0.0408731	0.0909315	0.113317
0.00462883	0.00513199	0.00956795	0.0193666	0.0366742	0.0410873	0.0915045	0.113964
0.0044738	0.0047998	0.00809982	0.0152293	0.0284941	0.0325269	0.0751263	0.098351
0.0044075	0.00476212	0.00810059	0.0152762	0.0285281	0.0324792	0.0748184	0.0977509
0.00444443	0.00495438	0.00854599	0.0159592	0.0292582	0.0328741	0.0749531	0.0972228
0.00455086	0.00552795	0.0097242	0.0173042	0.029599	0.0317017	0.0698327	0.0889491
0.00462959	0.00558716	0.00974022	0.0172307	0.0294589	0.0316277	0.06995	0.0895049
0.00468391	0.00559448	0.00975891	0.0173867	0.0299177	0.0321959	0.0711459	0.0906744
0.00424545	0.00450737	0.00746696	0.0139059	0.0261465	0.0301453	0.0705933	0.0939982
0.00433197	0.00459747	0.00761978	0.0142001	0.0266982	0.0307545	0.0718752	0.0953718
0.00425789	0.0044175	0.00728935	0.0137943	0.0264009	0.0307162	0.0722169	0.0960984
0.00416969	0.00457649	0.00727173	0.0123383	0.0215229	0.0240795	0.0562185	0.0764828
0.00419411	0.00454529	0.00713829	0.0120914	0.0212858	0.0240623	0.0567603	0.0778441
0.00419617	0.0046032	0.00731239	0.0124232	0.0217294	0.0243714	0.0570348	0.0777184
0.00416321	0.00438347	0.00687263	0.0120242	0.0220143	0.0254349	0.0606209	0.0830916
0.00400124	0.00437241	0.00714798	0.0127274	0.0230473	0.0261893	0.0613619	0.0829356
0.00403717	0.00425179	0.00675697	0.0120433	0.0222936	0.0258331	0.0615289	0.084099
0.00396988	0.00420143	0.00656158	0.0113238	0.0204799	0.0235629	0.0562708	0.0777708
0.00400909	0.00417801	0.00646591	0.0112167	0.0205461	0.0238483	0.0572581	0.0792419
0.00398117	0.0042971	0.00675964	0.0115717	0.0206622	0.0235985	0.0561514	0.0775571
0.00579163	0.00713249	0.0130119	0.0237935	0.0406932	0.0427668	0.0907928	0.109367
0.00550041	0.00684196	0.0126189	0.0232494	0.0399097	0.0420123	0.0893275	0.107849
0.00574013	0.00705811	0.012807	0.0232988	0.0397604	0.0418037	0.0889507	0.10758
0.00544106	0.00646324	0.0107423	0.0178086	0.0287779	0.0299126	0.0648621	0.0823993
0.00553604	0.00669754	0.011304	0.0188364	0.0302428	0.0311111	0.0665897	0.0834442
0.0054203	0.00641136	0.0107436	0.0180505	0.029447	0.0306888	0.0664073	0.0838705
0.00391205	0.00412575	0.00662811	0.0119836	0.0223784	0.0260065	0.0619737	0.0846385
0.00402412	0.00415382	0.00651314	0.0116895	0.0220576	0.0259467	0.0625444	0.0861414
0.00399368	0.00407784	0.00639534	0.0116032	0.0221212	0.0261362	0.0630775	0.086787
0.00410316	0.00407776	0.00660118	0.0127393	0.0251663	0.0299059	0.0714552	0.096193
0.00410759	0.00408035	0.00648903	0.012281	0.0241057	0.0287006	0.0689921	0.0936942
0.00416565	0.00418388	0.00674286	0.0127939	0.0249197	0.0294243	0.070118	0.0944337
0.00412643	0.00448761	0.00714905	0.0123335	0.0219476	0.0248599	0.0584752	0.0797047
0.00409576	0.00439278	0.00689095	0.0118233	0.0211832	0.0242178	0.0575477	0.079202
0.00415131	0.00450035	0.00705719	0.0119601	0.0211285	0.0239661	0.0567012	0.0779218
0.00510918	0.00612961	0.0108502	0.019628	0.0339859	0.0364709	0.0797058	0.0995509
0.0051458	0.00607925	0.010596	0.0190379	0.0330553	0.0356888	0.0786365	0.0991228
0.00491966	0.00589447	0.0104933	0.019132	0.0333257	0.03588	0.0786258	0.098497

0.109256	0.125752	0.128401	0.129791	0.113427	0.0866147	0.0564827	0.0307631
0.104522	0.121807	0.126613	0.130997	0.11762	0.0922717	0.0614801	0.0339456
0.128808	0.132455	0.12042	0.107676	0.0830481	0.0565608	0.0338477	0.0175052
0.126842	0.130728	0.119586	0.10806	0.0845701	0.0585705	0.0355733	0.0185815
0.128031	0.131735	0.120043	0.107749	0.0835097	0.0571655	0.0343547	0.0178173
0.131397	0.133726	0.120027	0.105626	0.0799539	0.0534182	0.0314764	0.0161242
0.13152	0.134368	0.12098	0.106588	0.0804611	0.0533198	0.0310537	0.0157398
0.1323	0.134198	0.119934	0.10485	0.078555	0.0517502	0.0300492	0.0152231
0.132648	0.134923	0.120776	0.105732	0.0793696	0.0524258	0.0305163	0.0154806
0.133811	0.135876	0.121221	0.105418	0.0782054	0.0507603	0.028977	0.0144713
0.134318	0.13603	0.120995	0.104903	0.0776241	0.0503114	0.0287199	0.0143532
0.122586	0.132012	0.125669	0.117758	0.0951085	0.0674705	0.041587	0.0218806
0.121746	0.131193	0.125176	0.117809	0.09577	0.0684698	0.0424985	0.0224648
0.120688	0.130024	0.124338	0.117499	0.0959942	0.0689484	0.0429332	0.0227324
0.110642	0.121531	0.120314	0.119442	0.103624	0.0791499	0.0517883	0.0282884
0.111699	0.122811	0.121327	0.119764	0.102969	0.0778155	0.0504429	0.0273839
0.112479	0.122839	0.120604	0.118507	0.101696	0.0769282	0.0499919	0.0272015
0.119293	0.130933	0.127142	0.121634	0.100251	0.0723548	0.045111	0.0238688
0.120463	0.131454	0.126822	0.12049	0.0986519	0.0708267	0.0440189	0.0232581
0.121398	0.132268	0.127258	0.120458	0.0981953	0.0701817	0.0434521	0.0228997
0.101265	0.11798	0.123531	0.12956	0.118458	0.0947531	0.0641751	0.035822
0.103407	0.120283	0.125157	0.129874	0.117119	0.092349	0.0618248	0.0342544
0.102884	0.119568	0.124539	0.129528	0.117134	0.0926023	0.0621167	0.0344601
0.10926	0.124935	0.127091	0.128243	0.112043	0.0856191	0.0558924	0.0304657
0.108177	0.123315	0.125559	0.127255	0.111985	0.086319	0.056794	0.0311291
0.110164	0.125446	0.127075	0.127698	0.111141	0.0846648	0.0551573	0.0300359
0.103688	0.120807	0.125793	0.130578	0.117772	0.092878	0.0621964	0.034473
0.105368	0.122089	0.126203	0.129931	0.116281	0.0911504	0.0608125	0.0336408
0.103522	0.120783	0.125879	0.130681	0.117801	0.092822	0.0621085	0.0344041
0.126972	0.128542	0.115785	0.102998	0.0791854	0.0537654	0.0320588	0.0165211
0.125648	0.127862	0.116015	0.104242	0.0811845	0.055943	0.0338148	0.0175986
0.125547	0.127898	0.116084	0.10427	0.0811648	0.0559254	0.0338218	0.0176139
0.10352	0.115929	0.117865	0.120949	0.108907	0.086301	0.0581864	3.24E-02
0.103676	0.115158	0.116461	0.119193	0.107304	0.0851583	0.0575286	0.0321088
0.104571	0.116201	0.117331	0.119738	0.107402	0.084904	0.0571597	0.0318235
0.110707	0.125838	0.127216	0.12755	0.110746	0.0841733	0.0547375	0.0297694
0.113015	0.128171	0.128659	0.127528	0.109154	0.0817697	0.0525684	0.0283864
0.113608	0.128511	0.128662	0.127198	0.108598	0.0811778	0.0521103	0.0281164
0.122307	0.133657	0.12864	0.121531	0.0986831	0.0701739	0.0432504	0.0227294
0.120294	0.132803	0.129173	0.123399	0.101343	0.0728229	0.0452384	0.0238867
0.120449	0.132326	0.128285	0.122322	0.100391	0.0721461	0.0448325	0.0236771
0.105075	0.121234	0.125123	0.128788	0.115253	0.0902913	0.0601767	0.033258
0.10519	0.122001	0.126276	0.130007	0.116046	0.0904863	0.0600012	0.0330328
0.103603	0.120539	0.125406	0.130069	0.117192	0.0923061	0.0617439	3.42E-02
0.12011	0.126702	0.119401	0.111914	0.0913716	0.0660856	0.041603	0.0222439
0.120561	0.127954	0.120975	0.113322	0.0920218	0.0659098	0.0410433	0.0217599
0.119272	0.126397	0.119768	0.112957	0.0928077	0.0674933	0.0426491	0.0228494

0.000768354	0
0.000851524	0
0.000430423	0
0.000458352	0
0.000438498	0
0.000395328	0
0.00038436	0
0.000371825	0
0.00037822	0
0.000351594	0
0.000348859	0
0.000540748	0
0.000556008	0
0.000562876	0
0.00070726	0
0.000683292	0
0.000679315	0
0.000590641	0
0.000575338	0
0.000565996	0
0.000901811	0
0.000860301	0
0.000865841	0
0.000761114	0
0.000779153	0
0.00075021	0
0.000865941	0
0.000844566	0
0.000864032	0
0.000405575	0
0.000433495	0
0.000433987	0
0.000816108	0
0.000808535	0
0.000800654	0
7.43E-04	0
0.000707121	0
0.000700238	0
0.000561343	0
0.000590762	0
0.000585606	0
8.35E-04	0
0.000827907	0
0.0008588	0
0.00055274	0
0.000539115	0
0.000568106	0

76980	1	12/17/18	9:51	54462	W1835122
76980	1	12/17/18	9:51	54462	W1835122
76980	1	12/17/18	9:51	54462	W1835122
76980	1	12/17/18	9:54	15404	W1835123
76980	1	12/17/18	9:54	15404	W1835123
76980	1	12/17/18	9:54	15404	W1835123
76980	1	12/17/18	9:58	15980	W1835124
76980	1	12/17/18	9:58	15980	W1835124
76980	1	12/17/18	9:58	15980	W1835124
76980	1	12/17/18	10:04	18280	W1835125
76980	1	12/17/18	10:04	18280	W1835125
76980	1	12/17/18	10:04	18280	W1835125
76980	1	12/17/18	10:07	77649	W1835126
76980	1	12/17/18	10:07	77649	W1835126
76980	1	12/17/18	10:07	77649	W1835126
76980	1	12/17/18	10:11	45498	W1835127
76980	1	12/17/18	10:11	45498	W1835127
76980	1	12/17/18	10:11	45498	W1835127
76980	1	12/17/18	10:14	66108	W1835128
76980	1	12/17/18	10:14	66108	W1835128
76980	1	12/17/18	10:14	66108	W1835128
76980	1	12/17/18	10:17	35108	W1835129
76980	1	12/17/18	10:17	35108	W1835129
76980	1	12/17/18	10:17	35108	W1835129
76980	1	12/17/18	10:21	52242	W1835130
76980	1	12/17/18	10:21	52242	W1835130
76980	1	12/17/18	10:21	52242	W1835130
76980	1	12/17/18	10:24	78390	W1835131
76980	1	12/17/18	10:24	78390	W1835131
76980	1	12/17/18	10:24	78390	W1835131
76980	1	12/17/18	10:28	46124	W1835132
76980	1	12/17/18	10:28	46124	W1835132
76980	1	12/17/18	10:28	46124	W1835132
76980	1	12/17/18	10:32	49718	W1835133
76980	1	12/17/18	10:32	49718	W1835133
76980	1	12/17/18	10:32	49718	W1835133
76980	1	12/17/18	10:35	52509	W1835134
76980	1	12/17/18	10:35	52509	W1835134
76980	1	12/17/18	10:35	52509	W1835134
76980	1	12/17/18	10:39	73495	W1835135
76980	1	12/17/18	10:39	73495	W1835135
76980	1	12/17/18	10:39	73495	W1835135
76980	1	12/17/18	10:42	40459	W1835136
76980	1	12/17/18	10:42	40459	W1835136
76980	1	12/17/18	10:42	40459	W1835136
76980	1	12/17/18	10:46	64559	W1835137
76980	1	12/17/18	10:46	64559	W1835137

XtendiMax+AU-369+AU-243LFP13	TTI11004	63	1	406.1742859
XtendiMax+AU-369+AU-243LFP13	TTI11004	63	2	402.9779053
XtendiMax+AU-369+AU-243LFP13	TTI11004	63	3	404.9162292
XtendiMax+AU-905HFD+AU-243LFP13	TTI11004	63	1	425.5673828
XtendiMax+AU-905HFD+AU-243LFP13	TTI11004	63	2	422.6388855
XtendiMax+AU-905HFD+AU-243LFP13	TTI11004	63	3	424.7744141
XtendiMax+AvatarS2+AU-243LFP13	TTI11004	63	1	377.1362
XtendiMax+AvatarS2+AU-243LFP13	TTI11004	63	2	376.8845825
XtendiMax+AvatarS2+AU-243LFP13	TTI11004	63	3	374.5036316
XtendiMax+AvengerBoldS3+AU-243LFP13	TTI11004	63	1	393.2789612
XtendiMax+AvengerBoldS3+AU-243LFP13	TTI11004	63	2	394.633728
XtendiMax+AvengerBoldS3+AU-243LFP13	TTI11004	63	3	394.5783081
XtendiMax+AxiomDF+AU-243LFP13	TTI11004	63	1	421.2123413
XtendiMax+AxiomDF+AU-243LFP13	TTI11004	63	2	424.64328
XtendiMax+AxiomDF+AU-243LFP13	TTI11004	63	3	417.6789856
XtendiMax+BarrolaHL+AU-243LFP13	TTI11004	63	1	376.3280029
XtendiMax+BarrolaHL+AU-243LFP13	TTI11004	63	2	372.4145813
XtendiMax+BarrolaHL+AU-243LFP13	TTI11004	63	3	368.3247681
XtendiMax+BaythroidXL+AU-243LFP13	TTI11004	63	1	434.348877
XtendiMax+BaythroidXL+AU-243LFP13	TTI11004	63	2	431.0455627
XtendiMax+BaythroidXL+AU-243LFP13	TTI11004	63	3	432.0174561
XtendiMax+BeanOil+AU-243LFP13	TTI11004	63	1	357.9896851
XtendiMax+BeanOil+AU-243LFP13	TTI11004	63	2	358.7142639
XtendiMax+BeanOil+AU-243LFP13	TTI11004	63	3	355.7898865
XtendiMax+BestShot+AU-243LFP13	TTI11004	63	1	405.4835815
XtendiMax+BestShot+AU-243LFP13	TTI11004	63	2	406.3283386
XtendiMax+BestShot+AU-243LFP13	TTI11004	63	3	407.7572632
XtendiMax+Between+AU-243LFP13	TTI11004	63	1	424.2668152
XtendiMax+Between+AU-243LFP13	TTI11004	63	2	423.7189636
XtendiMax+Between+AU-243LFP13	TTI11004	63	3	424.5724792
XtendiMax+BicepIIMagnum+AU-243LFP13	TTI11004	63	1	381.4278259
XtendiMax+BicepIIMagnum+AU-243LFP13	TTI11004	63	2	382.9951477
XtendiMax+BicepIIMagnum+AU-243LFP13	TTI11004	63	3	379.936676
XtendiMax+BifentureEC+AU-243LFP13	TTI11004	63	1	394.2460632
XtendiMax+BifentureEC+AU-243LFP13	TTI11004	63	2	393.1571655
XtendiMax+BifentureEC+AU-243LFP13	TTI11004	63	3	394.2697449
XtendiMax+Bio-ForgeAdvanced+AU-243LFP13	TTI11004	63	1	447.0379334
XtendiMax+Bio-ForgeAdvanced+AU-243LFP13	TTI11004	63	2	444.4693909
XtendiMax+Bio-ForgeAdvanced+AU-243LFP13	TTI11004	63	3	443.1029358
XtendiMax+Boundary6-5EC+AU-243LFP13	TTI11004	63	1	374.6854858
XtendiMax+Boundary6-5EC+AU-243LFP13	TTI11004	63	2	375.4446716
XtendiMax+Boundary6-5EC+AU-243LFP13	TTI11004	63	3	376.8389893
XtendiMax+BrandtAPlus+AU-243LFP13	TTI11004	63	1	393.8925171
XtendiMax+BrandtAPlus+AU-243LFP13	TTI11004	63	2	392.0123596
XtendiMax+BrandtAPlus+AU-243LFP13	TTI11004	63	3	394.1051025
XtendiMax+BrandtTorpedo+AU-243LFP13	TTI11004	63	1	354.729126
XtendiMax+BrandtTorpedo+AU-243LFP13	TTI11004	63	2	353.4044495

821.8938599	1562.151245	0.71582377	0	0	0	0	0
814.0397339	1550.834229	0.715563476	0	0	0	0	0
821.5054932	1559.729614	0.711839795	0	0	0	0	0
903.5344238	1701.144287	0.595220983	0	0	0	0	0
902.7283325	1698.947876	0.596599281	0	0	0	0	0
900.9140015	1696.385132	0.58916682	0	0	0	0	0
771.8358154	1500.199341	0.789280772	0	0	0	0	0
766.0139771	1480.357544	0.800998509	0	0	0	0	0
764.5006104	1482.990723	0.809584022	0	0	0	0	0
805.6176758	1551.942139	0.738677382	0	0.00E+00	0.00E+00	0.00E+00	0.00E+00
803.6015015	1537.709351	0.708527386	0	0.00E+00	0.00E+00	0.00E+00	0.00E+00
803.1294556	1547.399048	0.758472741	0	0.00E+00	0.00E+00	0.00E+00	0.00E+00
907.2462769	1706.564941	0.626846433	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
912.1928101	1711.446533	0.621051013	0	0.00E+00	0.00E+00	0.00E+00	0.00E+00
911.03125	1715.637573	0.627017617	0	0.00E+00	0.00E+00	0.00E+00	0.00E+00
819.5580444	1614.210938	0.700183272	0	0	0	0	0
809.6035156	1602.986938	0.729321897	0	0	0	0	0
805.7227783	1603.076782	0.732516646	0	0	0	0	0
886.2337646	1660.200928	0.624402821	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
867.1045532	1621.937378	0.650904059	0	0.00E+00	0.00E+00	0.00E+00	0.00E+00
871.3709717	1632.447388	0.652951896	0	0.00E+00	0.00E+00	0.00E+00	0.00E+00
726.1074829	1404.608032	0.923128068	0	0	0	0	0
729.1315308	1417.272217	0.911581099	0	0	0	0	0
725.1152344	1409.344971	0.92979908	0	0	0	0	0
887.1844482	1692.750977	0.697731078	0	0.00E+00	0.00E+00	0.00E+00	0.00E+00
886.9411011	1688.637207	0.687660694	0	0.00E+00	0.00E+00	0.00E+00	0.00E+00
890.8376465	1690.859009	0.709851265	0	0.00E+00	0.00E+00	0.00E+00	0.00E+00
884.3726196	1666.216064	0.585249424	0	0.00E+00	0.00E+00	0.00E+00	0.00E+00
891.2203369	1675.959961	0.570421517	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
889.8399048	1679.469849	0.579918563	0	0.00E+00	0.00E+00	0.00E+00	0.00E+00
825.7764282	1614.917969	0.801423132	0	0.00E+00	0.00E+00	0.00E+00	0.00E+00
824.5803833	1614.750122	0.789828718	0	0.00E+00	0.00E+00	0.00E+00	0.00E+00
816.397583	1595.690796	0.800694942	0	0.00E+00	0.00E+00	0.00E+00	0.00E+00
795.9432983	1522.826904	0.773382604	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
791.6756592	1508.251343	0.761956632	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
791.7003784	1512.098511	0.771521628	0	0.00E+00	0.00E+00	0.00E+00	0.00E+00
910.3051758	1683.18811	0.573769748	0	0.00E+00	0.00E+00	0.00E+00	0.00E+00
903.9157715	1677.792358	0.587978303	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
910.147644	1689.683838	0.576396227	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
799.4206543	1572.647095	0.852086842	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
799.7019043	1566.526123	0.849582195	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
805.757019	1572.451538	0.807246208	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
791.2945557	1513.57959	0.753661811	0	0	0	0	0
784.1177368	1490.461914	0.772687256	0	0	0	0	0
788.284729	1495.458252	0.767664373	0	0	0	0	0
721.4933472	1395.781616	0.917281091	0	0	0	0	0
717.2573242	1389.600098	0.957737565	0	0	0	0	0

0.00E+00	0	0	7.10297E-05	0.000513458	0.00113281	0.00243988	0.00433334
0.00E+00	0	0	7.11823E-05	0.000518417	0.00113991	0.00244049	0.00430794
0.00E+00	0	0	0.000059967	0.00048912	0.00110336	0.0024263	0.00440552
0.00E+00	0	0	7.10297E-05	0.000399933	0.000883179	0.00198738	0.00383072
0.00E+00	0	0	8.22449E-05	0.000405502	0.000880051	0.00197739	0.00385666
0.00E+00	0	0	0.000070343	0.000396805	0.000875397	0.00196678	0.00378983
0.00E+00	0	0	0.000208054	0.000699844	0.00131859	0.00258377	0.00445984
0.00E+00	0.00E+00	0	0.000220108	0.000727386	0.00135666	0.00262253	0.00444687
0.00E+00	0	0	0.000208969	0.000714493	0.00135193	0.00265419	0.00457993
0.00E+00	0.00E+00	0	0.000164795	0.000618362	0.00121117	0.00244423	0.00426178
0.00E+00	0.00E+00	0	0.000135727	0.000569763	0.00114746	0.00235817	0.00416161
0.00E+00	0	0	0.000157013	0.000639572	0.00126396	0.00253036	0.00430496
0.00E+00	0.00E+00	0	0.000110016	0.000446701	0.000933151	0.00206017	0.00399979
0.00E+00	0	0	0.000120468	0.000455551	0.000933304	0.00203476	0.00391907
0.00E+00	0.00E+00	0	0.00014801	0.000477982	0.000946274	0.00203064	0.00393066
0.00E+00	0.00E+00	0	0.000172729	0.000566864	0.00108612	0.0022496	0.0043277
0	0.00E+00	0	0.00017807	0.000592041	0.00113579	0.00234711	0.00449089
0.00E+00	0.00E+00	0.000001297	0.000221024	0.000615005	0.00114235	0.00232513	0.00447311
0.00E+00	0	0	0.000037384	0.000396957	0.000937347	0.00213852	0.00396797
0.00E+00	0	0	1.60217E-05	0.000394135	0.000972214	0.00225151	0.00416557
0	0	0	1.85394E-05	0.000398331	0.000976639	0.00225662	0.00417114
0	0.00E+00	1.08337E-05	0.000367737	0.000909882	0.00163452	0.00292809	0.00486954
0.00E+00	0.00E+00	1.57928E-05	0.00037941	0.00091362	0.00162277	0.00288147	0.00475395
0	0.00E+00	1.02997E-05	0.000359879	0.000898209	0.00162758	0.00294922	0.00498886
0.00E+00	0.00E+00	2.05994E-06	0.000198288	0.00056572	0.0010791	0.00224258	0.00424675
0.00E+00	0	0	0.000165482	0.000535126	0.00104889	0.00222588	0.00427025
0.00E+00	0	0	0.000161591	0.000547638	0.00108185	0.00230545	0.00441391
0.00E+00	0	0	0.000034256	0.000357895	0.000850677	0.00198196	0.00385498
0	0	0	0.000067215	0.000385742	0.000850677	0.00190544	0.00366112
0	0	0	5.19562E-05	0.000381851	0.000866776	0.00195587	0.00371994
0.00E+00	0.00E+00	3.38745E-05	0.000312042	0.000710373	0.00127228	0.0025206	0.00463943
0.00E+00	0.00E+00	3.05939E-05	0.000317078	0.000726395	0.00128487	0.00248772	0.00445412
0.00E+00	0.00E+00	2.34222E-05	0.00028862	0.000699081	0.00127174	0.00253799	0.00466743
0.00E+00	0	0	0.000167923	0.000658112	0.00129204	0.00257797	0.00436195
0.00E+00	0	0	0.000141449	0.000618896	0.00125061	0.0025515	0.00440353
0.00E+00	0.00E+00	0	0.000139236	0.000630188	0.00127785	0.00259499	0.00441116
0	0	0	1.06812E-05	0.000313416	0.000853729	0.00193687	0.00382431
0.00E+00	0.00E+00	0	3.76892E-05	0.000372238	0.000878296	0.00201111	0.00374695
0.00E+00	0	0	3.79181E-05	0.000357513	0.000846863	0.00196213	0.00373276
0.00E+00	0.00E+00	3.83759E-05	0.000353165	0.000782623	0.00142075	0.00266449	0.00475014
0	0	3.06702E-05	0.000325317	0.000752869	0.00139801	0.00267082	0.0048423
0.00E+00	0	2.86102E-05	0.000299683	0.000705185	0.0012767	0.00254883	0.00471344
0	0	0	0.000149536	0.000630646	0.00125694	0.00252403	0.00427147
0	0	0	0.000109558	0.000597382	0.00125694	0.00261635	0.00452858
0	0	0	0.000114899	0.000599899	0.00125244	0.00259552	0.00447929
0	0	1.96838E-05	0.000385132	0.000911407	0.00161629	0.00288689	0.0048452
0	0	2.14386E-05	0.000406342	0.000958481	0.00169624	0.00301758	0.00501221

0.00447968	0.00478333	0.00808907	0.015304	0.0287698	0.032898	0.0759839	0.0993315
0.00445213	0.00480408	0.00825951	0.0157906	0.0296992	0.0338398	0.0777223	0.100916
0.00464859	0.00499672	0.00836067	0.0155362	0.028859	0.0328517	0.0757714	0.0990941
0.00435867	0.00488487	0.00802597	0.0139996	0.0245805	0.0272943	0.0626685	0.083233
0.00447456	0.00509201	0.00839348	0.014482	0.0250233	0.0274845	0.0626348	0.0828769
0.00432426	0.00487419	0.00806038	0.0141148	0.0247892	0.0274949	0.0630386	0.0836237
0.00487076	0.00579437	0.0106615	0.0203196	0.0364579	0.0396716	0.0868607	0.10752
0.00477615	0.00566437	0.010522	0.0203125	0.0367674	0.0401664	0.0881062	0.109094
0.00499031	0.00591995	0.0108719	0.020705	0.0371333	0.0403798	0.0882915	0.109029
0.00454971	0.00518127	0.00922119	0.0175143	0.0320085	0.035573	0.0798273	0.101566
0.00447853	0.0051162	0.00911491	0.0173441	0.0318082	0.0354781	0.0799525	0.102186
0.00444054	0.00495415	0.00885185	0.0171354	0.0318518	0.035709	0.0805078	0.102572
0.00464111	0.00527161	0.00861961	0.0146769	0.0250494	0.0273149	0.0619581	0.0817997
0.00452347	0.00512512	0.00837784	0.014296	0.0244967	0.0268194	0.0611224	0.0811153
0.00464417	0.0054081	0.00900024	0.0153218	0.0257628	0.0276704	0.0618867	0.080844
0.00535927	0.00673378	0.0120245	0.0211597	0.0351237	0.0364843	0.0776062	0.0951207
0.00552666	0.00691795	0.0123373	0.0217137	0.0360455	0.037409	0.0793727	0.0968168
0.00561562	0.00715523	0.0128616	0.0225665	0.0370995	0.038146	0.0801763	0.0969477
0.00414757	0.00425537	0.00670723	0.0121394	0.0229295	0.0268484	0.0641811	0.0874738
0.00427757	0.00428528	0.00665878	0.0121539	0.0233837	0.0277152	0.0667536	0.0911868
0.00427917	0.0042794	0.00662903	0.012063	0.0231767	0.0274632	0.0661582	0.0904134
0.00531319	0.00655624	0.0124937	0.0240308	0.0425344	0.0453899	0.0968955	0.116317
0.00518478	0.00645027	0.0124061	0.0239798	0.0424632	0.045254	0.0964114	0.115511
0.00552559	0.0068264	0.0128831	0.0244804	0.0429364	0.0455842	0.0969345	0.115992
0.00496834	0.0057959	0.00970924	0.0166	0.0278386	0.0296938	0.0656605	0.0844517
0.00501923	0.00583611	0.00970711	0.0164919	0.0276002	0.029472	0.065366	0.0844108
0.00513489	0.00588264	0.00963913	0.0162177	0.0270778	0.0289603	0.0644568	0.0836246
0.00435226	0.00481583	0.00787628	0.0138897	0.0248531	0.0279919	0.064968	0.0867922
0.00418655	0.00476509	0.00800278	0.0142217	0.0251888	0.028024	0.0643183	0.0853107
0.00416298	0.00464966	0.00776443	0.013934	0.025042	0.0281146	0.0648437	0.0860447
0.00542465	0.00649338	0.0112712	0.0197675	0.0332715	0.0351113	0.0759404	0.094523
0.00511864	0.00615829	0.0109106	0.019575	0.0334186	0.0354405	0.076679	0.0952054
0.00543518	0.00649597	0.0113121	0.0199684	0.0338152	0.035802	0.0775334	0.0964163
0.0044474	0.00490547	0.00874222	0.0170413	0.0319698	0.0360614	0.0816704	0.104337
0.00456383	0.00505188	0.00892799	0.017223	0.0321497	0.036241	0.0821774	0.105181
0.00446571	0.00487	0.00864128	0.0169358	0.0320271	0.0363137	0.0825181	0.10555
0.00410164	0.0041935	0.00638016	0.0110942	0.0207019	0.0244203	0.0594086	0.0828741
0.00391418	0.00398315	0.00620621	0.0111958	0.0213168	0.0252199	0.0610566	0.084427
0.00401543	0.00418968	0.00656609	0.0116103	0.0215428	0.0251058	0.0602286	0.0829502
0.00540359	0.00647995	0.0115128	0.0207544	0.0355141	0.0376238	0.0810299	0.0997066
0.00553543	0.00657761	0.0115167	0.0205441	0.0350682	0.0372319	0.0805532	0.0996815
0.00553268	0.00665169	0.0116115	0.0204845	0.0346249	0.0366055	0.0791682	0.098289
0.00435143	0.00482132	0.0086866	0.0171188	0.0323169	0.0365359	0.0827759	0.105611
0.00463852	0.00505379	0.00887764	0.0172405	0.0324938	0.0368356	0.0837523	0.107148
0.00457336	0.00496643	0.0087059	0.0169124	0.0319418	0.0362961	0.082785	0.106329
0.00541092	0.00680519	0.0130312	0.0249001	0.0436224	0.0461769	0.0978531	0.116717
0.00550537	0.00684433	0.0130701	0.0250476	0.0440391	0.0466961	0.0989404	0.117743

0.123503	0.132584	0.125749	0.117301	0.0941833	0.0663136	0.0405382	2.12E-02
0.124619	0.132878	0.125171	0.115935	0.0924215	0.0646576	0.0393472	0.0205038
0.123369	0.132631	0.125923	0.11746	0.0941581	0.0660899	0.0402658	0.0209841
0.107198	0.121198	0.122987	0.124925	0.110819	0.0864571	0.05757	0.031829
0.106733	0.120896	0.122946	0.125025	0.110822	0.0862456	0.0572715	0.0316046
0.107619	0.121585	0.123229	0.12489	0.110407	0.0857769	0.0569046	0.0313816
0.127384	0.130929	0.119324	0.107244	0.0833501	0.0573028	0.034595	0.0180005
0.129093	0.132304	0.119942	0.106826	0.0818615	0.0552435	0.0327362	0.0167995
0.128718	0.131656	0.119202	0.106182	0.0815764	0.05535	0.0330231	0.0170431
0.123624	0.130577	0.12241	0.113372	0.0908488	0.0641925	0.0395238	0.020797
0.124832	0.132114	0.12375	0.114014	0.090355	0.0628121	0.0380268	0.0197596
0.124663	0.131242	0.122502	0.112922	0.0901132	0.0635072	0.0390669	0.0205567
0.105394	0.119696	0.122274	0.125106	0.111675	0.0874871	0.0583754	0.0322998
0.104988	0.119673	0.122608	0.12577	0.112552	0.0883928	0.0591027	0.0327501
0.103677	0.117792	0.120874	0.124647	0.112354	0.088857	0.0597126	0.0331803
0.114101	0.12113	0.116184	0.112065	0.0949371	0.0713586	0.0463284	0.0252488
0.115339	0.121424	0.115426	0.110378	0.092858	0.069497	0.0450418	2.45E-02
0.114789	0.120406	0.1143	0.109371	0.0922336	0.0692741	0.0450549	0.0246094
0.113617	0.127765	0.127439	0.125832	0.107587	0.0807115	0.0520251	0.0281602
0.118012	0.131504	0.129237	0.124863	0.103758	0.0754003	0.0472719	0.0251172
0.117096	0.130656	0.12872	0.124919	0.104544	0.0766779	0.0485119	0.0259476
0.133392	0.132317	0.115809	0.099093	0.0725276	0.0466151	0.0264743	0.0132006
0.13236	0.131416	0.1154	0.0993926	0.0735134	0.0479002	0.0275724	0.0138801
0.132708	0.131436	0.114996	0.0985625	0.072493	0.0469896	0.0269488	0.0135399
0.106452	0.11879	0.119751	0.121419	0.107859	0.0843791	0.056325	0.0311889
0.10678	0.119428	0.120455	0.121937	0.107918	0.0839924	0.0557876	0.0307808
0.106292	0.119422	0.120913	0.12273	0.108733	0.0845843	0.0561152	0.0309314
0.111658	0.125237	0.125212	0.124406	0.10732	0.0812887	0.0528119	0.0287312
0.109658	0.123544	0.124534	0.124994	0.10888	0.0830633	0.0541769	0.0295227
0.110223	0.123541	0.123938	0.124106	0.108299	0.0831027	0.0545921	0.0299174
0.114617	0.12249	0.11785	0.113662	0.0960123	0.0718265	0.0464115	0.0252091
0.115041	0.122544	0.117622	0.113308	0.095732	0.0717032	0.0463928	0.02522
0.116543	0.123896	0.118312	0.112922	0.0941098	0.0693495	0.0442154	0.0237946
0.126846	0.133228	0.123642	0.112746	0.0884264	0.0608982	0.0365964	0.0189185
0.128014	0.134372	0.124312	0.112601	0.0873549	0.0593059	0.0351396	0.0179787
0.128163	0.134169	0.123888	0.112214	0.087296	0.0596006	0.0355536	0.0182922
0.110236	0.12681	0.129135	0.129855	0.112639	0.0852931	0.0552271	0.0299436
0.11127	0.126975	0.128499	0.128653	0.111307	0.0841816	0.0544805	0.0295314
0.109391	0.125295	0.127564	0.128758	0.112486	0.0859351	0.0560871	0.0305737
0.118925	0.124571	0.117145	0.110112	0.0905013	0.0659695	0.0417768	0.0224083
0.119462	0.125502	0.118078	0.110708	0.090473	0.0654336	0.0411268	0.0219429
0.118489	0.125362	0.118769	0.112005	0.0918581	0.0664797	0.041725	0.0222203
0.128019	0.133879	0.123568	0.111965	0.0872305	0.0597083	0.0357165	0.0184127
0.129943	0.135576	0.124408	0.111521	0.0854281	0.0571824	0.0334372	0.0169423
0.129492	0.135684	0.125019	0.112485	0.0864084	0.0579199	0.0338696	0.0171517
0.133264	0.13182	0.115158	0.0983433	0.0717175	0.0457705	0.0257338	0.0127054
0.133873	0.131714	0.114411	0.0971939	0.0706161	0.0450136	0.025339	0.0125377

5.22E-04	0
0.000504943	0
0.000516731	0
0.00079903	0
0.000792938	0
0.000787143	0
0.00044343	0
0.000411893	0
0.000418717	0
0.000514003	0
0.00048628	0
0.000508113	0
0.000810988	0
0.000822709	0
0.000834174	0
0.000631143	0
0.000613406	0
0.000615712	0
0.00070212	0
0.000622511	0
0.000644545	0
0.000320635	0
0.000338193	0
0.000329737	0
0.000783331	0
0.000772148	0
0.000775669	0
0.000717516	0
0.000737567	0
0.0007489	0
0.000629431	0
0.000629859	0
0.000592277	0
0.000464718	0
0.00044009	0
0.000448675	0
0.000746843	0
0.000736496	0
0.00076389	0
0.0005573	0
0.000544765	0
0.000551227	0
0.000451918	0
0.000413327	0
0.000418318	0
0.000307376	0
0.000303621	0

76980	1	12/17/18	10:46	64559	W1835137
76980	1	12/17/18	10:50	37185	W1835138
76980	1	12/17/18	10:50	37185	W1835138
76980	1	12/17/18	10:50	37185	W1835138
76980	1	12/17/18	10:53	92644	W1835139
76980	1	12/17/18	10:53	92644	W1835139
76980	1	12/17/18	10:53	92644	W1835139
76980	1	12/17/18	10:56	53467	W1835140
76980	1	12/17/18	10:56	53467	W1835140
76980	1	12/17/18	10:56	53467	W1835140
76980	1	12/17/18	11:00	50883	W1835141
76980	1	12/17/18	11:00	50883	W1835141
76980	1	12/17/18	11:00	50883	W1835141
76980	1	12/17/18	11:03	47858	W1835142
76980	1	12/17/18	11:03	47858	W1835142
76980	1	12/17/18	11:03	47858	W1835142
76980	1	12/17/18	11:07	64741	W1835143
76980	1	12/17/18	11:07	64741	W1835143
76980	1	12/17/18	11:07	64741	W1835143
76980	1	12/17/18	11:10	71625	W1835144
76980	1	12/17/18	11:10	71625	W1835144
76980	1	12/17/18	11:10	71625	W1835144
76980	1	12/17/18	11:15	41357	W1835145
76980	1	12/17/18	11:15	41357	W1835145
76980	1	12/17/18	11:15	41357	W1835145
76980	1	12/17/18	11:19	30457	W1835146
76980	1	12/17/18	11:19	30457	W1835146
76980	1	12/17/18	11:19	30457	W1835146
76980	1	12/17/18	11:23	15606	W1835147
76980	1	12/17/18	11:23	15606	W1835147
76980	1	12/17/18	11:23	15606	W1835147
76980	1	12/17/18	11:27	81513	W1835148
76980	1	12/17/18	11:27	81513	W1835148
76980	1	12/17/18	11:27	81513	W1835148
76980	1	12/17/18	11:32	46632	W1835149
76980	1	12/17/18	11:32	46632	W1835149
76980	1	12/17/18	11:32	46632	W1835149
76980	1	12/17/18	11:36	59389	W1835150
76980	1	12/17/18	11:36	59389	W1835150
76980	1	12/17/18	11:36	59389	W1835150
76980	1	12/17/18	11:39	90556	W1835151
76980	1	12/17/18	11:39	90556	W1835151
76980	1	12/17/18	11:39	90556	W1835151
76980	1	12/17/18	11:43	23021	W1835152
76980	1	12/17/18	11:43	23021	W1835152
76980	1	12/17/18	11:43	23021	W1835152
76980	1	12/17/18	11:47	85701	W1835153

XtendiMax+BrandtTorpedo+AU-243LFP13	TTI11004	63	3	354.7046509
XtendiMax+BuckhornTotal+AU-243LFP13	TTI11004	63	1	390.1992188
XtendiMax+BuckhornTotal+AU-243LFP13	TTI11004	63	2	389.7384033
XtendiMax+BuckhornTotal+AU-243LFP13	TTI11004	63	3	388.2963867
XtendiMax+Cadet+AU-243LFP13	TTI11004	63	1	404.8460999
XtendiMax+Cadet+AU-243LFP13	TTI11004	63	2	408.2627869
XtendiMax+Cadet+AU-243LFP13	TTI11004	63	3	406.3826294
XtendiMax+CadoMax+AU-243LFP13	TTI11004	63	1	374.6250916
XtendiMax+CadoMax+AU-243LFP13	TTI11004	63	2	379.3409729
XtendiMax+CadoMax+AU-243LFP13	TTI11004	63	3	375.3203735
XtendiMax+Callisto+AU-243LFP13	TTI11004	63	1	438.8747253
XtendiMax+Callisto+AU-243LFP13	TTI11004	63	2	434.259552
XtendiMax+Callisto+AU-243LFP13	TTI11004	63	3	435.4692993
XtendiMax+CalPower+AU-243LFP13	TTI11004	63	1	445.6477051
XtendiMax+CalPower+AU-243LFP13	TTI11004	63	2	443.1815796
XtendiMax+CalPower+AU-243LFP13	TTI11004	63	3	443.6707459
XtendiMax+Canopy+AU-243LFP13	TTI11004	63	1	428.9082336
XtendiMax+Canopy+AU-243LFP13	TTI11004	63	2	430.3485718
XtendiMax+Canopy+AU-243LFP13	TTI11004	63	3	427.6362915
XtendiMax+Caparol4L+AU-243LFP13	TTI11004	63	1	435.6763916
XtendiMax+Caparol4L+AU-243LFP13	TTI11004	63	2	441.0188293
XtendiMax+Caparol4L+AU-243LFP13	TTI11004	63	3	434.7235107
XtendiMax+Capreno+AU-243LFP13	TTI11004	63	1	452.4508972
XtendiMax+Capreno+AU-243LFP13	TTI11004	63	2	448.0252991
XtendiMax+Capreno+AU-243LFP13	TTI11004	63	3	447.426239
XtendiMax+CELP4-0-9+AU-243LFP13	TTI11004	63	1	447.8432007
XtendiMax+CELP4-0-9+AU-243LFP13	TTI11004	63	2	453.6575012
XtendiMax+CELP4-0-9+AU-243LFP13	TTI11004	63	3	451.9026184
XtendiMax+CeriumElite+AU-243LFP13	TTI11004	63	1	371.0545654
XtendiMax+CeriumElite+AU-243LFP13	TTI11004	63	2	368.7922058
XtendiMax+CeriumElite+AU-243LFP13	TTI11004	63	3	365.4064331
XtendiMax+ChargerMaxATZ+AU-243LFP13	TTI11004	63	1	381.3329773
XtendiMax+ChargerMaxATZ+AU-243LFP13	TTI11004	63	2	379.0579224
XtendiMax+ChargerMaxATZ+AU-243LFP13	TTI11004	63	3	380.5591431
XtendiMax+ChemproCP-60+AU-243LFP13	TTI11004	63	1	449.1783752
XtendiMax+ChemproCP-60+AU-243LFP13	TTI11004	63	2	444.9371338
XtendiMax+ChemproCP-60+AU-243LFP13	TTI11004	63	3	442.3417358
XtendiMax+ChemproCP-75+AU-243LFP13	TTI11004	63	1	413.2536316
XtendiMax+ChemproCP-75+AU-243LFP13	TTI11004	63	2	411.0412598
XtendiMax+ChemproCP-75+AU-243LFP13	TTI11004	63	3	408.5823669
XtendiMax+ChemproS-172+AU-243LFP13	TTI11004	63	1	415.598053
XtendiMax+ChemproS-172+AU-243LFP13	TTI11004	63	2	415.1401367
XtendiMax+ChemproS-172+AU-243LFP13	TTI11004	63	3	414.0592041
XtendiMax+Chemspray+AU-243LFP13	TTI11004	63	1	417.4624939
XtendiMax+Chemspray+AU-243LFP13	TTI11004	63	2	416.8868713
XtendiMax+Chemspray+AU-243LFP13	TTI11004	63	3	414.583374
XtendiMax+CideWinder+AU-243LFP13	TTI11004	63	1	361.6788025

720.6231079	1398.390137	0.929711401	0	0	0	0	0
789.0536499	1513.345215	0.762004256	0	0	0	0	0
784.1208496	1497.35498	0.80099839	0	0	0	0	0
781.0808105	1492.310425	0.790897667	0	0	0	0	0
811.477356	1539.520264	0.725291431	0	0	0	0	0
816.618042	1547.779419	0.736239135	0	0	0	0	0
810.8621826	1535.9021	0.759253263	0	0	0	0	0
761.7693481	1470.231201	0.838500738	0	0	0	0	0
771.9620972	1489.903687	0.815207064	0	0	0	0	0
761.7484741	1463.326416	0.845674872	0	0	0	0	0
905.0079346	1685.734253	0.575918496	0	0	0	0	0
897.8850098	1680.472046	0.594655633	0	0	0	0	0
906.9342651	1694.478027	0.578485668	0	0	0	0	0
923.5250854	1706.57312	0.588221252	0	0	0	0	0
918.9946289	1702.157227	0.57327944	0	0	0	0	0
915.0002441	1696.861694	0.591377676	0	0	0	0	0
901.3966675	1685.992432	0.612179756	0	0	0	0	0
906.828186	1693.571045	0.590943635	0	0	0	0	0
891.5076904	1672.837524	0.648523092	0	0	0	0	0
882.8966675	1648.37207	0.614627004	0	0	0	0	0
886.7109985	1650.31665	0.6209656	0	0	0	0	0
882.6738892	1648.84021	0.620866477	0	0	0	0	0
947.0638428	1736.682739	0.562229455	0	0	0	0	0
935.6063843	1724.688232	0.582790256	0	0	0	0	0
937.37677	1729.237061	0.588144839	0	0	0	0	0
929.81427	1717.117065	0.59267205	0	0	0	0	0
937.8293457	1723.620239	0.585264742	0	0	0	0	0
938.5646362	1724.553711	0.563652635	0	0	0	0	0
750.8328857	1444.322632	0.90932858	0	0	0	0	0
751.7869263	1457.179565	0.88642174	0	0	0	0	0
747.6353149	1452.549194	0.903994381	0	0	0	0	0
831.3591919	1628.56189	0.767823398	0	0	0	0	0
825.9382935	1623.554932	0.780819297	0	0	0	0	0
829.5756226	1627.329346	0.784055412	0	0	0	0	0
940.7640991	1735.649658	0.551505387	0	0	0	0	0
931.6473999	1724.17395	0.576328874	0	0	0	0	0
931.1705933	1727.23999	0.581619024	0	0	0	0	0
900.3428955	1703.928955	0.683879852	0	0	0	0	0
900.3357544	1708.918701	0.694677114	0	0	0	0	0
895.9358521	1704.474609	0.692111313	0	0	0	0	0
858.1956177	1632.934204	0.640644968	0	0	0	0	0
850.8128662	1619.542969	0.664031744	0	0	0	0	0
847.2352905	1612.016479	0.67314291	0	0	0	0	0
860.751709	1636.361816	0.6627689	0	0	0	0	0
856.9689941	1631.692871	0.666861534	0	0	0	0	0
854.4160767	1627.006714	0.663666904	0	0	0	0	0
741.4400024	1444.753296	0.894321859	0	0	0	0	0

0	0	8.01086E-06	0.000359116	0.000903549	0.00163498	0.00295128	0.00496727
0	0	0	0.000148621	0.000626984	0.00125504	0.00254486	0.00438782
0	0	0	0.000154877	0.000663071	0.00132805	0.0026825	0.00457253
0	0	0	0.000134735	0.000633163	0.0012957	0.00265785	0.00459106
0	0	0	0.000104675	0.000553284	0.00116898	0.00245514	0.00427628
0	0	0	0.000100479	0.000558853	0.00118965	0.0025016	0.00432587
0	0	0	0.000118179	0.000594482	0.00124046	0.00257256	0.00439651
0	0	0	0.000229874	0.000763016	0.00142281	0.00274712	0.0046434
0	0	0	0.000182953	0.000700302	0.00136055	0.00270073	0.00462585
0	0	0	0.000186234	0.000716248	0.00139946	0.00280075	0.00484459
0	0	0	2.67029E-05	0.000343933	0.000835724	0.00196434	0.00378334
0	0	0	4.53949E-05	0.000383148	0.00088768	0.00202011	0.00380417
0	0	0	5.41687E-05	0.000376282	0.000857849	0.00195175	0.00371933
0	0	0	5.25665E-05	0.000367508	0.000853119	0.00198372	0.00384262
0	0	0	5.82886E-05	0.000370941	0.00084343	0.00192963	0.00370064
0	0	0	4.89807E-05	0.000375595	0.000872116	0.00200485	0.00381012
0	0	0	6.76727E-05	0.00040329	0.000903778	0.00205185	0.00394897
0	0	0	6.58417E-05	0.000382767	0.000860214	0.00197289	0.00386307
0	0	0	0.000091629	0.000466843	0.00100014	0.00217453	0.00400185
0	0	0	3.73077E-05	0.000393906	0.0009272	0.00210617	0.00388901
0	0	0	2.47192E-05	0.000392685	0.000943756	0.00214676	0.00390167
0	0	0	3.95966E-05	0.000399094	0.000936127	0.00212517	0.0039296
0	0	0	4.85229E-05	0.000333405	0.000830154	0.00185852	0.00374245
0	0	0	6.14166E-05	0.000372086	0.000847702	0.00195679	0.00379356
0	0	0	7.46155E-05	0.000392914	0.000869522	0.00196808	0.0037677
0	0	0	5.78308E-05	0.000380859	0.000871582	0.00199982	0.00382111
0	0	0	5.00488E-05	0.000367966	0.000856171	0.00198143	0.00379051
0	0	0	4.42505E-05	0.00033371	0.000836792	0.00186989	0.00373672
0	0	0	0.000233994	0.000797577	0.001577	0.00297508	0.00504555
0	0	0	0.000238495	0.000787506	0.0015374	0.00288612	0.00492065
0	0	0	0.000253448	0.000806274	0.00156021	0.00293076	0.00503845
0	0	3.30353E-05	0.000294113	0.000668564	0.00120316	0.00240959	0.00451622
0	0	4.50134E-05	0.000343781	0.000726089	0.0012574	0.0024231	0.0044194
0	0	3.71552E-05	0.000323715	0.000714722	0.00125763	0.00245079	0.00448181
0	0	0	5.13458E-05	0.000339203	0.00082756	0.00182541	0.00361801
0	0	0	6.58417E-05	0.000377502	0.000848083	0.00193344	0.00371437
0	0	0	8.16345E-05	0.000401459	0.000871201	0.00194145	0.00368401
0	0	0	0.000164795	0.000534363	0.00104881	0.0022197	0.00421562
0	0	4.65393E-06	0.000209732	0.000576401	0.00108727	0.00223091	0.00415901
0	0	1.52588E-06	0.000191956	0.000557098	0.00106888	0.00222923	0.00421997
0	0	0	5.72205E-05	0.00043396	0.00097908	0.00217346	0.00401901
0	0	0	7.66754E-05	0.000482101	0.00104858	0.00225182	0.00402206
0	0	0	6.80542E-05	0.000474777	0.00105125	0.0022876	0.00412651
0	0	0	8.40759E-05	0.000480194	0.00103729	0.00223717	0.00404205
0	0	0	7.57599E-05	0.000479126	0.00104691	0.00226105	0.00406044
0	0	0	7.95746E-05	0.000480118	0.00104149	0.00224388	0.00404526
0	0	0	0.000308838	0.000842896	0.00156151	0.00286156	0.00486671

0.00549438	0.00682175	0.0129707	0.024784	0.0435606	0.0462354	0.0981448	0.117076
0.00458633	0.00515572	0.00922173	0.0178051	0.0330045	0.0369273	0.0830536	0.10543
0.00467751	0.00514565	0.00911194	0.0176578	0.0330003	0.037133	0.0838552	0.106687
0.00475426	0.00525993	0.00929535	0.0179129	0.033338	0.03744	0.0844378	0.107279
0.00434792	0.00462929	0.00794762	0.0153699	0.02932	0.0337251	0.0780386	0.101872
0.00431313	0.00448135	0.00758537	0.0147366	0.0284589	0.0330338	0.0770097	0.101125
0.00433632	0.00448433	0.00761833	0.0149053	0.0288969	0.033562	0.0781486	0.102359
0.00495049	0.00581375	0.0107073	0.0205694	0.0371548	0.0405495	0.0888469	0.10983
0.0049086	0.00566231	0.0102698	0.0196651	0.0357221	0.0392525	0.0866635	0.10799
0.0051741	0.00594955	0.0106822	0.0202582	0.0366025	0.0401308	0.0884643	0.110007
0.0041291	0.00436378	0.00688026	0.0121011	0.0222109	0.0256722	0.0611481	0.0836902
0.00410904	0.0043718	0.00702461	0.0125551	0.0230945	0.0265565	0.0627178	0.0850003
0.00409714	0.00443283	0.00715477	0.0126495	0.0229255	0.0261327	0.0614297	0.0832027
0.00421883	0.00442696	0.00680298	0.0115919	0.0209257	0.0241472	0.0578736	0.080121
0.00406845	0.00433594	0.00683388	0.0118806	0.0215357	0.0247533	0.0589305	0.0810101
0.00410278	0.0042733	0.00664253	0.011604	0.0213474	0.0247971	0.0594415	0.081946
0.00442406	0.00484108	0.00777855	0.0134592	0.0238018	0.026713	0.0620848	0.0834465
0.00441475	0.00489166	0.007864	0.0134707	0.0235735	0.0263344	0.061156	0.0823734
0.00429893	0.00460915	0.00746628	0.0132939	0.0241114	0.0273681	0.0638392	0.0856167
0.0040451	0.00414085	0.00654686	0.0119464	0.0227562	0.0267969	0.0643813	0.0881367
0.00392395	0.00386612	0.00599426	0.0111175	0.0218031	0.026161	0.063683	0.0879224
0.00409859	0.00420479	0.00664322	0.0120715	0.0228881	0.0268745	0.0644292	0.0880717
0.00418549	0.00443558	0.00677063	0.011281	0.0199475	0.0228179	0.0546229	0.0760347
0.00419258	0.00443184	0.00682373	0.0115401	0.0206013	0.0236098	0.0563784	0.078038
0.00413971	0.00438606	0.00681007	0.0116113	0.0207664	0.023748	0.0564896	0.0778699
0.00414169	0.0043129	0.00662506	0.0113559	0.0206194	0.0238544	0.0572306	0.0792673
0.00407707	0.00418221	0.00631905	0.0107673	0.019693	0.0230007	0.0557539	0.0779968
0.00413605	0.00434937	0.00663643	0.0111665	0.0200095	0.0230865	0.0555788	0.0775535
0.00526917	0.00602791	0.0109078	0.0208763	0.0378419	0.0414366	0.0909556	0.112332
0.00525566	0.00617081	0.0113101	0.0215497	0.0385855	0.0418167	0.0909285	0.111425
0.00545479	0.00645096	0.0117815	0.0222207	0.0393864	0.0423996	0.0916741	0.111775
0.0053994	0.00656082	0.0114417	0.0199731	0.0333308	0.0349424	0.0751833	0.0932852
0.00525482	0.00647842	0.0115314	0.0204241	0.0342104	0.0357681	0.0764972	0.0941993
0.00529404	0.00645935	0.0113983	0.0201083	0.0336974	0.035308	0.0757469	0.0936105
0.00402344	0.00430656	0.00673965	0.0115368	0.0206524	0.0236227	0.0562121	0.0775246
0.00410049	0.00438179	0.00688721	0.0118603	0.0212651	0.024273	0.0575154	0.0788998
0.00406494	0.00439079	0.00700714	0.0121686	0.0217554	0.0246724	0.0580144	0.0790119
0.00487015	0.00557243	0.00917976	0.0155985	0.0262947	0.0282939	0.0632833	0.082466
0.00478996	0.00553825	0.00926453	0.015908	0.026834	0.0287445	0.0638309	0.0825193
0.0049192	0.00571114	0.0095237	0.0162337	0.0272036	0.0290397	0.0643534	0.0830688
0.00434357	0.00474731	0.00794785	0.0145756	0.0267261	0.0302586	0.0698152	0.0919454
0.00420753	0.00453835	0.00768562	0.0144418	0.0269711	0.0307753	0.0712073	0.093696
0.00433403	0.00465004	0.00778763	0.0145111	0.0270448	0.0308858	0.0715762	0.0943026
0.00427597	0.0046122	0.00770683	0.0142381	0.0263335	0.0299696	0.0694032	0.0916409
0.0042527	0.00455795	0.00763367	0.0142271	0.0265118	0.0302716	0.0701632	0.0925344
0.00428696	0.00465981	0.00786346	0.0146036	0.0269821	0.030613	0.070596	0.0927659
0.00536079	0.00654846	0.0122511	0.0232273	0.0408562	0.0435691	0.0932429	0.11257

0.133439	0.131611	0.114639	0.0977544	0.0714222	0.0458835	0.0260487	0.0129762
0.127449	0.133119	0.122842	0.111373	0.0868817	0.0595813	0.035713	0.0184404
0.128971	0.134423	0.123479	0.111064	0.0856005	0.057805	0.0341304	0.0174309
0.129445	0.134573	0.123232	0.110459	0.0848466	0.0571361	0.0336748	0.017183
0.126101	0.134402	0.126186	0.1161	0.0916386	0.0633624	0.038162	0.0197534
0.125699	0.13442	0.126606	0.116923	0.0927236	0.0644562	0.0390032	0.02025
0.126803	0.135052	0.126584	0.116178	0.0914042	0.0629642	0.0377904	0.0195128
0.129683	0.132551	0.11977	0.106211	0.0809095	0.0541799	0.0318405	0.0162301
0.128464	0.132305	0.120564	0.108006	0.0832666	0.056473	0.0335578	0.017236
0.130414	0.133546	0.120616	0.106626	0.0807115	0.053551	0.0311664	0.0157693
0.10981	0.125227	0.127014	0.1278	0.111408	0.0850385	0.0555149	0.0302817
0.110543	0.125118	0.126149	0.126394	0.109936	0.083875	0.0547764	0.0298908
0.108543	0.123568	0.125563	0.127017	0.111659	0.0860825	0.0566943	0.0311097
0.106604	0.123444	0.127211	0.130079	0.11511	0.0889392	0.0585322	0.0320703
0.107177	0.123564	0.126903	0.129408	0.114255	0.0881017	0.057879	0.0316682
0.108311	0.124459	0.12724	0.12909	0.113421	0.0871241	0.0571015	0.0312065
0.108455	0.123306	0.125252	0.126572	0.110901	0.0849734	0.0555566	0.0303018
0.107456	0.122681	0.125155	0.12706	0.111893	0.086183	0.0566034	0.0309708
0.110592	0.1247	0.125489	0.125545	0.10891	0.0827248	0.0537544	0.0292176
0.114813	0.129232	0.128692	0.126424	0.107105	0.0793511	0.0505131	0.0270913
0.115048	0.129828	0.129496	0.127337	0.107892	0.0798689	0.0507745	0.0271986
0.114645	0.129016	0.128499	0.126292	0.107068	0.0793875	0.050572	0.0271354
0.102261	0.120171	0.126094	0.131727	0.11935	0.0943476	0.063222	0.0350383
0.104175	0.121369	0.126169	0.130532	0.117181	0.0919288	0.0612829	0.0338657
0.10365	0.120616	0.12548	0.130182	0.117396	0.0925792	0.061989	0.0343519
0.105547	0.122435	0.126594	0.130171	0.116112	0.0905568	0.0600982	0.0331163
0.104723	0.122331	0.127226	0.131455	0.117696	0.0920212	0.0611513	0.0337149
0.10418	0.121908	0.127041	0.131493	0.117869	0.0922144	0.0613011	0.0338066
0.132034	0.13385	0.119518	0.104326	0.0779647	0.0511684	0.0295764	0.0149209
0.130384	0.132045	0.11824	0.103977	0.0786644	0.0524446	0.0307673	0.0156818
0.130279	0.131519	0.117462	0.103065	0.0778346	0.0518319	0.0303992	0.0154991
0.113087	0.121144	0.117129	0.113831	0.0971406	0.0735161	0.0479962	0.0262577
0.11343	0.120876	0.11643	0.112858	0.0961446	0.0726824	0.0474202	0.0259321
0.113102	0.120902	0.116785	0.113481	0.0968533	0.0733003	0.0478528	0.0261792
0.103233	0.120182	0.125137	0.130089	0.117775	0.0934246	0.0629465	0.0350513
0.104513	0.121045	0.125341	0.129438	0.116247	0.0914185	0.0611431	0.0338809
0.104136	0.120271	0.124458	0.12872	0.116005	0.0916595	0.0615844	0.03424
0.10525	0.118782	0.120901	0.123526	0.11032	0.086599	0.0579378	0.0321349
0.104672	0.117721	0.119772	0.122714	0.11021	0.087113	0.0586325	0.0326461
0.105188	0.118003	0.119669	0.12217	0.109366	0.0862443	0.05797	0.0322564
0.116074	0.127446	0.124572	0.120877	0.101894	0.0756882	0.0485398	0.0262316
0.117853	0.128687	0.124906	0.120172	0.10033	0.0738105	0.0469628	0.0252475
0.118632	0.129376	0.12523	0.119959	0.0995746	0.0727901	0.0460578	0.0246673
0.115885	0.127412	0.124711	0.12122	0.102398	0.0762228	0.048956	0.0264745
0.116693	0.127829	0.12461	0.120628	0.101545	0.0754154	0.0483892	0.0261627
0.116754	0.127775	0.124494	0.120414	0.101163	0.0748703	0.0478438	0.0257823
0.130223	0.130756	0.11634	0.101781	0.0766468	0.0508867	0.0297698	0.015158

0.000314998	0
0.000452858	0
0.000426474	0
0.000420316	0
0.000485448	0
0.000498112	0
0.000479138	0
0.000396934	0
0.000422606	0
0.000384685	0
0.000756836	0
0.000747157	0
0.000779039	0
0.0008026	0
0.000792122	0
0.00078033	0
0.000757146	0
0.000774695	0
0.000729331	0
0.000673351	0
0.000675717	0
0.000674544	0
0.000880065	0
0.00084989	0
0.000862842	0
0.000830312	0
0.000845417	0
0.000847816	0
0.000363796	0
0.000383619	0
0.000379232	0
0.000657206	0
0.000648964	0
0.000655251	0
0.000881909	0
0.000851108	0
0.000861137	0
0.000807605	0
0.000821442	0
0.000811501	0
0.000653948	0
0.000628348	0
0.000613137	0
0.000660087	0
0.000652324	0
0.000642082	0
0.000370796	0

76980	1	12/17/18	11:47	85701	W1835153
76980	1	12/17/18	11:47	85701	W1835153
76980	1	12/17/18	11:50	15048	W1835154
76980	1	12/17/18	11:50	15048	W1835154
76980	1	12/17/18	11:50	15048	W1835154
76980	1	12/17/18	11:54	88419	W1835155
76980	1	12/17/18	11:54	88419	W1835155
76980	1	12/17/18	11:54	88419	W1835155
76980	1	12/17/18	11:57	73530	W1835156
76980	1	12/17/18	11:57	73530	W1835156
76980	1	12/17/18	11:57	73530	W1835156
76980	1	12/17/18	12:01	25049	W1835157
76980	1	12/17/18	12:01	25049	W1835157
76980	1	12/17/18	12:01	25049	W1835157
76980	1	12/17/18	12:04	21008	W1835158
76980	1	12/17/18	12:04	21008	W1835158
76980	1	12/17/18	12:04	21008	W1835158
76980	1	12/17/18	12:08	86706	W1835159
76980	1	12/17/18	12:08	86706	W1835159
76980	1	12/17/18	12:08	86706	W1835159
76980	1	12/17/18	12:12	19787	W1835160
76980	1	12/17/18	12:12	19787	W1835160
76980	1	12/17/18	12:12	19787	W1835160
76980	1	12/17/18	13:06	50215	W1835161
76980	1	12/17/18	13:06	50215	W1835161
76980	1	12/17/18	13:06	50215	W1835161
76980	1	12/17/18	13:10	74934	W1835162
76980	1	12/17/18	13:10	74934	W1835162
76980	1	12/17/18	13:10	74934	W1835162
76980	1	12/17/18	13:13	32821	W1835163
76980	1	12/17/18	13:13	32821	W1835163
76980	1	12/17/18	13:13	32821	W1835163
76980	1	12/17/18	13:17	33040	W1835164
76980	1	12/17/18	13:17	33040	W1835164
76980	1	12/17/18	13:17	33040	W1835164
76980	1	12/17/18	13:21	69821	W1835165
76980	1	12/17/18	13:21	69821	W1835165
76980	1	12/17/18	13:21	69821	W1835165
76980	1	12/17/18	13:24	65024	W1835166
76980	1	12/17/18	13:24	65024	W1835166
76980	1	12/17/18	13:24	65024	W1835166
76980	1	12/17/18	13:28	65123	W1835167
76980	1	12/17/18	13:28	65123	W1835167
76980	1	12/17/18	13:28	65123	W1835167
76980	1	12/17/18	13:31	51237	W1835168
76980	1	12/17/18	13:31	51237	W1835168
76980	1	12/17/18	13:31	51237	W1835168

XtendiMax+CideWinder+AU-243LFP13	TTI11004	63	2	363.7173462
XtendiMax+CideWinder+AU-243LFP13	TTI11004	63	3	361.5332642
XtendiMax+Cinch+AU-243LFP13	TTI11004	63	1	380.6368408
XtendiMax+Cinch+AU-243LFP13	TTI11004	63	2	380.5796204
XtendiMax+Cinch+AU-243LFP13	TTI11004	63	3	374.56604
XtendiMax+CinchATZ+AU-243LFP13	TTI11004	63	1	382.3786316
XtendiMax+CinchATZ+AU-243LFP13	TTI11004	63	2	384.0944824
XtendiMax+CinchATZ+AU-243LFP13	TTI11004	63	3	379.464325
XtendiMax+Cleanse2EC+AU-243LFP13	TTI11004	63	1	396.3898621
XtendiMax+Cleanse2EC+AU-243LFP13	TTI11004	63	2	397.8589783
XtendiMax+Cleanse2EC+AU-243LFP13	TTI11004	63	3	395.1393433
XtendiMax+CNIDefoamer+AU-243LFP13	TTI11004	63	1	447.1844482
XtendiMax+CNIDefoamer+AU-243LFP13	TTI11004	63	2	442.3765259
XtendiMax+CNIDefoamer+AU-243LFP13	TTI11004	63	3	443.1895752
XtendiMax+Coact-D+AU-243LFP13	TTI11004	63	1	445.4968567
XtendiMax+Coact-D+AU-243LFP13	TTI11004	63	2	446.4085083
XtendiMax+Coact-D+AU-243LFP13	TTI11004	63	3	445.5941772
XtendiMax+Cobra+AU-243LFP13	TTI11004	63	1	388.6647034
XtendiMax+Cobra+AU-243LFP13	TTI11004	63	2	391.2667236
XtendiMax+Cobra+AU-243LFP13	TTI11004	63	3	390.8293762
XtendiMax+Command3ME+AU-243LFP13	TTI11004	63	1	434.159668
XtendiMax+Command3ME+AU-243LFP13	TTI11004	63	2	437.494873
XtendiMax+Command3ME+AU-243LFP13	TTI11004	63	3	436.3259888
XtendiMax+Compadre+AU-243LFP13	TTI11004	63	1	400.4607544
XtendiMax+Compadre+AU-243LFP13	TTI11004	63	2	402.7487793
XtendiMax+Compadre+AU-243LFP13	TTI11004	63	3	403.3762817
XtendiMax+Coron25-0-0+AU-243LFP13	TTI11004	63	1	462.9945679
XtendiMax+Coron25-0-0+AU-243LFP13	TTI11004	63	2	459.7908936
XtendiMax+Coron25-0-0+AU-243LFP13	TTI11004	63	3	457.4030151
XtendiMax+Crosshair+AU-243LFP13	TTI11004	63	1	377.7733765
XtendiMax+Crosshair+AU-243LFP13	TTI11004	63	2	377.8296814
XtendiMax+Crosshair+AU-243LFP13	TTI11004	63	3	375.5916138
XtendiMax+CrossOverPro+AU-243LFP13	TTI11004	63	1	372.3540955
XtendiMax+CrossOverPro+AU-243LFP13	TTI11004	63	2	373.8432617
XtendiMax+CrossOverPro+AU-243LFP13	TTI11004	63	3	368.8275757
XtendiMax+DC-4+AU-243LFP13	TTI11004	63	1	394.5942383
XtendiMax+DC-4+AU-243LFP13	TTI11004	63	2	392.6371765
XtendiMax+DC-4+AU-243LFP13	TTI11004	63	3	388.4971008
XtendiMax+DestinyHC+AU-243LFP13	TTI11004	63	1	399.4934082
XtendiMax+DestinyHC+AU-243LFP13	TTI11004	63	2	400.6237793
XtendiMax+DestinyHC+AU-243LFP13	TTI11004	63	3	399.4919128
XtendiMax+DimethoateLV4+AU-243LFP13	TTI11004	63	1	414.0145874
XtendiMax+DimethoateLV4+AU-243LFP13	TTI11004	63	2	412.1470947
XtendiMax+DimethoateLV4+AU-243LFP13	TTI11004	63	3	410.6889648
XtendiMax+DimetricLiquid+AU-243LFP13	TTI11004	63	1	433.7205505
XtendiMax+DimetricLiquid+AU-243LFP13	TTI11004	63	2	433.2853394
XtendiMax+DimetricLiquid+AU-243LFP13	TTI11004	63	3	430.2246094

741.3799438	1443.380249	0.869633436	0	0	0	0	0
741.7762451	1443.041748	0.871262252	0	0	0	0	0
822.6455078	1613.619873	0.788280189	0	0	0	0	0
819.3991699	1607.612549	0.789058924	0	0	0	0	0
808.4671631	1595.81604	0.831624568	0	0	0	0	0
833.010376	1629.652832	0.759304583	0	0	0	0	0
827.6630859	1613.843872	0.785946548	0	0	0	0	0
816.4698486	1600.790039	0.808951974	0	0	0	0	0
799.4265137	1529.428833	0.750342131	0	0	0	0	0
803.7626343	1539.346436	0.740047455	0	0	0	0	0
798.4918823	1535.82019	0.772127092	0	0	0	0	0
915.6113892	1696.462158	0.573325396	0	0	0	0	0
904.3129272	1681.474609	0.581110358	0	0	0	0	0
911.0626831	1690.804321	0.569333911	0	0	0	0	0
933.5244751	1724.958862	0.595231175	0	0	0	0	0
931.4575195	1722.071899	0.588354409	0	0	0	0	0
932.694458	1724.687012	0.586223066	0	0	0	0	0
824.1233521	1607.486084	0.655434847	0	0	0	0	0
825.2090454	1610.180298	0.68691355	0	0	0	0	0
830.1104126	1612.148071	0.668665349	0	0	0	0	0
915.406189	1706.437988	0.601891279	0	0	0	0	0
916.8746338	1711.062378	0.59602952	0	0	0	0	0
923.6989136	1718.444092	0.586612582	0	0	0	0	0
816.8174438	1579.119995	0.732649088	0	0	0	0	0
817.041626	1569.200439	0.723931074	0	0	0	0	0
820.9787598	1579.694946	0.719991207	0	0	0	0	0
969.9095459	1762.462036	0.479440778	0	0	0	0	0
968.0014648	1764.196045	0.498939633	0	0	0	0	0
961.786438	1757.660645	0.518093526	0	0	0	0	0
774.5756836	1506.786743	0.772883952	0	0	0	0	0
778.0775146	1516.590576	0.77472204	0	0	0	0	0
766.4072266	1482.562622	0.80749619	0	0	0	0	0
768.6175537	1499.040771	0.840849876	0	0	0	0	0
778.5534668	1522.039429	0.771123111	0	0	0	0	0
769.3283081	1500.04187	0.795506716	0	0	0	0	0
796.8746338	1523.205811	0.727895439	0	0	0	0	0
793.7870483	1518.052002	0.750315726	0	0	0	0	0
781.5449829	1500.049438	0.775416255	0	0	0	0	0
806.604126	1537.545288	0.715021372	0	0	0	0	0
812.2098389	1550.143188	0.706952512	0	0	0	0	0
807.7625732	1547.054321	0.740670323	0	0	0	0	0
901.413208	1704.027832	0.656557858	0	0	0	0	0
905.3258667	1710.852661	0.66505903	0	0	0	0	0
907.7679443	1715.827393	0.648633182	0	0	0	0	0
925.9871826	1724.282837	0.560413182	0	0	0	0	0
921.6912231	1719.533081	0.558103681	0	0	0	0	0
920.5543213	1717.522217	0.560258925	0	0	0	0	0

0	0	0	0.000262527	0.000799408	0.00151482	0.00280586	0.00478539
0	0	0	0.000267792	0.000784225	0.0014901	0.00279716	0.00489563
0	0	2.59399E-05	0.000295029	0.000699158	0.00125923	0.00249031	0.00456032
0	0	2.78473E-05	0.000309372	0.000719528	0.00127869	0.00248741	0.00448418
0	0	0.00003685	0.000346909	0.000766602	0.00138435	0.00259232	0.00465591
0	0	4.29535E-05	0.000325546	0.000693359	0.00121132	0.00236031	0.00434654
0	0	2.34985E-05	0.000288696	0.00069458	0.00125641	0.00248947	0.00454659
0	0	3.25775E-05	0.000319977	0.00073143	0.00130104	0.00254616	0.00461967
0	0	0	0.000128784	0.000598221	0.00122551	0.00252144	0.00436295
0	0	0	0.000123215	0.000591965	0.00121536	0.0024926	0.00428238
0	0	0	0.000156937	0.000655899	0.00129906	0.0025869	0.00433022
0	0	0	1.35803E-05	0.000336761	0.000838547	0.00197319	0.00374367
0	0	0	7.24792E-06	0.000336075	0.000849915	0.00200562	0.00380318
0	0	0	1.02234E-05	0.000313187	0.000848923	0.00192009	0.00379616
0	0	0	7.22504E-05	0.000391083	0.00087326	0.00199272	0.00383934
0	0	0	6.71387E-05	0.000389175	0.000871735	0.00197716	0.00376602
0	0	0	8.46863E-05	0.000406876	0.000879822	0.00195709	0.00369934
0	0	0	0.00012886	0.00051239	0.00102638	0.00214806	0.00402031
0	0	0	0.000145569	0.000564651	0.00111084	0.00226059	0.00406021
0	0	0	0.000128021	0.000516129	0.00104118	0.00219421	0.00412025
0	0	0	0.000068512	0.000389099	0.000875931	0.00201195	0.00392487
0	0	0	7.98798E-05	0.000412598	0.000898819	0.00199585	0.00375473
0	0	0	0.000102081	0.000418777	0.000878677	0.0019371	0.00370811
0	0	0	0.000138321	0.000602341	0.00121239	0.00245644	0.00419258
0	0	0	0.000100479	0.000552521	0.00116905	0.00245102	0.00427338
0	0	0	9.86481E-05	0.000541534	0.00115189	0.00243515	0.00429001
0	0	0	1.96075E-05	0.000245514	0.000672073	0.00158318	0.00336143
0	0	0	4.99725E-05	0.000299835	0.000733948	0.00163994	0.00333183
0	0	0	4.48608E-05	0.00030098	0.000755234	0.00170708	0.00348969
0	0	0	0.000199509	0.000678101	0.00128349	0.00252945	0.00440292
0	0	0	0.00021286	0.000692673	0.00129303	0.0025251	0.00438171
0	0	0	0.000201492	0.000697784	0.00133286	0.00264893	0.00462753
0	0	0	0.000206833	0.000731049	0.00139496	0.00275917	0.00480461
0	0	0	0.000184097	0.000654449	0.00125633	0.00251953	0.00451439
0	0	0	0.000204163	0.000676651	0.00128334	0.00258011	0.0046962
0	0	0	0.000127411	0.000582428	0.00118797	0.00243996	0.00424324
0	0	0	0.000132217	0.000601425	0.00122574	0.00251549	0.00436722
0	0	0	0.000163803	0.000664291	0.00130478	0.00258797	0.00435448
0	0	0	9.02557E-05	0.0005336	0.00114326	0.00242195	0.00427658
0	0	0	7.59888E-05	0.000509872	0.00111572	0.00240005	0.00429535
0	0	0	8.53729E-05	0.000550537	0.00118988	0.00251961	0.00441193
0	0	6.10352E-07	0.000156097	0.000485916	0.000973434	0.00212479	0.0041684
0	0	4.57764E-07	0.000161896	0.000498505	0.000990295	0.00214775	0.00421013
0	0	1.44196E-05	0.000196915	0.000507431	0.000968628	0.00206062	0.00405182
0	0	0	6.79779E-05	0.000364685	0.000811234	0.00186111	0.00368408
0	0	0	0.000065918	0.000364227	0.000812378	0.00185829	0.00365051
0	0	0	7.39288E-05	0.000362396	0.000801086	0.00185028	0.00371819

0.00524101	0.00637222	0.0119527	0.0228455	0.0405314	0.043473	0.0934559	0.113166
0.00550507	0.00672531	0.0124251	0.023259	0.0406569	0.0433147	0.0928545	0.112451
0.00533066	0.00642807	0.0112832	0.0199705	0.0337374	0.035593	0.0767906	0.0952039
0.00520203	0.00630112	0.0111829	0.0200043	0.0339951	0.0359286	0.0775045	0.0959611
0.00539192	0.0065641	0.0117094	0.0209568	0.0354401	0.0372084	0.0795692	0.0975114
0.00518707	0.00637558	0.0112864	0.0199126	0.0333498	0.0349522	0.0750941	0.0930673
0.00526939	0.00628998	0.010959	0.0193628	0.0328248	0.0348061	0.0755986	0.0944778
0.00535858	0.00644028	0.011311	0.0200814	0.0340382	0.0359856	0.0777352	0.0963903
0.00449966	0.00493279	0.00865631	0.0167055	0.0313328	0.0354748	0.0807763	0.10378
0.00438766	0.00481262	0.00850655	0.0165356	0.0311054	0.0352238	0.0801505	0.102925
0.0043544	0.00477936	0.00857704	0.0168948	0.0318817	0.0360155	0.0815217	0.103969
0.00396782	0.00405991	0.00627319	0.0111096	0.0208544	0.0245368	0.0593343	0.0822292
0.00403419	0.00414742	0.00646172	0.0115155	0.0216233	0.025375	0.0610926	0.0841742
0.00411995	0.00429901	0.00667343	0.0116455	0.0214481	0.0249549	0.0599108	0.0826598
0.00423454	0.00448593	0.00693985	0.0117751	0.020994	0.0239766	0.056974	0.0784271
0.00410522	0.00432816	0.00673637	0.0115988	0.0209484	0.0240723	0.0573666	0.0790139
0.00404144	0.00430435	0.00678444	0.0117564	0.0211813	0.0242253	0.0574416	0.0787994
0.00475113	0.00581039	0.0104379	0.0189898	0.032853	0.035192	0.0768655	0.0962184
0.00459007	0.00549461	0.00991425	0.0183863	0.0323937	0.0350461	0.076973	0.0965565
0.00483925	0.00583473	0.0103185	0.0185782	0.0320501	0.0343855	0.0754213	0.0950074
0.00443047	0.00482567	0.00763474	0.0129895	0.0228037	0.0256132	0.0598376	0.0810612
0.00410324	0.00441597	0.00708977	0.0124713	0.022522	0.0256278	0.0601919	0.0815474
0.00418739	0.00463348	0.00748924	0.0129195	0.0226997	0.0253942	0.0590577	0.0797944
0.00428726	0.00471565	0.00836517	0.0162648	0.0305106	0.0344489	0.0781726	0.100218
0.00439072	0.00475273	0.0082399	0.0158461	0.0298141	0.0338969	0.077585	0.100332
0.00444618	0.00481422	0.00828094	0.0157833	0.0295613	0.0335712	0.0768507	0.099466
0.00392456	0.00426765	0.00655243	0.0107787	0.0187919	0.0214112	0.0514648	0.0723991
0.00380806	0.00415192	0.00651482	0.0109988	0.0193819	0.0220261	0.0524723	0.073011
0.00397346	0.00428322	0.00662422	0.0110792	0.0195153	0.0222357	0.0531041	0.0739397
0.00485504	0.00580376	0.0106704	0.020266	0.0362596	0.0394107	0.0862804	0.106889
0.00484528	0.00581848	0.0107139	0.0202998	0.0361781	0.0392055	0.0856281	0.105934
0.00506645	0.00596573	0.0108223	0.0204488	0.0366377	0.0399294	0.0876369	0.108703
0.00526772	0.00621529	0.0112347	0.0210121	0.0371748	0.0401165	0.087243	0.107375
0.00515793	0.00626526	0.0113995	0.0210934	0.0367991	0.0393759	0.0852399	0.104879
0.00546631	0.00667801	0.0120497	0.0219668	0.0378381	0.0402002	0.0866077	0.106192
0.0044503	0.0049884	0.00888474	0.0171518	0.0319329	0.0359206	0.081338	0.104073
0.00456573	0.00509636	0.00903969	0.017396	0.0323089	0.0362717	0.0819391	0.104551
0.00446648	0.00503036	0.00916771	0.0180366	0.0337349	0.0378077	0.0848792	0.107279
0.00446793	0.00490097	0.00853195	0.0163403	0.0305807	0.0346655	0.0791975	0.102286
0.00453384	0.00497375	0.00857391	0.0162296	0.0301758	0.0341438	0.0780331	0.100977
0.00453423	0.00489143	0.00844482	0.0162061	0.0304784	0.0346394	0.0791885	0.10215
0.0049305	0.00567581	0.0092849	0.015593	0.0260998	0.0280526	0.0628685	0.0822066
0.00500664	0.00580139	0.00951584	0.0159058	0.0263599	0.0280882	0.0624776	0.0812781
0.00491341	0.0058226	0.00970421	0.0162733	0.0267731	0.0282898	0.0624264	0.0807342
0.00429314	0.0048468	0.00787025	0.0134181	0.0231626	0.0255943	0.0589732	0.0791904
0.00421715	0.00474625	0.00774811	0.0133672	0.0233247	0.0259068	0.0597882	0.0801639
0.0044072	0.00503006	0.00818352	0.0138583	0.0236981	0.0260206	0.0596659	0.0798221

0.13102	0.131404	0.11659	0.101623	0.0762958	0.0506319	0.0296919	0.0151668
0.130461	0.1312	0.116707	0.101908	0.0765314	0.0506934	0.0296243	0.0150798
0.114951	0.122355	0.11733	0.112906	0.0953194	0.071405	0.0462546	0.0251822
0.115637	0.122792	0.117413	0.112591	0.0946612	0.0706021	0.0455607	0.0247382
0.11636	0.122474	0.116213	0.1107	0.0925519	0.0687368	0.0442407	0.0239908
0.112844	0.121054	0.117277	0.11419	0.097543	0.0737987	0.0481282	0.0263013
0.114944	0.123131	0.118587	0.114293	0.0963227	0.0718306	0.0462837	0.0250939
0.116228	0.123343	0.117694	0.112438	0.0940392	0.0697333	0.0447842	0.0242438
0.126703	0.133431	0.124009	0.113213	0.0889932	0.0615704	0.0372396	0.0193694
0.125744	0.132731	0.123873	0.113765	0.0900787	0.0627895	0.0382144	0.0199596
0.126155	0.132333	0.122851	0.112412	0.088902	0.0620744	0.0379041	0.0198557
0.108904	0.125143	0.12778	0.129387	0.113465	0.0870536	0.0570386	0.0311782
0.110742	0.126305	0.127885	0.128247	0.111286	0.084522	0.0549487	0.0298919
0.109207	0.125258	0.127636	0.128887	0.112633	0.0860947	0.0562376	0.0306802
0.104195	0.12097	0.125513	0.129822	0.116695	0.0917542	0.0613	0.0339229
0.104865	0.121513	0.125775	0.129744	0.116309	0.0912301	0.0608431	0.0336358
0.104376	0.120932	0.125341	0.129608	0.116525	0.0916515	0.0612499	0.0339035
0.116796	0.124476	0.119049	0.113845	0.0952765	0.0707461	0.0455347	0.0247053
0.117152	0.124675	0.119079	0.113825	0.0953684	0.0710026	0.0458433	0.0249343
0.116137	0.124619	0.119875	0.115102	0.0965082	0.0716516	0.046072	0.0249773
0.106262	0.121877	0.124948	0.127627	0.113292	0.0881079	0.0584179	0.0321949
0.106588	0.121835	0.124626	0.127311	0.113349	0.0886119	0.0590685	0.0326795
0.104673	0.120495	0.124292	0.128022	0.114763	0.0901275	0.0602201	0.0333496
0.122522	0.129846	0.122247	0.114125	0.0928191	0.0671067	0.0423996	0.0227809
0.123465	0.131347	0.123724	0.115081	0.0928002	0.0662648	0.041349	0.0220177
0.122556	0.130619	0.12339	0.115306	0.093637	0.0674561	0.0424451	0.022734
0.0987434	0.117853	0.125693	0.133614	0.123289	0.0992029	0.0674439	0.0377387
0.0986967	0.117136	0.124644	0.132594	0.122723	0.0991676	0.0676845	0.0379761
0.0997691	0.117962	0.124897	0.132119	0.121615	0.0978218	0.066553	0.0372712
0.126826	0.130613	0.119333	0.1076	0.0839831	0.0580397	0.0352228	0.0184002
0.125724	0.129747	0.119023	0.107989	0.0849603	0.0592087	0.0361751	0.0189761
0.128833	0.13216	0.119859	0.106781	0.0819031	0.0554046	0.0329519	0.0169701
0.126707	0.129943	0.118371	0.106502	0.0829296	0.0571063	0.0345043	0.017959
0.124281	0.128448	0.118282	0.107921	0.0854428	0.0598586	0.0366839	0.0192681
0.125475	0.129197	0.118273	0.106881	0.0834138	0.0573888	0.034563	0.0179284
0.126795	0.133412	0.123929	0.113001	0.0885569	0.0609412	0.0366261	0.0189523
0.127036	0.133345	0.123607	0.112479	0.0879381	0.0603328	0.0361418	0.0186519
0.128919	0.133713	0.122417	0.110008	0.08502	0.0578145	0.0344548	0.017742
0.12569	0.133337	0.124872	0.114826	0.090745	0.0629045	0.037994	0.0197096
0.124455	0.132543	0.124745	0.115461	0.0920207	0.0644248	0.0392837	0.0205237
0.125231	0.132553	0.12403	0.114291	0.0909223	0.063745	0.0389976	0.0204354
0.105238	0.118994	0.121206	0.123822	0.110523	0.0866984	0.0579628	0.0321284
0.10391	0.117719	0.120444	0.123819	0.111285	0.087829	0.0589662	0.0327613
0.102971	0.116725	0.119765	0.123671	0.111733	0.0886121	0.059706	0.0332438
0.103611	0.119288	0.123344	0.127623	0.115103	0.0909786	0.0611079	0.0339529
0.104511	0.11981	0.123372	0.127177	0.114325	0.0900996	0.0603687	0.0334817
0.10415	0.11961	0.123343	0.127185	0.114212	0.0898315	0.0600701	0.0332715

0.000371506	0
0.000368869	0
0.000629332	0
0.000617669	0
0.000598816	0
0.000658034	0
0.000626213	0
0.000604774	0
0.000476972	0
0.000492182	0
0.000490131	0
0.000779736	0
0.000746458	0
0.000766806	0
0.000851688	0
0.000844227	0
0.00085129	0
0.000616835	0
0.000623095	0
0.000623487	0
0.00080737	0
0.000820573	0
0.000837606	0
0.000567281	0
0.000546639	0
0.000565515	0
0.000950876	0
0.00095772	0
0.000939399	0
0.000453898	0
0.000468697	0
0.000416641	0
0.000442446	0
0.000476064	0
0.000441107	0
0.000465836	0
0.000458009	0
0.000435453	0
0.000484755	0
0.000506029	0
0.00050439	0
0.000807227	0
0.000823695	0
0.000836381	0
0.000853633	0
0.000841246	0
0.000835613	0

76980	1	12/17/18	13:35	91025	W1835169
76980	1	12/17/18	13:35	91025	W1835169
76980	1	12/17/18	13:35	91025	W1835169
76980	1	12/17/18	13:38	38584	W1835170
76980	1	12/17/18	13:38	38584	W1835170
76980	1	12/17/18	13:38	38584	W1835170
76980	1	12/17/18	13:42	21372	W1835171
76980	1	12/17/18	13:42	21372	W1835171
76980	1	12/17/18	13:42	21372	W1835171
76980	1	12/17/18	13:45	55534	W1835172
76980	1	12/17/18	13:45	55534	W1835172
76980	1	12/17/18	13:45	55534	W1835172
76980	1	12/17/18	13:49	87827	W1835173
76980	1	12/17/18	13:49	87827	W1835173
76980	1	12/17/18	13:49	87827	W1835173
76980	1	12/17/18	13:52	80056	W1835174
76980	1	12/17/18	13:52	80056	W1835174
76980	1	12/17/18	13:52	80056	W1835174
76980	1	12/17/18	13:56	27166	W1835175
76980	1	12/17/18	13:56	27166	W1835175
76980	1	12/17/18	13:56	27166	W1835175

XtendiMax+Diplomat+AU-243LFP13	TTI11004	63	1	415.2536316
XtendiMax+Diplomat+AU-243LFP13	TTI11004	63	2	413.7660828
XtendiMax+Diplomat+AU-243LFP13	TTI11004	63	3	414.9423218
XtendiMax+Diuron80+AU-243LFP13	TTI11004	63	1	441.3703918
XtendiMax+Diuron80+AU-243LFP13	TTI11004	63	2	439.4961243
XtendiMax+Diuron80+AU-243LFP13	TTI11004	63	3	442.4542236
XtendiMax+Domark+AU-243LFP13	TTI11004	63	1	392.2480774
XtendiMax+Domark+AU-243LFP13	TTI11004	63	2	390.7024536
XtendiMax+Domark+AU-243LFP13	TTI11004	63	3	390.3563232
XtendiMax+Drift-Fiant+AU-243LFP13	TTI11004	63	1	387.5529175
XtendiMax+Drift-Fiant+AU-243LFP13	TTI11004	63	2	384.4881592
XtendiMax+Drift-Fiant+AU-243LFP13	TTI11004	63	3	385.1282043
XtendiMax+Drift-X+AU-243LFP13	TTI11004	63	1	394.6856384
XtendiMax+Drift-X+AU-243LFP13	TTI11004	63	2	393.8999023
XtendiMax+Drift-X+AU-243LFP13	TTI11004	63	3	393.8098145
XtendiMax+DualIIMagnum+AU-243LFP13	TTI11004	63	1	384.9382019
XtendiMax+DualIIMagnum+AU-243LFP13	TTI11004	63	2	386.5751038
XtendiMax+DualIIMagnum+AU-243LFP13	TTI11004	63	3	383.8638611
XtendiMax+DualMagnum+AU-243LFP13	TTI11004	63	1	379.8973389
XtendiMax+DualMagnum+AU-243LFP13	TTI11004	63	2	378.6772766
XtendiMax+DualMagnum+AU-243LFP13	TTI11004	63	3	383.0545959

861.7075195	1634.791748	0.631587982	0	0	0	0	0
857.4914551	1629.401367	0.638189852	0	0	0	0	0
853.9373169	1617.982788	0.635932505	0	0	0	0	0
940.5516968	1738.339844	0.635199368	0	0	0	0	0
941.6083374	1741.06958	0.639847457	0	0	0	0	0
941.0996094	1736.353394	0.624216735	0	0	0	0	0
865.6098633	1671.765503	0.678123236	0	0	0	0	0
862.8442993	1668.8302	0.702024758	0	0	0	0	0
860.2200317	1662.442261	0.707102299	0	0	0	0	0
774.6112061	1481.410889	0.794206023	0	0	0	0	0
768.0791016	1466.110962	0.837329805	0	0	0	0	0
766.0860596	1454.853394	0.838677764	0	0	0	0	0
786.616394	1494.280884	0.811385155	0	0	0	0	0
784.850708	1491.123779	0.806326926	0	0	0	0	0
782.0852661	1484.828491	0.829901874	0	0	0	0	0
817.3435669	1587.633545	0.781863451	0	0	0	0	0
822.7246094	1598.915771	0.78744936	0	0	0	0	0
817.8261719	1595.592163	0.778717995	0	0	0	0	0
797.9191284	1556.29895	0.817290664	0	0	0	0	0
798.4867554	1561.547974	0.81378603	0	0	0	0	0
806.3321533	1560.655518	0.80909723	0	0	0	0	0

0	0	0	0.000072937	0.000435791	0.000959091	0.00212234	0.00397896
0	0	0	0.000072937	0.000443954	0.000975342	0.00214722	0.0039991
0	0	0	5.24902E-05	0.000418854	0.000957108	0.00215469	0.00404991
0	0	1.83105E-06	0.000168304	0.000501709	0.00098175	0.00206795	0.0038382
0	0	1.54114E-05	0.000199966	0.000516357	0.000983505	0.0020546	0.0038446
0	0	5.0354E-06	0.000165329	0.000480423	0.000947571	0.00202667	0.0038298
0	0	1.62506E-05	0.000226746	0.000561829	0.00103867	0.00213898	0.0041407
0	0	1.36566E-05	0.000231247	0.000585022	0.00108269	0.00222069	0.00426445
0	0	1.09863E-05	0.000220566	0.000575485	0.00108009	0.00224442	0.00434525
0	0	0	0.000147552	0.000664444	0.00133369	0.0026709	0.00447906
0	0	0	0.000172806	0.000720749	0.00142021	0.00280617	0.00465416
0	0	0	0.000163574	0.000705948	0.00140839	0.00281586	0.00471657
0	0	0	0.000121536	0.000644836	0.00134247	0.00275482	0.00465309
0	0	0	0.000133972	0.000656357	0.00134399	0.00272736	0.00458244
0	0	0	0.000140305	0.000680771	0.00139053	0.00281052	0.00468033
0	0	1.64795E-05	0.000267563	0.000677643	0.00124664	0.0024958	0.0045517
0	0	7.24792E-06	0.000249329	0.000674515	0.00125854	0.00253304	0.00459946
0	0	1.28937E-05	0.000265808	0.000683365	0.00125305	0.00248856	0.00450226
0	0	1.57928E-05	0.000296707	0.000745316	0.00134529	0.00261162	0.00458786
0	0	2.79999E-05	0.000329361	0.000758438	0.00137787	0.00255775	0.00448242
0	0	2.36511E-06	0.000238495	0.000681381	0.00128845	0.00261574	0.00476372

0.00440308	0.00489555	0.00819443	0.0147946	0.0266946	0.0299783	0.0689379	0.0908589
0.00440384	0.00489624	0.00823112	0.0149376	0.0270204	0.0303497	0.0697132	0.0916814
0.00444138	0.00487358	0.00809471	0.014668	0.0267306	0.0302541	0.0699866	0.0925314
0.00422035	0.00456978	0.00725616	0.0123872	0.0217056	0.024305	0.0566894	0.0769814
0.00429901	0.00471802	0.00751076	0.0126926	0.0219402	0.0243635	0.056536	0.0765865
0.00427132	0.00463921	0.00731071	0.0123346	0.0214776	0.0240449	0.0562495	0.0767227
0.0050956	0.00625977	0.01086	0.0186961	0.0308409	0.0322144	0.0695614	0.0873499
0.00519989	0.00634644	0.0109674	0.0188435	0.0310507	0.0324075	0.0699106	0.0876847
0.00529877	0.00642662	0.0110184	0.0188311	0.0310015	0.0324005	0.0700581	0.0880761
0.00452141	0.00500748	0.00908722	0.018018	0.0340224	0.0383385	0.0863189	0.109116
0.0046505	0.005121	0.00928093	0.0184037	0.0347106	0.0390372	0.0876376	0.110372
0.0047242	0.0051545	0.00922432	0.0181995	0.0344224	0.0388922	0.0877753	0.111083
0.00458611	0.00482986	0.00840363	0.0165556	0.0317625	0.0363863	0.0833129	0.107054
0.00453163	0.00482635	0.00848549	0.0167539	0.0320544	0.0366257	0.0836895	0.107382
0.004552	0.00477142	0.00835228	0.0166132	0.0320645	0.0368132	0.0843263	0.108231
0.00521194	0.00615189	0.0107011	0.0190932	0.0328473	0.0352223	0.0771871	0.096981
0.00520752	0.00608261	0.0105247	0.018786	0.0324079	0.0348194	0.0763979	0.0960609
0.00514969	0.00612427	0.0107652	0.0193347	0.0332653	0.0355572	0.0775262	0.0968366
0.0051149	0.00605652	0.0108052	0.0198273	0.0346371	0.0372465	0.0812534	0.101027
0.00503784	0.00606865	0.0109686	0.0201757	0.0350662	0.0374902	0.0813204	0.100643
0.00537613	0.00623978	0.0107458	0.0191797	0.0332089	0.0358144	0.0788406	0.0992767

0.115139	0.127078	0.12488	0.121717	0.102834	0.0763187	0.0487842	0.0262684
0.115849	0.127426	0.124744	0.121091	0.101917	0.0754212	0.0481334	0.0259018
0.117193	0.128846	0.125743	0.121328	0.101203	0.0740772	0.046788	0.0249877
0.101733	0.118313	0.123638	0.129336	0.117844	0.0938917	0.0633787	0.0353031
0.101172	0.117732	0.123186	0.129123	0.117972	0.0942763	0.0637943	0.0355883
0.101796	0.118708	0.124197	0.129861	0.118084	0.0937906	0.0631084	0.035068
0.107957	0.118567	0.11797	0.118247	0.103959	0.0806077	0.0534609	0.0294901
0.108233	0.11869	0.117873	0.117886	0.103409	0.0800488	0.0530533	0.0292651
0.10886	0.119375	0.118367	0.117983	0.102969	0.0792263	0.0522195	0.0286937
0.130782	0.134968	0.122665	0.109119	0.0832225	0.0557195	0.0327213	0.0166691
0.131757	0.135378	0.122405	0.108148	0.081707	0.0540506	0.0313558	0.0158248
0.132981	0.136672	0.123242	0.108215	0.0809511	0.0528686	0.0302803	0.0151367
0.130104	0.135883	0.124775	0.111947	0.0858797	0.0576183	0.0337931	0.0171726
0.130367	0.135999	0.124676	0.111611	0.0854134	0.057192	0.0335087	0.0170249
0.13118	0.136456	0.124652	0.111141	0.0846797	0.0564416	0.0329334	0.0166827
0.118002	0.125791	0.11997	0.113886	0.0940604	0.0685714	0.0433167	0.0231754
0.116991	0.124977	0.119676	0.114343	0.0952417	0.070054	0.0445668	0.0239454
0.117261	0.124652	0.118883	0.113262	0.0942351	0.0693626	0.0442011	0.0237855
0.121215	0.127147	0.119151	0.110978	0.0898663	0.0643048	0.0400289	0.0212141
0.120464	0.126307	0.118521	0.110732	0.0900974	0.0648518	0.0405916	0.0215953
0.120625	0.127913	0.120848	0.113085	0.0916185	0.0653307	0.0404469	0.0213332

0.000653888	0
0.000644689	0
0.000620308	0
0.000888192	0
0.000895782	0
0.000881536	0
0.000739814	0
0.000734239	0
0.000718965	0
0.000407612	0
0.000385702	0
0.000367723	0
0.000419465	0
0.000415882	0
0.000407105	0
0.000575858	0
0.000595739	0
0.000592095	0
0.000525514	0
0.000535642	0
0.000527531	0

Material	Batch	Date	Time	Material ID	Battelle_ID
76980	1	12/18/18	7:39	11117	W1835201A
76980	1	12/18/18	7:39	11117	W1835201A
76980	1	12/18/18	7:39	11117	W1835201A
76980	1	12/18/18	7:42	11116	W1835201B
76980	1	12/18/18	7:42	11116	W1835201B
76980	1	12/18/18	7:42	11116	W1835201B
76980	1	12/18/18	7:46	11115	W1835201C
76980	1	12/18/18	7:46	11115	W1835201C
76980	1	12/18/18	7:46	11115	W1835201C
76980	1	12/18/18	7:49	11114	W1835201D
76980	1	12/18/18	7:49	11114	W1835201D
76980	1	12/18/18	7:49	11114	W1835201D
76980	1	12/18/18	7:53	11113	W1835201E
76980	1	12/18/18	7:53	11113	W1835201E
76980	1	12/18/18	7:53	11113	W1835201E
76980	1	12/18/18	7:56	11112	W1835201F
76980	1	12/18/18	7:56	11112	W1835201F
76980	1	12/18/18	7:56	11112	W1835201F
76980	1	12/18/18	8:01	11117	W1835202A
76980	1	12/18/18	8:01	11117	W1835202A
76980	1	12/18/18	8:01	11117	W1835202A
76980	1	12/18/18	8:04	11116	W1835202B
76980	1	12/18/18	8:04	11116	W1835202B
76980	1	12/18/18	8:04	11116	W1835202B
76980	1	12/18/18	8:08	11115	W1835202C
76980	1	12/18/18	8:08	11115	W1835202C
76980	1	12/18/18	8:08	11115	W1835202C
76980	1	12/18/18	8:11	11114	W1835202D
76980	1	12/18/18	8:11	11114	W1835202D
76980	1	12/18/18	8:11	11114	W1835202D
76980	1	12/18/18	8:15	11113	W1835202E
76980	1	12/18/18	8:15	11113	W1835202E
76980	1	12/18/18	8:15	11113	W1835202E
76980	1	12/18/18	8:18	11112	W1835202F
76980	1	12/18/18	8:18	11112	W1835202F
76980	1	12/18/18	8:18	11112	W1835202F
76980	1	12/18/18	8:23	76980	W1835203
76980	1	12/18/18	8:23	76980	W1835203
76980	1	12/18/18	8:23	76980	W1835203
76980	1	12/18/18	8:27	89870	W1835204
76980	1	12/18/18	8:27	89870	W1835204
76980	1	12/18/18	8:27	89870	W1835204
76980	1	12/18/18	8:33	77355	W1835205
76980	1	12/18/18	8:33	77355	W1835205
76980	1	12/18/18	8:33	77355	W1835205
76980	1	12/18/18	8:38	26199	W1835206

Spray_solution_name	Nozzle	Pressure	Rep	DV10
Water+6515+21.7	6515	21.7	1	381.8164063
Water+6515+21.7	6515	21.7	2	385.6706848
Water+6515+21.7	6515	21.7	3	386.1529541
Water+6510+29.0	6510	29.0	1	267.2902527
Water+6510+29.0	6510	29.0	2	267.6564636
Water+6510+29.0	6510	29.0	3	265.6382751
Water+8008+36.3	8008	36.3	1	200.5617218
Water+8008+36.3	8008	36.3	2	199.4040833
Water+8008+36.3	8008	36.3	3	201.1347656
Water+11006+29.0	11006	29.0	1	160.045929
Water+11006+29.0	11006	29.0	2	159.8784943
Water+11006+29.0	11006	29.0	3	159.3510437
Water+11003+43.5	11003	43.5	1	103.1638031
Water+11003+43.5	11003	43.5	2	105.0311584
Water+11003+43.5	11003	43.5	3	103.8063736
Water+11001+65.3	11001	65.3	1	53.36437988
Water+11001+65.3	11001	65.3	2	52.77298737
Water+11001+65.3	11001	65.3	3	53.2314949
Water+NIS+6515+21.7	6515	21.7	1	329.8827209
Water+NIS+6515+21.7	6515	21.7	2	331.2943726
Water+NIS+6515+21.7	6515	21.7	3	331.4305725
Water+NIS+6510+29.0	6510	29.0	1	236.9358521
Water+NIS+6510+29.0	6510	29.0	2	237.3386536
Water+NIS+6510+29.0	6510	29.0	3	238.0198364
Water+NIS+8008+36.3	8008	36.3	1	184.7628326
Water+NIS+8008+36.3	8008	36.3	2	185.0756531
Water+NIS+8008+36.3	8008	36.3	3	184.5692444
Water+NIS+11006+29.0	11006	29.0	1	152.5553589
Water+NIS+11006+29.0	11006	29.0	2	152.7371063
Water+NIS+11006+29.0	11006	29.0	3	152.3292542
Water+NIS+11003+43.5	11003	43.5	1	99.81789398
Water+NIS+11003+43.5	11003	43.5	2	99.74064636
Water+NIS+11003+43.5	11003	43.5	3	100.4434967
Water+NIS+11001+65.3	11001	65.3	1	52.70683289
Water+NIS+11001+65.3	11001	65.3	2	52.68811035
Water+NIS+11001+65.3	11001	65.3	3	52.31697464
XtendiMax	TTI11004	63	1	379.2939148
XtendiMax	TTI11004	63	2	382.2089844
XtendiMax	TTI11004	63	3	379.4310303
XtendiMax+Induce	TTI11004	63	1	281.5935974
XtendiMax+Induce	TTI11004	63	2	282.6105347
XtendiMax+Induce	TTI11004	63	3	283.3771057
XtendiMax+Dyne-Amic+AU-243LFP13	TTI11004	63	1	392.9102173
XtendiMax+Dyne-Amic+AU-243LFP13	TTI11004	63	2	391.3580627
XtendiMax+Dyne-Amic+AU-243LFP13	TTI11004	63	3	393.0431519
XtendiMax+EezyMan+AU-243LFP13	TTI11004	63	1	408.7165527

VMD	DV90	%_141	18	22	26	30	36
809.8624268	1559.244019	1.152755022	3.28064E-06	7.75909E-05	0.000114975	0.00011734	0.000143433
816.3109741	1572.608521	1.126795411	3.20435E-06	7.62177E-05	0.000113525	0.000115738	0.00013916
809.7565308	1559.621582	1.138201833	3.28064E-06	7.88879E-05	0.000117645	0.000119247	0.000140305
578.7623291	1113.716431	2.832950592	9.16E-06	0.000198059	0.000239258	0.000203705	0.000249481
577.5172729	1103.578125	2.845033407	9.46E-06	0.000204468	0.000244293	0.000203629	0.000240402
574.4309082	1095.601685	2.91159296	9.61E-06	0.000207672	0.000251694	0.000215073	0.000263977
442.796814	822.0151367	4.94847393	1.31E-05	0.000270309	0.000297165	0.000253601	0.000432281
440.7635803	829.6346436	4.982860565	1.32E-05	0.000271454	0.000300903	0.000262909	0.000459671
444.7625732	839.588623	4.934158802	1.33E-05	0.000272369	0.0003022	0.000263214	0.000456772
358.8335266	656.6745605	7.685304642	1.58E-05	0.000332642	0.000415649	0.000459747	0.000938797
358.3626099	657.3080444	7.687085629	1.51E-05	0.000317688	0.000399017	0.000447693	0.000928421
358.0382385	658.9152222	7.747154713	1.55E-05	0.000325851	0.000405579	0.000449066	0.000923691
236.7196655	440.2511902	19.61569977	3.22E-05	0.000780487	0.00122208	0.00160881	0.00319626
238.6252289	441.299408	19.00550079	3.08E-05	0.00072403	0.00118614	0.00158104	0.00317535
236.7420044	438.8218384	19.44009972	3.16E-05	0.000773468	0.00122627	0.00163063	0.00324356
110.7946777	217.1144257	67.22723389	1.48E-04	0.00527367	0.00669556	0.0071608	0.0128475
110.4302216	218.026413	67.29146576	1.55E-04	5.53E-03	0.00704636	0.00754082	0.0134319
111.2930222	217.4036865	66.94672394	1.59E-04	0.00568436	0.00720627	0.00758354	0.0131592
711.3041382	1419.253418	0.824413836	0	0	0	0	0
710.9429321	1408.840698	0.800083399	0	0	0	0	0
712.4207764	1422.449097	0.797595859	0	0	0	0	0
518.2056274	1007.639587	2.633421183	4.65E-06	9.67407E-05	0.000103836	6.68335E-05	4.27246E-05
518.8582764	995.3538818	2.663922071	4.73E-06	9.85718E-05	0.000104218	6.39343E-05	3.24249E-05
519.022644	1002.757202	2.592930079	4.65E-06	9.59778E-05	0.000100555	6.05774E-05	2.92206E-05
406.4022217	773.9215088	5.213210583	6.10E-06	0.000118866	0.000113449	9.04083E-05	0.000202179
406.5149841	773.0506592	5.203644753	6.03E-06	0.000116653	0.000109558	8.70514E-05	0.000202942
405.2552185	766.4008789	5.243513584	6.10E-06	0.000118027	0.000111542	8.76617E-05	0.000197906
334.5789185	619.777832	8.238753319	5.87E-06	0.000118256	0.000133972	0.000156631	0.000437622
335.8440857	624.2374878	8.207698822	6.33E-06	0.000128708	0.000147018	0.000163345	0.000402298
335.9944763	625.244812	8.273813248	6.48E-06	0.000131912	0.000150604	0.000166779	0.000430603
223.7043762	415.4688721	21.70674706	2.41E-05	0.000587463	0.00104874	0.0014843	0.0031015
224.4493713	416.862793	21.65291977	2.45E-05	0.000594559	0.00104897	0.00147575	0.00308182
225.5198212	419.4056091	21.41230965	2.28E-05	0.000555649	0.00098999	0.00140633	0.00296463
108.2991486	208.0328979	69.22885895	1.54E-04	5.53E-03	7.04E-03	7.51E-03	1.33E-02
108.4634628	208.5598907	69.11533356	1.59E-04	5.70E-03	7.24E-03	7.65E-03	1.34E-02
108.439476	208.6260529	69.09796143	1.60E-04	5.77E-03	7.44E-03	7.96E-03	1.39E-02
849.1600952	1655.164917	0.698022068	0.00E+00	3.66E-06	2.40E-05	3.86E-05	6.06E-05
851.4331055	1653.712769	0.67442137	0	2.21E-06	2.11E-05	3.84E-05	6.49E-05
846.6776123	1650.427368	0.691240013	0	3.13E-06	2.33E-05	3.91E-05	6.31E-05
558.8070679	1044.119507	1.337431073	0	0	0	0	0
556.4406128	1030.582397	1.316364527	0	0	0	0	0
558.2403564	1036.768921	1.330714345	0	0	0	0	0
812.1813965	1569.653442	0.697486162	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
808.8803711	1564.033325	0.704915106	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
815.5105591	1573.625977	0.682689011	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
852.5886841	1634.806396	0.646830499	0	0	0	0	0

44	52	62	74	86	100	120	150
0.000124664	0.000112	0.000253677	0.000647659	0.00109261	0.00177727	0.00322914	0.00554077
0.000113602	0.000094986	0.000227356	0.000615158	0.00106277	0.00174614	0.0031852	0.00544922
0.000106659	8.29315E-05	0.000215302	0.000616226	0.00108261	0.00178413	0.00323944	0.00546135
0.000401306	0.000696564	0.00149605	0.00265266	0.00339081	0.00449554	0.00686272	0.0107296
0.000382309	0.00068222	0.0014962	0.00267761	0.00343231	0.00454552	0.00690598	0.0107016
0.000420609	0.000722885	0.00154579	0.00273674	0.00349434	0.00462555	0.00703819	0.0109315
0.00101112	0.0018042	0.003349	0.0051844	0.00591782	0.00731148	0.0109728	0.0186974
0.0010672	0.00186882	0.00341812	0.00523109	0.0059256	0.00729492	0.0109649	0.0188538
0.00105743	0.00185486	0.00340096	0.00521431	0.00590782	0.00725746	0.010842	0.0184542
0.00210838	0.00319031	0.00525032	0.00750015	0.00829666	0.0104308	0.0167962	0.0315397
0.00209991	0.00317566	0.00521805	0.00745049	0.00825478	0.010415	0.0168612	0.0318057
0.00209259	0.00318016	0.00524681	0.00751396	0.00833786	0.0105217	0.0170155	0.0320249
0.00581192	0.00743729	0.0112785	0.0161992	0.0192605	0.0265256	0.0458474	0.0835741
0.00574753	0.00725044	0.0108346	0.0154142	0.0183212	0.0254049	0.0444527	0.082259
0.00584763	0.00739388	0.0110995	0.0158559	0.0188672	0.0261094	0.045462	0.0835216
0.0249081	0.0358647	0.0585204	0.0832288	0.0891192	0.102334	0.132081	0.155094
0.0256696	0.0365255	0.059089	0.0834629	0.088914	0.101725	0.130916	0.153477
0.0247194	0.0351973	0.0574075	0.0819506	0.0881783	0.101731	0.131967	0.155795
0	6.86646E-07	4.81415E-05	0.0003228	0.000668564	0.00118919	0.00249573	0.00532341
0	0	4.40216E-05	0.000309143	0.000644913	0.00115089	0.0024234	0.00519066
0	0	0.000043335	0.000310059	0.000647812	0.00115265	0.0024157	0.00515564
7.99561E-05	0.000281372	0.000842819	0.0017437	0.00258293	0.00392036	0.00715195	0.0140903
6.15692E-05	0.000268021	0.000846405	0.0017775	0.00264503	0.00400757	0.00726143	0.0141376
0.000059967	0.000263748	0.000826416	0.00172569	0.00255913	0.00387665	0.00705299	0.0138783
0.000695648	0.00137146	0.00267448	0.0043988	0.0054377	0.00744667	0.0128432	0.0250713
0.000712433	0.00140297	0.00272087	0.0044442	0.00545639	0.00742943	0.0127554	0.024864
0.000695267	0.00138153	0.00270348	0.00445251	0.00550087	0.0075161	0.0129106	0.0250873
0.001203	0.00213448	0.0039547	0.00642242	0.00811821	0.0115441	0.0207353	0.0409709
0.00114693	0.00202942	0.00380447	0.00628952	0.00805489	0.0115507	0.02083	0.0410928
0.00116058	0.00207436	0.00389435	0.00640762	0.00817253	0.0116658	0.0209305	0.0411031
0.0057859	0.0075396	0.0117455	0.0174908	0.0214709	0.0301362	0.0523335	0.0939969
0.00577332	0.0075602	0.0118117	0.0175855	0.0215276	0.0301061	0.0520831	0.0933003
0.0056012	0.00738075	0.0115891	0.0173303	0.0212848	0.0298329	0.0516999	0.0927489
2.57E-02	3.70E-02	0.0604671	0.0862063	0.092337	0.105779	0.13561	0.156808
2.55E-02	3.67E-02	0.0600601	0.0858076	0.09208	0.105624	0.135545	0.156848
2.61E-02	3.69E-02	0.059986	0.0853647	0.091538	0.105094	0.135114	0.15671
7.03E-05	8.36E-05	0.000185699	0.000406876	0.000635757	0.0010228	0.00191246	0.00379395
7.50E-05	7.76E-05	0.000160675	0.000360031	0.000584259	0.00097229	0.00186859	0.00377357
7.43E-05	8.56E-05	0.000182953	0.000397186	0.000622559	0.00100723	0.00189369	0.00377182
4.58E-07	5.24139E-05	0.000511856	0.00122612	0.00168365	0.00224503	0.00348007	0.00628128
0.00E+00	3.31879E-05	0.000472031	0.00120438	0.00168159	0.00224701	0.00345116	0.00611588
0.00E+00	3.71552E-05	0.000503006	0.00124542	0.00172119	0.00228287	0.00347031	0.00606247
0	0	0	0.000126724	0.000547485	0.00111382	0.00231766	0.00417107
0	0	0	0.000128479	0.000551682	0.00112183	0.00233948	0.00423134
0	0	0	0.000131378	0.000535507	0.00108063	0.00225555	0.0041185
0.00E+00	0	7.70569E-06	0.000240021	0.000614471	0.0010965	0.00207588	0.00351166

180	210	250	300	360	410	500	600
0.00588638	0.00643707	0.0105193	0.0182535	0.0315485	0.0343287	0.0766083	0.0979351
0.00573677	0.00622131	0.0101434	0.0176917	0.0308225	0.0337346	0.0756433	0.0970728
0.00563065	0.00602692	0.00985527	0.0174791	0.0309792	0.0342209	0.0770759	0.0989138
0.0121278	0.0151115	0.0268676	0.0455093	0.0699223	0.0665833	0.12622	0.132912
0.0120139	0.0149725	0.0267306	0.0454942	0.0701421	0.0669073	0.126946	0.133715
0.0122662	0.0152341	0.0270844	0.0459389	0.0706706	0.067327	0.127588	0.134158
0.023995	0.0311705	0.0530297	0.0807275	0.107938	0.0905819	0.149048	0.132727
0.0244108	0.0317808	0.0539435	0.0816885	0.108479	0.0904657	0.147828	0.130617
0.0237535	0.0309486	0.0527406	0.0803075	0.107265	0.0898753	0.147564	0.131054
0.0415305	0.0515179	0.0806583	0.110346	0.131119	0.0991013	0.144811	0.110662
0.041892	0.0518564	0.0809586	0.110432	0.1309	0.098792	0.144251	0.110249
0.0420852	0.0520033	0.0810471	0.110346	0.13056	0.0984035	0.143557	0.109734
0.0948653	0.0979259	0.124393	0.133647	0.121763	0.071928	0.0785406	0.0390778
0.0944781	0.0982147	0.12536	0.13514	0.123353	0.0729009	0.0795394	0.0394657
0.095282	0.0985607	0.125258	0.134451	0.122203	0.0719535	0.0781828	0.0385404
0.1061	0.0685684	0.0524902	0.029724	0.0109611	0.00122537	0	0
0.105046	0.0680493	0.0523297	0.0299017	0.0112735	0.00139088	0	0
0.107092	0.0694656	0.0533704	0.0303582	0.0112721	0.00128697	0	0
0.00749504	0.0101322	0.0183331	0.0311511	0.0487823	4.81E-02	0.0969221	0.111778
0.00734451	0.00997276	0.01812	0.0309119	0.0485859	4.81E-02	0.0971091	1.12E-01
0.0072953	0.00992958	0.018093	0.0309287	0.0486336	4.81E-02	0.0969548	1.12E-01
0.0187577	0.0240507	0.0404993	0.0623534	0.0866021	0.0763728	0.134649	0.131807
0.0186273	0.0237761	0.0400214	0.0617783	0.0861782	0.0763185	0.135184	0.133021
0.0185107	0.0238073	0.040217	0.0620995	0.0864684	0.0764069	0.135001	0.132482
0.0334199	0.0418585	0.0667439	0.0941924	0.116998	0.0927464	0.144417	0.121313
0.033206	0.0416974	0.0666459	0.0942368	0.117198	0.0929499	0.144735	0.121524
0.0333801	0.0418407	0.0668483	0.0945737	0.117723	0.0934205	0.14546	0.121968
0.0526064	0.0620331	0.0918192	0.118626	0.13364	0.0968635	0.135679	0.0986156
0.0525288	0.0617247	0.0911669	0.117717	0.132776	0.0964564	0.135597	0.099122
0.0524215	0.0615608	0.0909251	0.11743	0.132492	0.0962857	0.135454	0.0991728
0.103722	0.103924	0.127754	0.132042	0.115035	0.0649855	0.0670787	0.0302432
0.102928	0.103277	0.127285	0.132049	0.11558	0.0655905	0.068029	0.03081
0.102458	0.102948	0.127095	0.132151	0.116002	0.0660457	0.0688636	0.0316111
0.104527	0.0653444	0.0476639	0.0246945	0.00701988	7.95364E-06	0	1.16825E-07
0.104628	0.0654891	0.0479098	0.0250303	0.00739382	5.36942E-05	0	0
0.104686	0.0654953	0.0477587	0.024691	0.00694381	7.77006E-06	0	0
0.00509117	0.00676598	0.0122501	0.0211092	0.0338964	0.0344183	0.072298	0.0887225
0.00506279	0.00667313	0.0119933	0.0206196	0.0332241	0.0339189	0.0717279	0.0886193
0.00506744	0.00673668	0.0122102	0.0210857	0.0339512	0.0345474	0.0726894	0.0892696
0.00945152	0.0146304	0.0293479	0.0520889	0.080051	0.0749661	0.138474	0.141084
0.00917168	0.0143343	0.0290858	0.0521359	0.0806803	0.0758266	0.140292	0.142855
0.00902794	0.014126	0.028755	0.051705	0.0802016	0.0754804	0.139798	0.142498
0.00460693	0.00535141	0.00951828	0.0178117	0.0320461	0.0352822	0.0786878	0.0998168
0.00469971	0.00546738	0.00969231	0.0180428	0.0323368	0.0355378	0.0791739	0.100344
0.00464317	0.00545692	0.00968132	0.0179111	0.0318979	0.0349535	0.0778436	0.0988792
0.00378189	0.00446991	0.00823639	0.0158556	0.0289366	0.032081	0.072129	0.0927112

720	860	1020	1220	1460	1740	2060	2460
0.12047	0.128817	0.122178	0.114268	0.0921844	0.0653478	0.040268	0.021192
0.119745	0.128381	0.122182	0.114893	0.0934658	0.0669749	0.0416994	0.0221036
0.121558	0.129527	0.122339	0.114046	0.0919236	0.0652748	0.0403247	0.0212522
0.133881	0.116193	0.0881225	0.0639871	0.0385085	0.0196965	0.00903879	0.00352734
0.134654	0.116761	0.0883619	0.063802	0.0378499	0.0187338	0.00810427	0.00294934
0.134745	0.116383	0.0875945	0.0627901	0.0369232	0.0181086	0.00777621	0.00281948
0.112318	0.0805222	0.0485435	0.0253651	0.00839476	0.000124857	0	0
0.109813	0.0784899	0.0476558	0.0260121	0.0102579	0.00243293	0.000191592	0
0.110691	0.0794729	0.0485398	0.0268694	0.0111433	0.00333838	0.000886773	0.000243226
0.0781405	0.0440113	0.0178603	0.00296731	0	0	0	0
0.0779633	0.0440824	0.0180905	0.00314507	0	0	0	0
0.0777926	0.0443123	0.0185894	0.00351748	0	0	0	0
0.0140492	0.00103567	0	0	0	0	0	0
0.0141257	0.00103978	0	0	0	0	0	0
0.0135649	0.000940946	0	0	0	0	0	0
1.75405E-05	0.000256037	0.000757227	0.00161873	0.00274105	0.00388802	0.00439888	0.00386179
8.98361E-06	0.00019369	0.000663261	0.00154048	0.00279183	0.0041846	0.00487724	0.0041447
1.58119E-05	0.000235672	0.000709713	0.00152466	0.00254487	0.00354414	0.00401926	0.00370639
0.125822	0.124327	0.109596	0.0953988	0.0717272	0.0476967	0.0280027	0.0143098
1.27E-01	0.125445	0.110502	0.095814	0.0714192	0.0468217	0.027027	0.0136119
1.26E-01	0.124414	0.109629	0.0954582	0.0719079	0.0479865	0.0282776	0.0144828
0.124435	0.101549	0.072322	0.0489328	0.0270506	0.0124962	0.00516095	0.00186664
0.126145	0.103215	0.0733904	0.0490744	0.0261647	0.0110216	0.00373502	0.000998991
0.125351	0.102432	0.0729017	0.049077	0.0267265	0.0118925	0.00454774	0.00147945
0.0973683	0.066379	0.0380675	0.0190105	0.00631331	0.000701367	0	0
0.0974615	0.0663845	0.038038	0.0189504	0.00617787	0.000486732	0	0
0.0974853	0.0659597	0.0372994	0.0179953	0.00521011	6.71632E-05	0	0
0.065966	0.0345719	0.0122234	0.00142067	0	0.00E+00	0	0
0.0668241	0.0355768	0.0131703	0.00165759	0	0.00E+00	0	3.28024E-05
0.0670378	0.0358438	0.0133659	0.00171406	0	0.00E+00	0	0
0.00812381	0.000346423	0	0	0	0	0	0
0.00818547	0.00029246	0	0	0	0	0	0
0.0089124	0.000505623	0	0	0	0	0	0
5.22721E-05	0.000388561	0.000890647	0.00167077	0.00260851	0.00358478	0.00412063	0.00391377
1.27959E-05	0.000165007	0.000488906	0.00114059	0.00219764	0.00361033	0.00468604	0.00476587
1.31655E-05	0.000162835	0.000482302	0.00114272	0.00223946	0.00375459	0.0049969	0.00535058
0.10811	0.117726	0.116407	0.115925	0.10113	0.0777802	0.051257	0.0281695
0.108514	0.118507	0.117295	0.116706	0.101546	0.0778074	0.0510862	0.0280007
0.108719	0.11821	0.116624	0.1158	0.100662	0.077126	0.0506606	0.027781
0.137288	0.11478	0.0832956	0.0569864	0.031344	0.0139007	0.00516839	0.0015929
0.138565	0.115147	0.0827579	0.0557538	0.0298911	0.0126791	0.00436497	0.00120412
0.138399	0.115259	0.0831474	0.0563713	0.0305498	0.0132103	0.00471308	0.00137688
0.121574	0.128898	0.121651	0.113796	0.0924031	0.0663048	0.0414134	0.0220163
0.12207	0.129173	0.121569	0.113316	0.0916573	0.065533	0.040817	0.0216598
0.120828	0.128639	0.121921	0.114479	0.0932062	0.0669559	0.0418138	0.0222169
0.115144	0.125349	0.12228	0.119033	0.100998	0.075583	0.0487602	0.0264445

2740	3000
0.000523805	0
0.000547609	0
0.000525429	0
0.000166185	0
0.000135859	0
0.000129787	0
0	0
0	0
1.08455E-05	0
0.00E+00	0
0	0
0	0
0	0
0	0
0.00E+00	0
0.000117084	0
0.000121534	0
0.000115957	0
0.000350525	0
0.000331622	0
0.000354959	0
8.62923E-05	0
4.09553E-05	0
6.58695E-05	0
0	0
0.00E+00	0
0	0
0	0
4.03389E-06	0
0	0
0.00E+00	0
0	0
0.00E+00	0
0.000124343	0
0.000153875	0
0.000177325	0
0.000705931	0
0.000701063	0
0.000695702	0
6.93613E-05	0
5.00921E-05	0
5.87412E-05	0
0.000546025	0
0.000536868	0
0.00055087	0
0.000659951	0

76980	1	12/18/18	8:38	26199	W1835206
76980	1	12/18/18	8:38	26199	W1835206
76980	1	12/18/18	8:42	18901	W1835207
76980	1	12/18/18	8:42	18901	W1835207
76980	1	12/18/18	8:42	18901	W1835207
76980	1	12/18/18	8:46	65025	W1835208
76980	1	12/18/18	8:46	65025	W1835208
76980	1	12/18/18	8:46	65025	W1835208
76980	1	12/18/18	8:50	85136	W1835209
76980	1	12/18/18	8:50	85136	W1835209
76980	1	12/18/18	8:50	85136	W1835209
76980	1	12/18/18	8:54	85561	W1835210
76980	1	12/18/18	8:54	85561	W1835210
76980	1	12/18/18	8:54	85561	W1835210
76980	1	12/18/18	8:58	40490	W1835211
76980	1	12/18/18	8:58	40490	W1835211
76980	1	12/18/18	8:58	40490	W1835211
76980	1	12/18/18	9:02	20026	W1835212
76980	1	12/18/18	9:02	20026	W1835212
76980	1	12/18/18	9:02	20026	W1835212
76980	1	12/18/18	9:06	28976	W1835213
76980	1	12/18/18	9:06	28976	W1835213
76980	1	12/18/18	9:06	28976	W1835213
76980	1	12/18/18	9:10	99958	W1835214
76980	1	12/18/18	9:10	99958	W1835214
76980	1	12/18/18	9:10	99958	W1835214
76980	1	12/18/18	9:14	86685	W1835215
76980	1	12/18/18	9:14	86685	W1835215
76980	1	12/18/18	9:14	86685	W1835215
76980	1	12/18/18	9:18	40652	W1835216
76980	1	12/18/18	9:18	40652	W1835216
76980	1	12/18/18	9:18	40652	W1835216
76980	1	12/18/18	9:22	67992	W1835217
76980	1	12/18/18	9:22	67992	W1835217
76980	1	12/18/18	9:22	67992	W1835217
76980	1	12/18/18	9:29	90339	W1835218
76980	1	12/18/18	9:29	90339	W1835218
76980	1	12/18/18	9:29	90339	W1835218
76980	1	12/18/18	9:34	31247	W1835219
76980	1	12/18/18	9:34	31247	W1835219
76980	1	12/18/18	9:34	31247	W1835219
76980	1	12/18/18	9:38	71048	W1835220
76980	1	12/18/18	9:38	71048	W1835220
76980	1	12/18/18	9:38	71048	W1835220
76980	1	12/18/18	9:47	50046	W1835221
76980	1	12/18/18	9:47	50046	W1835221
76980	1	12/18/18	9:47	50046	W1835221

XtendiMax+EezyMan+AU-243LFP13	TTI11004	63	2	413.5639038
XtendiMax+EezyMan+AU-243LFP13	TTI11004	63	3	411.0177307
XtendiMax+ElectDX2+AU-243LFP13	TTI11004	63	1	409.8338623
XtendiMax+ElectDX2+AU-243LFP13	TTI11004	63	2	412.1954956
XtendiMax+ElectDX2+AU-243LFP13	TTI11004	63	3	407.2391663
XtendiMax+Eminence+AU-243LFP13	TTI11004	63	1	453.855072
XtendiMax+Eminence+AU-243LFP13	TTI11004	63	2	463.8830566
XtendiMax+Eminence+AU-243LFP13	TTI11004	63	3	461.0471802
XtendiMax+Exchange+AU-243LFP13	TTI11004	63	1	450.1054077
XtendiMax+Exchange+AU-243LFP13	TTI11004	63	2	447.3125
XtendiMax+Exchange+AU-243LFP13	TTI11004	63	3	449.5092163
XtendiMax+EZMix+AU-243LFP13	TTI11004	63	1	442.0543213
XtendiMax+EZMix+AU-243LFP13	TTI11004	63	2	442.3752747
XtendiMax+EZMix+AU-243LFP13	TTI11004	63	3	443.5671997
XtendiMax+FertiactylGZZero+AU-243LFP13	TTI11004	63	1	467.3964539
XtendiMax+FertiactylGZZero+AU-243LFP13	TTI11004	63	2	464.2993164
XtendiMax+FertiactylGZZero+AU-243LFP13	TTI11004	63	3	464.8462524
XtendiMax+FinanHL+AU-243LFP13	TTI11004	63	1	433.0830383
XtendiMax+FinanHL+AU-243LFP13	TTI11004	63	2	431.0974121
XtendiMax+FinanHL+AU-243LFP13	TTI11004	63	3	433.4874878
XtendiMax+FIREBALL+AU-243LFP13	TTI11004	63	1	468.2882996
XtendiMax+FIREBALL+AU-243LFP13	TTI11004	63	2	471.8789368
XtendiMax+FIREBALL+AU-243LFP13	TTI11004	63	3	469.7440186
XtendiMax+FireZone+AU-243LFP13	TTI11004	63	1	401.7851257
XtendiMax+FireZone+AU-243LFP13	TTI11004	63	2	408.7684326
XtendiMax+FireZone+AU-243LFP13	TTI11004	63	3	406.8968506
XtendiMax+FixatePro+AU-243LFP13	TTI11004	63	1	385.2462158
XtendiMax+FixatePro+AU-243LFP13	TTI11004	63	2	389.366272
XtendiMax+FixatePro+AU-243LFP13	TTI11004	63	3	385.5709534
XtendiMax+Flexstar+AU-243LFP13	TTI11004	63	1	395.6567383
XtendiMax+Flexstar+AU-243LFP13	TTI11004	63	2	403.0281982
XtendiMax+Flexstar+AU-243LFP13	TTI11004	63	3	402.3375244
XtendiMax+FoamFree+AU-243LFP13	TTI11004	63	1	448.9706421
XtendiMax+FoamFree+AU-243LFP13	TTI11004	63	2	451.5160217
XtendiMax+FoamFree+AU-243LFP13	TTI11004	63	3	447.7306213
XtendiMax+ForeFrontHL+AU-243LFP13	TTI11004	63	1	427.7873535
XtendiMax+ForeFrontHL+AU-243LFP13	TTI11004	63	2	425.2224426
XtendiMax+ForeFrontHL+AU-243LFP13	TTI11004	63	3	424.1499023
XtendiMax+Fortix+AU-243LFP13	TTI11004	63	1	446.3339844
XtendiMax+Fortix+AU-243LFP13	TTI11004	63	2	443.7754517
XtendiMax+Fortix+AU-243LFP13	TTI11004	63	3	445.8454285
XtendiMax+FullLoadComplete+AU-243LFP13	TTI11004	63	1	422.7869263
XtendiMax+FullLoadComplete+AU-243LFP13	TTI11004	63	2	422.6320801
XtendiMax+FullLoadComplete+AU-243LFP13	TTI11004	63	3	422.180603
XtendiMax+Fury+AU-243LFP13	TTI11004	63	1	468.2214966
XtendiMax+Fury+AU-243LFP13	TTI11004	63	2	463.2062988
XtendiMax+Fury+AU-243LFP13	TTI11004	63	3	464.4151001

866.3591309	1658.406128	0.61256808	0	0	0	0	0
868.4749756	1666.182373	0.609166205	0	0	0	0	0
842.0001831	1601.539063	0.64840734	0	0	0	0	0
844.8712158	1610.364502	0.651634634	0	0.00E+00	0.00E+00	0.00E+00	0.00E+00
835.1737061	1595.025513	0.671456039	0	0	0	0.00E+00	0
948.5839844	1741.540527	0.546096265	0	0	0	0	0
963.5220947	1751.966431	0.519933105	0	0	0	0	0
960.6134644	1750.905396	0.510527134	0	0	0	0	0
946.0169678	1737.04126	0.512630224	0	0	0	0	0
955.088501	1754.275635	0.505862534	0	0.00E+00	0.00E+00	0.00E+00	0.00E+00
950.4187012	1745.793335	0.510382295	0	0.00E+00	0.00E+00	0.00E+00	0.00E+00
952.8375854	1753.01355	0.586046875	0	0	0	0	0
948.4334717	1746.811279	0.583020926	0	0	0	0	0
952.6217651	1751.570435	0.587321639	0	0	0	0	0
974.3762817	1763.209717	0.508232892	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
967.8848877	1760.731934	0.520463586	0	0.00E+00	0.00E+00	0.00E+00	0.00E+00
967.7627563	1757.451294	0.53236258	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
918.8380127	1710.940552	0.522862375	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
913.1484375	1708.42688	0.526369333	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
915.5756226	1710.319336	0.546803892	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
977.9437866	1766.37085	0.481290221	0	0	0	0	0
977.1115112	1761.848999	0.489480138	0	0	0	0	0
975.5370483	1763.660034	0.496663392	0	0	0	0	0
837.7606812	1610.630371	0.630608439	0	0	0	0	0
854.7400513	1636.797363	0.615240633	0	0	0	0	0
844.5476074	1617.895386	0.610898197	0	0	0	0	0
799.0308228	1545.841187	0.772151172	0	0	0	0	0
804.4521484	1557.078857	0.755893648	0	0	0	0	0
803.6940308	1557.424194	0.751500368	0	0	0	0	0
865.161377	1671.784058	0.610993326	0	0	0	0	0
872.3513184	1671.808838	0.601324201	0	0	0	0	0
873.9807129	1676.93335	0.601639271	0	0	0	0	0
900.1211548	1665.930908	0.577178121	0	0	0	0	0
906.5716553	1675.184204	0.564956546	0	0	0	0	0
896.0117798	1659.306641	0.573091805	0	0	0	0	0
931.4262085	1738.196655	0.573713779	0	0	0	0	0
936.0911255	1745.022217	0.571306527	0	0	0	0	0
930.0974121	1739.036743	0.589883864	0	0	0	0	0
938.5667725	1733.749634	0.552058637	0	0	0	0	0
941.6225586	1740.379272	0.535082698	0	0	0	0	0
938.4560547	1732.585083	0.534181297	0	0	0	0	0
888.8946533	1679.266235	0.58198303	0	0	0	0	0
885.9832153	1673.447754	0.584991157	0	0	0	0	0
887.6870117	1675.810669	0.591870606	0	0	0	0	0
975.9468384	1765.523804	0.506803095	0	0	0	0	0
967.0384521	1758.647705	0.51387924	0	0	0	0	0
965.8946533	1754.906128	0.513152063	0	0	0	0	0

0.00E+00	0	8.16345E-06	0.000233459	0.000590439	0.00104576	0.00196251	0.00329491
0.00E+00	0	1.75476E-05	0.000256119	0.000600739	0.00104126	0.00192871	0.00324692
0	0	0	3.88E-05	0.000415649	0.000972824	0.00220856	0.00415459
0.00E+00	0.00E+00	0.00E+00	6.72E-05	0.000462799	0.0010199	0.00221123	0.00399345
0.00E+00	0	0.00E+00	7.74E-05	0.000483093	0.00105209	0.00227066	0.00410675
0	0	0	4.24E-05	0.000320435	0.000806732	0.00180977	0.00363762
0	0	0	2.39E-05	0.000282059	0.000751648	0.0017292	0.00354324
0	0	0	1.17E-05	0.000254059	0.000716782	0.00169678	0.00357742
0.00E+00	0.00E+00	0	1.85394E-05	0.000265198	0.000723572	0.00169495	0.00358223
0.00E+00	0.00E+00	0	4.56238E-05	0.000294647	0.000731506	0.00165459	0.00344841
0.00E+00	0.00E+00	0	2.99835E-05	0.000280457	0.000732193	0.00168282	0.00351112
0.00E+00	0	0	0.000110321	0.000409317	0.000853348	0.00191536	0.00379402
0.00E+00	0	0	8.96454E-05	0.000386505	0.000837326	0.00191994	0.00383156
0.00E+00	0	0	0.000105209	0.000406876	0.000855942	0.00192581	0.00380081
0.00E+00	0.00E+00	0	4.98962E-05	0.000297852	0.000739899	0.00167137	0.00341522
0.00E+00	0.00E+00	0	5.37109E-05	0.00031517	0.000770798	0.00171692	0.00344055
0.00E+00	0.00E+00	0	5.02777E-05	0.000316696	0.000784531	0.00175789	0.00353912
0.00E+00	0	0	2.71606E-05	0.000288315	0.000752487	0.00172363	0.00360367
0.00E+00	0	0	4.31061E-05	0.000319443	0.000783768	0.00173454	0.00350899
0	0	0	4.09698E-05	0.000330276	0.000817413	0.00180908	0.00362923
0	0	0.00E+00	1.43433E-05	0.000237122	0.000667191	0.00159081	0.00340721
0	0	0.00E+00	6.94275E-06	0.000233765	0.000678482	0.00162697	0.00346733
0	0	0.00E+00	1.28937E-05	0.000246735	0.00069519	0.0016494	0.00348351
0	0	0.00E+00	0.000118637	0.00049469	0.00100052	0.00208603	0.00379997
0	0	0.00E+00	0.000124741	0.000493317	0.000983887	0.00203094	0.00366791
0	0	0.00E+00	0.000109558	0.000478134	0.00097374	0.00202873	0.00366547
0	0	0.00E+00	0.000162888	0.000628281	0.00124298	0.00254738	0.00456436
0	0	0.00E+00	0.000144043	0.000605087	0.00121849	0.00251083	0.00446861
0	0	0.00E+00	0.000151749	0.000602036	0.00120056	0.00247917	0.00448883
0	0.00E+00	1.06E-05	0.000195236	0.000501862	0.000935211	0.0019323	0.00375481
0	0	0.00E+00	0.000140915	0.00046814	0.000915604	0.00194069	0.00376457
0	0.00E+00	0.00E+00	0.000136185	0.000463562	0.000912552	0.00194305	0.00378731
0.00E+00	0	0	2.67029E-06	0.000313568	0.000836182	0.00200905	0.00378876
0.00E+00	0.00E+00	0	2.74658E-06	0.000280762	0.000840836	0.00193314	0.00376022
0.00E+00	0.00E+00	0	2.59399E-06	0.000273209	0.000845795	0.00196297	0.00384132
0.00E+00	0.00E+00	0	0.000116501	0.000419159	0.000852432	0.00186699	0.00366386
0	0.00E+00	0	0.00012207	0.000408936	0.000830841	0.0018454	0.00371758
0.00E+00	0.00E+00	0	0.000131226	0.000432053	0.000870056	0.00190842	0.0037822
0.00E+00	0	0	5.69153E-05	0.000353699	0.000804672	0.00185204	0.00359764
0.00E+00	0	0	5.76782E-05	0.000329819	0.000793381	0.00175591	0.0035511
0.00E+00	0	0	5.48553E-05	0.000331955	0.000799942	0.00176056	0.00351303
0.00E+00	0.00E+00	0	6.15692E-05	0.000389633	0.00086937	0.00195229	0.00373184
0.00E+00	0.00E+00	0	4.28772E-05	0.000371323	0.000861664	0.00197556	0.00380959
0.00E+00	0.00E+00	0	6.43158E-05	0.000395508	0.0008815	0.00198326	0.00380264
0	0.00E+00	0	0.000015564	0.000259552	0.000717621	0.00168404	0.00352211
0	0.00E+00	0	2.57874E-05	0.000283508	0.000746689	0.00170769	0.00348854
0	0.00E+00	0	2.59399E-05	0.000276413	0.000735626	0.00170067	0.00352119

0.00354904	0.00423729	0.00791077	0.0153638	0.0281377	0.0312267	0.0702679	0.0904888
0.00357216	0.00436455	0.0082225	0.0158652	0.0286818	0.0315003	0.0702335	0.0897982
0.00455513	0.00501152	0.00837257	0.0152441	0.0277839	0.031358	0.0721696	0.0947438
0.00424377	0.00464745	0.00793549	0.0148875	0.0276328	0.0313722	0.0722562	0.0946779
0.00439468	0.00485207	0.00831337	0.0155335	0.0286139	0.0322849	0.0739076	0.0962496
0.0040554	0.00429779	0.00660202	0.0111268	0.0198611	0.0228143	0.0546998	0.076123
0.00397125	0.00416748	0.00626396	0.0103526	0.018437	0.0213538	0.0519247	0.0735052
0.00409859	0.00435303	0.0065435	0.010691	0.0187957	0.0216203	0.0523529	0.0738863
0.00418884	0.00458931	0.00712021	0.0117822	0.0204568	0.0231063	0.054857	0.0760192
0.0040892	0.00461372	0.00737717	0.012344	0.0211477	0.0234473	0.0546223	0.0745863
0.00410103	0.004533	0.00713326	0.0119243	0.0206924	0.0232442	0.0547912	0.075447
0.00442184	0.004925	0.00775978	0.012766	0.0215501	0.0236797	0.0547948	0.0744664
0.00445457	0.00492241	0.00769638	0.0126396	0.0214439	0.0237001	0.0551406	0.0752117
0.00439697	0.00486084	0.00762459	0.0125587	0.021314	0.0235332	0.0546872	0.0745627
0.00386131	0.00409866	0.00620895	0.0102444	0.0181024	0.020854	0.0505879	0.0717002
0.00382225	0.00402481	0.00613625	0.0103161	0.0185204	0.0214495	0.0519661	0.0731955
0.00393265	0.00411522	0.00619171	0.0102647	0.0183171	0.02122	0.0515636	0.072926
0.00428574	0.00488419	0.00794777	0.013532	0.0233511	0.0258362	0.0596638	0.0802865
0.00410393	0.00469696	0.0078096	0.0136531	0.0239336	0.0265711	0.061158	0.0816726
0.0041671	0.00466637	0.00762093	0.0132468	0.0233461	0.0261069	0.0605369	0.0813539
0.0039756	0.00427658	0.00643654	0.0103801	0.0179739	0.0205476	0.0498116	0.0708435
0.00398102	0.00419075	0.00618011	0.00990974	0.017365	0.0201257	0.0494119	0.0709593
0.0039769	0.00418228	0.00619743	0.0100232	0.017651	0.0204504	0.0500314	0.0714647
0.00428314	0.0050544	0.00903091	0.0168273	0.03013	0.0331449	0.0741827	0.0949445
0.00409393	0.00479134	0.00852394	0.0158993	0.0286079	0.0316422	0.0713126	0.0920679
0.00407944	0.00477638	0.00854904	0.0160847	0.0291383	0.032336	0.0729697	0.0941158
0.00504112	0.00583099	0.0102399	0.018839	0.0334084	0.0364552	0.0807056	0.10168
0.00486092	0.0055584	0.00976364	0.0181571	0.0326092	0.0358805	0.0799319	0.101146
0.00502586	0.0058696	0.0103273	0.01891	0.0333221	0.0362086	0.0799252	0.100553
0.00468056	0.00587135	0.0104426	0.0183849	0.0307771	0.0323672	0.0701175	0.0880962
0.00458214	0.00559685	0.00979195	0.0172343	0.029201	0.0311295	0.0684584	0.0873106
0.00463135	0.0056675	0.00990097	0.0173563	0.0292802	0.0311233	0.0682903	0.0869515
0.00389725	0.00383064	0.00578026	0.0104409	0.0204144	0.0247047	0.0609558	0.0854508
0.00387856	0.00380608	0.00570778	0.0102489	0.0200163	0.0242528	0.0599736	0.0843144
0.00397415	0.00390579	0.00586258	0.0105318	0.0205656	0.0249013	0.0614809	0.086184
0.0043557	0.00506897	0.00841431	0.0143287	0.0242148	0.02618	0.0590633	0.0779786
0.00454384	0.0053624	0.0088681	0.0148145	0.0244813	0.026096	0.0583469	0.07674
0.00454643	0.0053138	0.00877975	0.0147721	0.0246451	0.0264265	0.0592577	0.0778979
0.00403061	0.00436661	0.0069194	0.0118954	0.0211717	0.0240319	0.0567362	0.0777412
0.00409058	0.00454018	0.00727097	0.0123859	0.0216349	0.02422	0.0565871	0.0770255
0.00398109	0.00437004	0.00699364	0.012047	0.0213544	0.02414	0.0568015	0.0776775
0.00422272	0.00476051	0.00796692	0.0142137	0.0253329	0.0282832	0.0649711	0.0859978
0.00430664	0.00481552	0.00798027	0.014164	0.0252647	0.0282828	0.0651719	0.0864829
0.00430939	0.00484627	0.00805885	0.0142745	0.0253315	0.0282475	0.0649129	0.0860327
0.00400383	0.00421524	0.00627167	0.0101677	0.01786	0.020609	0.0501948	0.0714173
0.00392403	0.00415611	0.00631927	0.0105067	0.0186475	0.0214692	0.0518722	0.0730481
0.00399284	0.0042218	0.00634506	0.0104015	0.0183673	0.0211983	0.0515181	0.0730236

0.112811	0.123605	0.121754	0.120141	0.103676	0.0789781	0.0517025	0.0283065
0.111548	0.122182	0.120675	0.119733	0.104122	0.079982	0.0527174	0.0289842
0.119027	0.129686	0.125306	0.119579	0.0986184	0.0714678	0.0448342	0.0238606
0.118652	0.129084	0.124774	0.119443	0.0991284	0.0724693	0.0458628	0.0245669
0.119921	0.12967	0.124482	0.118186	0.097141	0.0702956	0.0440998	0.0234824
0.102236	0.119936	0.125695	0.131354	0.119345	0.0948341	0.0639195	0.0355874
0.100359	0.1195	0.126834	0.133867	0.122407	0.0975229	0.0657279	0.0365565
0.100605	0.119453	0.126447	0.133203	0.121727	0.0970566	0.0655088	0.0364824
0.10207	0.119876	0.125749	0.131359	0.119071	0.0942381	0.063249	0.0351024
0.0994827	0.116916	0.123498	0.130627	0.120355	0.0968994	0.0659523	0.036936
0.100958	0.118537	0.124681	0.130977	0.119672	0.0955464	0.064598	0.0360206
0.0990784	0.116346	0.12293	0.130129	0.119981	0.0966175	0.0657419	0.036803
0.100145	0.117382	0.123548	0.130093	0.119248	0.0955147	0.0647344	0.0361503
0.0993834	0.11677	0.123324	0.13038	0.119992	0.0964383	0.0655169	0.0366397
0.0983602	0.117989	0.12638	0.134746	0.124417	0.0999072	0.0676773	0.0377407
0.0995343	0.118307	0.125724	0.133335	0.122896	0.0988351	0.0671506	0.0375446
0.0995541	0.1187	0.126364	0.133973	0.123139	0.0985651	0.0666498	0.0371409
0.105113	0.120841	0.124446	0.127823	0.114058	0.0890206	0.0591129	0.0325844
0.10599	0.120868	0.123696	0.126561	0.11281	0.0881675	0.0586883	0.032417
0.105994	0.121129	0.124073	0.126989	0.113225	0.0885372	0.0589717	0.0325915
0.0976419	0.117629	0.126428	0.135163	0.125077	0.100613	0.0682417	0.0380854
0.0983371	0.118735	0.127563	0.135976	0.125185	0.100077	0.0675077	0.0375388
0.0984999	0.118391	0.126822	0.135095	0.124615	0.100015	0.0677528	0.0377932
0.117264	0.126647	0.122242	0.11739	0.0980251	0.0721551	0.0459038	0.0246614
0.114818	0.125371	0.122538	0.119429	0.10142	0.0759432	0.0490039	0.0265741
0.116961	0.126945	0.12302	0.118552	0.0993217	0.0733331	0.0467684	0.0251675
0.123053	0.12954	0.121187	0.112059	0.0896576	0.0632619	0.0389166	0.0204716
0.122705	0.129392	0.121308	0.112613	0.09071	0.0645898	0.0400857	0.0212164
0.12176	0.128511	0.120793	0.112489	0.0908262	0.0647083	0.040118	0.0212049
0.108714	0.119089	0.118144	0.118117	0.103704	0.0804444	0.0534432	0.0295343
0.109025	0.120433	0.120047	0.120124	0.105134	0.0810527	0.0534937	0.0294193
0.108479	0.119812	0.11953	0.119887	0.105361	0.0816654	0.0541718	0.0298987
0.113356	0.129423	0.130374	0.129341	0.110532	0.0825209	0.0528544	2.85E-02
0.112216	0.128625	0.130194	0.129937	0.111813	0.0840614	0.0541446	0.0292648
0.114197	0.130084	0.130607	0.129021	0.109715	0.0814913	0.051963	0.0278967
0.101147	0.116339	0.120978	0.12659	0.115881	0.0930064	0.0632359	0.0354069
0.0996431	0.115055	0.120296	0.126666	0.11668	0.0941695	0.0642985	0.0361026
0.100787	0.115766	0.120346	0.126031	0.115579	0.0929764	0.0633422	0.0355138
0.103141	0.119891	0.124794	0.129734	0.117417	0.0930674	0.0626518	0.0348677
0.101949	0.118588	0.123817	0.129381	0.117867	0.0940567	0.063658	0.0355454
0.103019	0.119823	0.12484	0.129865	0.117509	0.0930186	0.0625017	0.0347257
0.110048	0.12331	0.123706	0.123875	0.108102	0.0829795	0.0545531	0.0299229
0.110785	0.124063	0.12418	0.123861	0.107536	0.082114	0.0537692	0.0294257
0.110248	0.123642	0.124022	0.12401	0.107921	0.0825526	0.0541049	2.96E-02
0.0981902	0.117891	0.126319	0.134761	0.124602	0.100265	0.0680622	0.0380132
0.0994675	0.118412	0.125945	0.133518	0.122853	0.0985537	0.0668107	0.0373049
0.0998985	0.119184	0.126727	0.134006	0.122793	0.0980489	0.0662103	0.0368758

0.000708546	0
0.000726443	0
0.000591785	0
0.000610664	0
0.000582554	0
0.000895299	0
0.000919207	0
0.000917789	0
0.000882134	0
0.000930921	0
0.000906561	0
0.000927404	0
0.000910247	0
0.000922983	0
0.000949681	0
0.000945637	0
0.000934458	0
0.000817061	0
0.000813456	0
0.000818006	0
0.000958597	0
0.000943736	0
0.000951133	0
0.000613523	0
0.000663112	0
0.000626458	0
0.000505941	0
0.000525394	0
0.000524829	0
0.000741461	0
0.000737374	0
0.000750278	0
0.00070849	0
0.00072922	0
0.000693581	0
8.92E-04	0
0.000910756	0
0.000895454	0
0.000877139	0
0.000895104	0
0.000873009	0
7.49E-04	0
0.000736389	0
0.000741202	0
0.000957034	0
0.000939253	0
0.000927683	0

76980	1	12/18/18	9:51	33608	W1835222
76980	1	12/18/18	9:51	33608	W1835222
76980	1	12/18/18	9:51	33608	W1835222
76980	1	12/18/18	9:56	49713	W1835223
76980	1	12/18/18	9:56	49713	W1835223
76980	1	12/18/18	9:56	49713	W1835223
76980	1	12/18/18	10:00	48848	W1835224
76980	1	12/18/18	10:00	48848	W1835224
76980	1	12/18/18	10:00	48848	W1835224
76980	1	12/18/18	10:04	65004	W1835225
76980	1	12/18/18	10:04	65004	W1835225
76980	1	12/18/18	10:04	65004	W1835225
76980	1	12/18/18	10:08	81590	W1835226
76980	1	12/18/18	10:08	81590	W1835226
76980	1	12/18/18	10:08	81590	W1835226
76980	1	12/18/18	10:12	50552	W1835227
76980	1	12/18/18	10:12	50552	W1835227
76980	1	12/18/18	10:12	50552	W1835227
76980	1	12/18/18	10:23	64020	W1835228
76980	1	12/18/18	10:23	64020	W1835228
76980	1	12/18/18	10:23	64020	W1835228
76980	1	12/18/18	10:28	86303	W1835229
76980	1	12/18/18	10:28	86303	W1835229
76980	1	12/18/18	10:28	86303	W1835229
76980	1	12/18/18	10:32	87098	W1835230
76980	1	12/18/18	10:32	87098	W1835230
76980	1	12/18/18	10:32	87098	W1835230
76980	1	12/18/18	10:38	96975	W1835231
76980	1	12/18/18	10:38	96975	W1835231
76980	1	12/18/18	10:38	96975	W1835231
76980	1	12/18/18	10:42	28124	W1835232
76980	1	12/18/18	10:42	28124	W1835232
76980	1	12/18/18	10:42	28124	W1835232
76980	1	12/18/18	10:46	69939	W1835233
76980	1	12/18/18	10:46	69939	W1835233
76980	1	12/18/18	10:46	69939	W1835233
76980	1	12/18/18	10:51	12246	W1835234
76980	1	12/18/18	10:51	12246	W1835234
76980	1	12/18/18	10:51	12246	W1835234
76980	1	12/18/18	10:55	73441	W1835235
76980	1	12/18/18	10:55	73441	W1835235
76980	1	12/18/18	10:55	73441	W1835235
76980	1	12/18/18	11:00	26308	W1835236
76980	1	12/18/18	11:00	26308	W1835236
76980	1	12/18/18	11:00	26308	W1835236
76980	1	12/18/18	11:04	89870	W1835237
76980	1	12/18/18	11:04	89870	W1835237

XtendiMax+FusiladeDX+AU-243LFP13	TTI11004	63	1	389.3918152
XtendiMax+FusiladeDX+AU-243LFP13	TTI11004	63	2	389.0418091
XtendiMax+FusiladeDX+AU-243LFP13	TTI11004	63	3	388.2957459
XtendiMax+Glacier-EA+AU-243LFP13	TTI11004	63	1	388.0836182
XtendiMax+Glacier-EA+AU-243LFP13	TTI11004	63	2	384.3772583
XtendiMax+Glacier-EA+AU-243LFP13	TTI11004	63	3	386.9431763
XtendiMax+Goal2XL+AU-243LFP13	TTI11004	63	1	400.9746094
XtendiMax+Goal2XL+AU-243LFP13	TTI11004	63	2	402.9348145
XtendiMax+Goal2XL+AU-243LFP13	TTI11004	63	3	399.8132324
XtendiMax+GPX791+AU-243LFP13	TTI11004	63	1	395.3538818
XtendiMax+GPX791+AU-243LFP13	TTI11004	63	2	400.7722473
XtendiMax+GPX791+AU-243LFP13	TTI11004	63	3	396.4961853
XtendiMax+GrazonP_D+AU-243LFP13	TTI11004	63	1	417.683136
XtendiMax+GrazonP_D+AU-243LFP13	TTI11004	63	2	418.4554749
XtendiMax+GrazonP_D+AU-243LFP13	TTI11004	63	3	420.4750671
XtendiMax+GundownElite+AU-243LFP13	TTI11004	63	1	451.4711914
XtendiMax+GundownElite+AU-243LFP13	TTI11004	63	2	456.9295349
XtendiMax+GundownElite+AU-243LFP13	TTI11004	63	3	452.9306641
XtendiMax+HalexGT+AU-243LFP13	TTI11004	63	1	387.0987549
XtendiMax+HalexGT+AU-243LFP13	TTI11004	63	2	395.3250732
XtendiMax+HalexGT+AU-243LFP13	TTI11004	63	3	390.8258667
XtendiMax+HarvestPower+AU-243LFP13	TTI11004	63	1	477.2527161
XtendiMax+HarvestPower+AU-243LFP13	TTI11004	63	2	472.2473145
XtendiMax+HarvestPower+AU-243LFP13	TTI11004	63	3	470.5627136
XtendiMax+HeftyNIS+AU-243LFP13	TTI11004	63	1	388.7937622
XtendiMax+HeftyNIS+AU-243LFP13	TTI11004	63	2	390.8014526
XtendiMax+HeftyNIS+AU-243LFP13	TTI11004	63	3	387.8008423
XtendiMax+Hero+AU-243LFP13	TTI11004	63	1	422.3372498
XtendiMax+Hero+AU-243LFP13	TTI11004	63	2	419.734314
XtendiMax+Hero+AU-243LFP13	TTI11004	63	3	420.4210205
XtendiMax+HM1666+AU-243LFP13	TTI11004	63	1	443.6254578
XtendiMax+HM1666+AU-243LFP13	TTI11004	63	2	444.8756409
XtendiMax+HM1666+AU-243LFP13	TTI11004	63	3	445.2950439
XtendiMax+HonchoK6+AU-243LFP13	TTI11004	63	1	396.6968079
XtendiMax+HonchoK6+AU-243LFP13	TTI11004	63	2	401.5935059
XtendiMax+HonchoK6+AU-243LFP13	TTI11004	63	3	401.0758362
XtendiMax+Hook+AU-243LFP13	TTI11004	63	1	460.4469299
XtendiMax+Hook+AU-243LFP13	TTI11004	63	2	463.954071
XtendiMax+Hook+AU-243LFP13	TTI11004	63	3	457.833313
XtendiMax+Iconic+AU-243LFP13	TTI11004	63	1	444.9577942
XtendiMax+Iconic+AU-243LFP13	TTI11004	63	2	442.0522461
XtendiMax+Iconic+AU-243LFP13	TTI11004	63	3	444.5150757
XtendiMax+ImpactF+AU-243LFP13	TTI11004	63	1	477.9022522
XtendiMax+ImpactF+AU-243LFP13	TTI11004	63	2	477.2837219
XtendiMax+ImpactF+AU-243LFP13	TTI11004	63	3	472.195343
XtendiMax+Induce+AU-243LFP13	TTI11004	63	1	440.7987976
XtendiMax+Induce+AU-243LFP13	TTI11004	63	2	434.7964172

784.213623	1502.363159	0.772118211	0	0	0	0	0
792.057251	1532.3302	0.735254765	0	0	0	0	0
790.3829346	1525.670288	0.752321362	0	0	0	0	0
807.928894	1562.616577	0.721037149	0	0	0	0	0
796.4946899	1539.618286	0.749947011	0	0	0	0	0
796.7664795	1538.713623	0.755300939	0	0	0	0	0
843.6984863	1627.150146	0.672256231	0	0	0	0	0
843.1021729	1620.597412	0.660535753	0	0	0	0	0
845.1641846	1630.021729	0.643319011	0	0	0	0	0
801.4434814	1530.103516	0.746326029	0	0.00E+00	0.00E+00	0.00E+00	0.00E+00
806.9075317	1538.921265	0.730042398	0	0.00E+00	0.00E+00	0.00E+00	0.00E+00
798.802063	1524.205811	0.763191581	0	0.00E+00	0.00E+00	0.00E+00	0.00E+00
928.6513672	1737.417847	0.61313951	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
924.7553101	1732.268555	0.60987854	0	0.00E+00	0.00E+00	0.00E+00	0.00E+00
930.1920776	1738.471924	0.602900743	0	0.00E+00	0.00E+00	0.00E+00	0.00E+00
914.1826782	1686.456421	0.548588693	0	0	0	0	0
921.7058105	1694.281982	0.533608496	0	0	0	0	0
914.2442017	1685.937256	0.54902935	0	0	0	0	0
792.0542603	1520.097046	0.773044407	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
803.4202271	1535.432373	0.715966165	0	0.00E+00	0.00E+00	0.00E+00	0.00E+00
798.7598877	1524.945313	0.718472719	0	0.00E+00	0.00E+00	0.00E+00	0.00E+00
989.5327759	1776.488403	0.461374611	0	0	0	0	0
974.8747559	1761.049805	0.477264374	0	0	0	0	0
975.6038208	1763.889771	0.475293219	0	0	0	0	0
811.5567627	1568.559814	0.7023682	0	0.00E+00	0.00E+00	0.00E+00	0.00E+00
821.6348877	1597.489502	0.680304825	0	0.00E+00	0.00E+00	0.00E+00	0.00E+00
818.2733154	1586.161987	0.694171906	0	0.00E+00	0.00E+00	0.00E+00	0.00E+00
857.2182007	1619.00354	0.613817573	0	0.00E+00	0.00E+00	0.00E+00	0.00E+00
850.199646	1611.629272	0.63883394	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
856.1484375	1623.554688	0.625550568	0	0.00E+00	0.00E+00	0.00E+00	0.00E+00
902.734314	1677.655273	0.558493376	0	0.00E+00	0.00E+00	0.00E+00	0.00E+00
900.9746704	1670.887939	0.579621553	0	0.00E+00	0.00E+00	0.00E+00	0.00E+00
903.1800537	1673.417969	0.558429182	0	0.00E+00	0.00E+00	0.00E+00	0.00E+00
890.484436	1703.900146	0.732085943	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
903.8338623	1715.980957	0.695284247	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
912.7261963	1729.278809	0.704060733	1.06812E-06	2.85E-05	4.73E-05	4.96E-05	5.26E-05
948.2490845	1733.559082	0.518352628	0	0.00E+00	0.00E+00	0.00E+00	0.00E+00
953.0634766	1734.764526	0.49244675	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
944.9818115	1729.013306	0.515063643	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
959.9158936	1760.982178	0.555896819	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
941.3748779	1736.210205	0.587949336	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
949.8513184	1747.295532	0.574068367	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
976.3646851	1757.425781	0.486327112	0	0	0	0	0
977.3728027	1760.711792	0.485632628	0	0	0	0	0
972.7903442	1755.637207	0.485298336	0	0	0	0	0
924.2926025	1714.479492	0.531607866	0	0	0	0	0
902.3643188	1685.337158	0.565129042	0	0	0	0	0

0.00E+00	0	0	0.000149307	0.000636826	0.0012764	0.00258301	0.00442657
0.00E+00	0	0	0.000184174	0.000647888	0.00123474	0.00242332	0.0041256
0.00E+00	0	0	0.000177841	0.000652161	0.0012574	0.00248764	0.00424934
0.00E+00	0	0	0.000140076	0.000560608	0.0011322	0.00237778	0.00438141
0.00E+00	0	0	0.00015892	0.000606232	0.00120033	0.00246986	0.00446243
0.00E+00	0	0	0.000161514	0.000620956	0.00122513	0.00249573	0.00442413
0.00E+00	0	0	0.000153656	0.000553055	0.00108025	0.00220657	0.0039724
0.00E+00	0.00E+00	0	0.000131149	0.000520401	0.00104599	0.00218109	0.00397354
0.00E+00	0	0	0.000149078	0.000524445	0.00102203	0.00210091	0.0038549
0.00E+00	0.00E+00	0	9.84955E-05	0.000558243	0.00119019	0.00252129	0.00447563
0.00E+00	0.00E+00	0	8.21686E-05	0.000543518	0.00117668	0.00248772	0.0043338
0.00E+00	0	0	0.000108948	0.000589676	0.00123993	0.00258316	0.00447647
0.00E+00	0.00E+00	1.57166E-05	0.000182571	0.000464783	0.000894928	0.00194023	0.00391281
0.00E+00	0	5.95093E-06	0.000156708	0.000447006	0.000886993	0.00195206	0.00393318
0.00E+00	0.00E+00	1.22833E-05	0.000170746	0.000452805	0.000882187	0.0019191	0.00384476
0.00E+00	0.00E+00	0	2.59399E-06	0.000264664	0.000795822	0.00186127	0.00373871
0	0.00E+00	0	2.13623E-06	0.000233917	0.000758591	0.00181366	0.00369331
0.00E+00	0.00E+00	0	2.44141E-06	0.000257263	0.000793991	0.00186707	0.00374748
0.00E+00	0	0	0.000185852	0.000656815	0.0012677	0.00254387	0.00445282
0.00E+00	0	0	0.000141525	0.0005793	0.00116119	0.00238121	0.0041909
0	0	0	0.000149918	0.000574188	0.00114426	0.00237076	0.00428619
0	0.00E+00	0	4.19617E-06	0.000214081	0.00063324	0.00153229	0.00329697
0.00E+00	0.00E+00	0	2.13623E-06	0.000212097	0.000652771	0.00159119	0.0034182
0	0.00E+00	0	0.000011673	0.000238113	0.000668716	0.00157982	0.00332359
0.00E+00	0.00E+00	0	0.000140305	0.000551071	0.00110466	0.00230995	0.00426643
0.00E+00	0	0	0.000140839	0.000541458	0.00107613	0.00223358	0.00411011
0.00E+00	0	0	0.00014122	0.000541	0.00108215	0.00227386	0.00425858
0.00E+00	0	0	5.22614E-05	0.00041832	0.000947952	0.00209435	0.00380264
0	0	0	5.37872E-05	0.000441971	0.000997849	0.00218521	0.00391449
0	0	0	6.81305E-05	0.000450211	0.00098732	0.00212746	0.00378845
0.00E+00	0.00E+00	0	3.12805E-06	0.000298462	0.000838547	0.00189827	0.00370544
0.00E+00	0.00E+00	0	2.67029E-06	0.000275421	0.000844879	0.00197273	0.00393715
0.00E+00	0.00E+00	0	2.36511E-06	0.000254059	0.000803528	0.00189857	0.0038353
0.00E+00	0	2.15912E-05	0.000247879	0.000600204	0.00111198	0.00230759	0.00448166
0.00E+00	0	0.000030365	0.000250778	0.000568848	0.00104385	0.00217331	0.00427773
1.26E-05	2.29E-06	4.31061E-05	0.000261536	0.00056366	0.00102051	0.00212029	0.00421722
0	0	0	2.67029E-06	0.000257263	0.000747375	0.00174606	0.00356056
0.00E+00	0.00E+00	0	1.83105E-06	0.000201263	0.000671463	0.00165321	0.00353355
0.00E+00	0	0	8.39233E-06	0.000265274	0.000741577	0.0017244	0.00353996
0.00E+00	0.00E+00	0	9.87244E-05	0.000385437	0.000809708	0.00181992	0.00360886
0	0	0	8.07953E-05	0.000389099	0.0008535	0.00194931	0.0038356
0.00E+00	0	0	6.70624E-05	0.000363007	0.000819016	0.00190849	0.00380783
0	0	0	2.21252E-06	0.000220261	0.000675049	0.00163048	0.00343483
0	0	0	5.18799E-06	0.000235901	0.000684662	0.00162567	0.00338669
0	0	0	1.73187E-05	0.000247192	0.000684509	0.00161133	0.00337662
0	0	0	2.50244E-05	0.000299377	0.0007798	0.0017662	0.00359627
0	0	0	2.41089E-05	0.000328598	0.00084877	0.00189217	0.00374031

0.00458572	0.00512955	0.00919609	0.0178659	0.0332798	0.0373179	0.0840072	0.106613
0.00437889	0.00510109	0.00940109	0.0182825	0.0336065	0.037234	0.0829438	0.104468
0.00449326	0.0051828	0.00945946	0.0183092	0.0336357	0.0372884	0.0831232	0.104743
0.0049675	0.00581467	0.0101904	0.0185849	0.0327415	0.035655	0.0790035	0.0998735
0.00499557	0.00585381	0.010363	0.0190926	0.0337775	0.0367664	0.0812114	0.102134
0.00483566	0.00559296	0.00993637	0.018577	0.0333488	0.0366157	0.0813446	0.102629
0.00443352	0.00517998	0.00915215	0.0168777	0.0299963	0.0328555	0.0732882	0.0935698
0.00444008	0.0051461	0.00901001	0.0165652	0.0295459	0.0325338	0.0730322	0.0938346
0.00443207	0.00529831	0.0094268	0.0172493	0.0302854	0.0329037	0.0730049	0.092983
0.0047142	0.00518494	0.0089563	0.0169159	0.0312856	0.035221	0.0800364	0.102896
0.00442474	0.00476379	0.00826996	0.0160152	0.0303297	0.0345985	0.07931	0.102535
0.00457748	0.00495056	0.00860397	0.0165866	0.0312091	0.0354256	0.0808121	0.103943
0.00484238	0.00576729	0.00952652	0.0157066	0.0254795	0.0267834	0.0592077	0.0772292
0.00481911	0.00568626	0.00936081	0.0155053	0.0253839	0.0268741	0.0597178	0.0780837
0.00470718	0.00557022	0.00921097	0.0153175	0.0251256	0.0266113	0.0591294	0.0773331
0.00401115	0.00405716	0.0060965	0.0105981	0.0200094	0.0238633	0.0586279	0.082433
0.00396744	0.0039711	0.00586128	0.0100836	0.0191351	0.0230323	0.0571803	0.0811971
0.00399124	0.00399513	0.00595505	0.0103707	0.0197466	0.0237038	0.0585236	0.0825506
0.00480263	0.00551025	0.00979355	0.0184392	0.0333647	0.0368205	0.0821079	0.103846
0.00448212	0.00508278	0.00901672	0.0171719	0.0316029	0.0353567	0.0799015	0.102352
0.00474899	0.00549019	0.00967392	0.017998	0.0324193	0.0358465	0.0804171	0.102586
0.00381767	0.00404625	0.00599602	0.00963165	0.0168731	0.0195569	0.0480773	0.0692393
0.00392441	0.00411926	0.00607033	0.00979233	0.0173259	0.0202077	0.0497968	0.0715768
0.00379868	0.00402771	0.00606186	0.00997116	0.0177135	0.0205554	0.0502425	0.0716508
0.0048864	0.00578545	0.0102054	0.0186044	0.0326469	0.0354418	0.0783756	0.0990437
0.00472298	0.00564362	0.0100547	0.0184299	0.0323374	0.0350191	0.0771626	0.0971675
0.00497131	0.00595406	0.01049	0.0188985	0.0326994	0.035162	0.0772172	0.097213
0.00398735	0.00426025	0.00715805	0.0135271	0.025654	0.0296838	0.0696641	0.0929281
0.00403847	0.00427109	0.00718536	0.0137027	0.0261638	0.030327	0.0710697	0.0944098
0.00393143	0.00422211	0.00720428	0.0137739	0.0261494	0.0301431	0.0703189	0.0931714
0.00394218	0.00406128	0.00634895	0.011382	0.0215098	0.025351	0.061249	0.0846035
0.00419975	0.00423965	0.00638229	0.0111167	0.0209488	0.0248839	0.0607603	0.0847373
0.00414009	0.00422707	0.00641701	0.0111864	0.0209903	0.0248465	0.0605201	0.0843066
0.00543221	0.00646545	0.0107821	0.0179259	0.0289993	0.0301328	0.0652559	0.0827392
0.00526749	0.00632797	0.0105698	0.0174919	0.0281313	0.0291523	0.063187	0.0805328
0.00527672	0.00641022	0.0107393	0.0176707	0.0281213	0.0288917	0.0621819	0.0789145
0.00392296	0.00405914	0.00611115	0.0103357	0.0188973	0.0221768	0.0541621	0.0764218
0.00401573	0.00419548	0.00622307	0.01021	0.0183149	0.0214431	0.0527036	0.0751675
0.00396317	0.00417274	0.00635033	0.0106924	0.0192939	0.0224359	0.0544781	0.07666
0.00423309	0.00476738	0.00760811	0.0126276	0.0213557	0.0234344	0.0541328	0.0735232
0.00438828	0.00480576	0.0075267	0.0125116	0.0215224	0.0239778	0.0560287	0.0764984
0.00439171	0.00481407	0.00750412	0.0123798	0.0211758	0.0235393	0.0549835	0.0751676
0.00383347	0.0039048	0.00562523	0.00909431	0.0164783	0.0196168	0.0491438	0.0714609
0.00376778	0.00385353	0.00560944	0.00916435	0.0166452	0.0197668	0.0493222	0.0714462
0.00383003	0.00401527	0.00596458	0.0097435	0.0173774	0.0203109	0.0500462	0.0718824
0.00412018	0.00454063	0.00726051	0.0124678	0.0220523	0.0249075	0.0585473	0.0798704
0.00414787	0.00448608	0.00720886	0.0127012	0.0230232	0.0262852	0.0618982	0.0839425

0.12868	0.133982	0.122998	0.110663	0.0855154	0.0581286	0.0346585	1.79E-02
0.125741	0.131202	0.121373	0.110823	0.0876241	0.0613266	0.0376079	0.0197826
0.126093	0.131559	0.121639	0.110879	0.0873231	0.0607095	0.0369453	0.0193163
0.121491	0.128725	0.121353	0.113254	0.091607	0.0654056	0.0406603	0.0215463
0.123457	0.129829	0.121277	0.111846	0.0891074	0.0625371	0.038284	0.0200749
0.124133	0.130416	0.121602	0.11191	0.0890041	0.0624069	0.0381962	0.0200296
0.11548	0.124916	0.121128	0.117321	0.0992191	0.0741591	0.047848	0.0259618
0.116323	0.126071	0.122138	0.117844	0.0990323	0.0734677	0.047091	0.0254385
0.114795	0.124402	0.120931	0.117451	0.0995928	0.0745954	0.0481874	0.0261575
0.125965	0.133171	0.124299	0.113894	0.0896661	0.0619151	0.037271	0.0192902
0.12591	0.133405	0.124812	0.114755	0.090778	0.0630411	0.0381397	0.019802
0.126981	0.133788	0.124375	0.11348	0.0889631	0.0611861	0.0367062	0.0189487
0.0998096	0.114917	0.11986	0.12584	0.115484	0.0928011	0.0631119	0.0353333
0.100838	0.115765	0.120247	0.125651	0.114779	0.0918782	0.0623174	0.0348343
0.100003	0.115126	0.120073	0.126094	0.115762	0.0930503	0.063285	0.035428
0.110209	0.127175	0.129738	0.130594	0.113363	0.0859147	0.0556813	0.030211
0.109407	0.127034	0.130262	0.131727	0.114838	0.0873671	0.056791	3.09E-02
0.110519	0.127551	0.130027	0.130721	0.113329	0.0858172	0.0556051	0.030173
0.125695	0.131906	0.122555	0.111972	0.0879529	0.0605742	0.0363449	0.0187489
0.125184	0.132507	0.12403	0.114117	0.0902734	0.0626105	0.0377952	0.019581
0.125264	0.132488	0.123876	0.113666	0.0894172	0.0614782	0.0367512	0.0188915
0.0963715	0.11706	0.126756	0.136496	0.127177	0.102909	0.0700993	0.0392241
0.0990276	0.119184	0.127567	0.135547	0.124592	0.0996406	0.0673171	0.0374921
0.0986257	0.118439	0.126812	0.135066	0.124609	0.100042	0.0677901	0.0378208
0.120663	0.12823	0.121381	0.113825	0.0925074	0.0662928	0.0412961	0.0218996
0.1182	0.125862	0.119972	0.11407	0.0946954	0.0696355	0.0444051	0.023925
0.118484	0.126431	0.120562	0.114269	0.0941257	0.0684336	0.0431524	0.0230675
0.118172	0.130078	0.126862	0.122172	0.101661	0.0742809	0.0469035	0.0250692
0.11935	0.130479	0.126353	0.120871	0.100058	0.0729062	0.0460084	0.0246009
0.117816	0.129186	0.125794	0.121302	0.101397	0.0746079	0.0474424	0.0254852
0.111418	0.127011	0.128357	0.128336	0.110965	0.0839815	0.0544419	0.0295605
0.112246	0.128222	0.129419	0.128846	0.11067	0.0831187	0.0535236	0.0289323
0.111718	0.127824	0.129334	0.129128	0.111188	0.0836365	0.0538871	0.0291307
0.103735	0.115958	0.117725	0.120675	0.108559	0.0859325	0.0578736	0.0322275
0.101857	0.115093	0.118176	0.122447	0.111127	0.088465	0.0597228	0.0332696
0.0998108	0.113232	0.117135	0.122634	0.112628	0.0906898	0.0617692	0.0346022
0.103429	0.121727	0.127527	0.132746	0.119698	0.0941329	0.0627876	0.0346806
0.102826	0.122044	0.128541	0.134074	0.120792	0.0947452	0.0630246	0.0347476
0.103692	0.12201	0.127703	0.132628	0.119169	0.0933417	0.0620594	0.0342137
0.0979628	0.115423	0.122566	0.130564	0.121199	0.098187	0.0670938	0.0376498
0.101666	0.118716	0.124296	0.129981	0.118154	0.0937981	0.0630888	0.0350512
0.100184	0.117501	0.123753	0.130396	0.119571	0.0957466	0.0648388	0.0361767
0.0995122	0.120187	0.128822	0.13677	0.125273	0.099573	0.0668099	0.0370042
0.0992358	0.119692	0.128278	0.136374	0.12527	0.0999679	0.0673332	0.0373958
0.0994089	0.119647	0.128064	0.135934	0.124551	0.09905	0.0664838	0.0368288
0.105427	0.121715	0.125535	0.128934	0.114999	0.0897649	0.0596539	0.0329126
0.109524	0.124541	0.1262	0.127039	0.110894	0.0847946	0.0554454	0.0302784

4.39E-04	0
0.000489093	0
0.000476548	0
0.000533808	0
0.000495649	0
0.000494535	0
0.000648012	0
0.000634045	0
0.000652942	0
0.000474072	0
0.000487098	0
0.000465233	0
0.000890443	0
0.00087745	0
0.0008928	0
0.000753674	0
0.000770678	0
0.000752793	0
0.000460114	0
0.00048125	0
0.000462998	0
0.00098806	0
0.00094314	0
0.000951884	0
0.000542624	0
0.000595865	0
0.000573028	0
0.000622645	0
0.000611174	0
0.000634035	0
0.000737719	0
0.000720998	0
0.000725927	0
0.000810911	0
0.000837028	0
0.000872103	0
0.000870045	0
0.00087122	0
0.000857867	0
0.000949413	0
0.000881095	0
0.000910591	0
0.000929008	0
0.000939694	0
0.000924616	0
0.000825586	0
0.000757047	0

76980	1	12/18/18	11:04	89870	W1835237
76980	1	12/18/18	11:09	49174	W1835238
76980	1	12/18/18	11:09	49174	W1835238
76980	1	12/18/18	11:09	49174	W1835238
76980	1	12/18/18	11:13	44881	W1835239
76980	1	12/18/18	11:13	44881	W1835239
76980	1	12/18/18	11:13	44881	W1835239
76980	1	12/18/18	11:18	17556	W1835240
76980	1	12/18/18	11:18	17556	W1835240
76980	1	12/18/18	11:18	17556	W1835240
76980	1	12/18/18	11:22	98576	W1835241
76980	1	12/18/18	11:22	98576	W1835241
76980	1	12/18/18	11:22	98576	W1835241
76980	1	12/18/18	11:27	54345	W1835242
76980	1	12/18/18	11:27	54345	W1835242
76980	1	12/18/18	11:27	54345	W1835242
76980	1	12/18/18	11:36	64534	W1835243
76980	1	12/18/18	11:36	64534	W1835243
76980	1	12/18/18	11:36	64534	W1835243
76980	1	12/18/18	11:40	25897	W1835244
76980	1	12/18/18	11:40	25897	W1835244
76980	1	12/18/18	11:40	25897	W1835244
76980	1	12/18/18	11:46	55446	W1835245
76980	1	12/18/18	11:46	55446	W1835245
76980	1	12/18/18	11:46	55446	W1835245
76980	1	12/18/18	11:51	63972	W1835246
76980	1	12/18/18	11:51	63972	W1835246
76980	1	12/18/18	11:51	63972	W1835246
76980	1	12/18/18	11:55	49135	W1835247
76980	1	12/18/18	11:55	49135	W1835247
76980	1	12/18/18	11:55	49135	W1835247
76980	1	12/18/18	11:59	94380	W1835248
76980	1	12/18/18	11:59	94380	W1835248
76980	1	12/18/18	11:59	94380	W1835248
76980	1	12/18/18	12:03	87716	W1835249
76980	1	12/18/18	12:03	87716	W1835249
76980	1	12/18/18	12:03	87716	W1835249
76980	1	12/18/18	12:07	44684	W1835250
76980	1	12/18/18	12:07	44684	W1835250
76980	1	12/18/18	12:07	44684	W1835250
76980	1	12/18/18	12:43	55613	W1835251
76980	1	12/18/18	12:43	55613	W1835251
76980	1	12/18/18	12:43	55613	W1835251
76980	1	12/18/18	12:47	37828	W1835252
76980	1	12/18/18	12:47	37828	W1835252
76980	1	12/18/18	12:47	37828	W1835252
76980	1	12/18/18	12:51	36038	W1835253

XtendiMax+Induce+AU-243LFP13	TTI11004	63	3	441.7662659
XtendiMax+Intensity+AU-243LFP13	TTI11004	63	1	398.5982056
XtendiMax+Intensity+AU-243LFP13	TTI11004	63	2	400.599823
XtendiMax+Intensity+AU-243LFP13	TTI11004	63	3	398.3060608
XtendiMax+IntensityOne+AU-243LFP13	TTI11004	63	1	396.569519
XtendiMax+IntensityOne+AU-243LFP13	TTI11004	63	2	392.7168274
XtendiMax+IntensityOne+AU-243LFP13	TTI11004	63	3	390.4455261
XtendiMax+InterLock+AU-243LFP13	TTI11004	63	1	416.9673462
XtendiMax+InterLock+AU-243LFP13	TTI11004	63	2	417.7295532
XtendiMax+InterLock+AU-243LFP13	TTI11004	63	3	419.3432312
XtendiMax+KarmexDF+AU-243LFP13	TTI11004	63	1	457.2359619
XtendiMax+KarmexDF+AU-243LFP13	TTI11004	63	2	457.2532349
XtendiMax+KarmexDF+AU-243LFP13	TTI11004	63	3	461.2898254
XtendiMax+Laudis+AU-243LFP13	TTI11004	63	1	468.4412231
XtendiMax+Laudis+AU-243LFP13	TTI11004	63	2	471.7250977
XtendiMax+Laudis+AU-243LFP13	TTI11004	63	3	467.4976807
XtendiMax+Liberate+AU-243LFP13	TTI11004	63	1	385.1340942
XtendiMax+Liberate+AU-243LFP13	TTI11004	63	2	386.0247498
XtendiMax+Liberate+AU-243LFP13	TTI11004	63	3	387.4459839
XtendiMax+Linex4L+AU-243LFP13	TTI11004	63	1	457.1716003
XtendiMax+Linex4L+AU-243LFP13	TTI11004	63	2	453.971283
XtendiMax+Linex4L+AU-243LFP13	TTI11004	63	3	458.9356079
XtendiMax+LoadUp+AU-243LFP13	TTI11004	63	1	433.7403259
XtendiMax+LoadUp+AU-243LFP13	TTI11004	63	2	428.627533
XtendiMax+LoadUp+AU-243LFP13	TTI11004	63	3	427.7951355
XtendiMax+LorsbanAdvanced+AU-243LFP13	TTI11004	63	1	398.1863098
XtendiMax+LorsbanAdvanced+AU-243LFP13	TTI11004	63	2	402.16745
XtendiMax+LorsbanAdvanced+AU-243LFP13	TTI11004	63	3	401.0700378
XtendiMax+Lox+AU-243LFP13	TTI11004	63	1	408.5941162
XtendiMax+Lox+AU-243LFP13	TTI11004	63	2	412.8248291
XtendiMax+Lox+AU-243LFP13	TTI11004	63	3	408.817627
XtendiMax+MagPower+AU-243LFP13	TTI11004	63	1	472.3206177
XtendiMax+MagPower+AU-243LFP13	TTI11004	63	2	473.274353
XtendiMax+MagPower+AU-243LFP13	TTI11004	63	3	467.0605774
XtendiMax+MAX-INforBeans+AU-243LFP13	TTI11004	63	1	448.936615
XtendiMax+MAX-INforBeans+AU-243LFP13	TTI11004	63	2	446.5186462
XtendiMax+MAX-INforBeans+AU-243LFP13	TTI11004	63	3	444.2163696
XtendiMax+Me-Too-Lachlor+AU-243LFP13	TTI11004	63	1	381.468689
XtendiMax+Me-Too-Lachlor+AU-243LFP13	TTI11004	63	2	382.7638245
XtendiMax+Me-Too-Lachlor+AU-243LFP13	TTI11004	63	3	380.1223755
XtendiMax+Moccasin+AU-243LFP13	TTI11004	63	1	377.725708
XtendiMax+Moccasin+AU-243LFP13	TTI11004	63	2	381.6438293
XtendiMax+Moccasin+AU-243LFP13	TTI11004	63	3	382.2349854
XtendiMax+MustangMaxx+AU-243LFP13	TTI11004	63	1	438.690155
XtendiMax+MustangMaxx+AU-243LFP13	TTI11004	63	2	438.2349854
XtendiMax+MustangMaxx+AU-243LFP13	TTI11004	63	3	445.0263672
XtendiMax+MVO+AU-243LFP13	TTI11004	63	1	383.5107117

923.324707	1712.217407	0.521552026	0	0	0	0	0
819.2322388	1568.972778	0.681469381	0	0	0	0	0
816.453064	1562.619873	0.694265485	0	0	0	0	0
819.3130493	1570.849609	0.67610544	0	0	0	0	0
809.5072021	1550.640869	0.694149971	0	0	0	0	0
802.831665	1539.773071	0.721040189	0	0	0	0	0
798.1807861	1530.30249	0.737760007	0	0	0	0	0
832.673584	1564.721313	0.676463246	0	0	0	0	0
843.5302124	1595.887939	0.669121563	0	0	0	0	0
840.7999878	1582.907593	0.660688818	0	0	0	0	0
970.1412964	1766.28833	0.558977008	0	0	0	0	0
972.4720459	1768.88269	0.552451909	0	0	0	0	0
977.8425293	1771.83606	0.536424458	0	0	0	0	0
975.7693481	1764.437134	0.483926117	0	0	0	0	0
982.5039063	1771.655396	0.465186	0	0	0	0	0
977.5199585	1768.415161	0.493901074	0	0	0	0	0
776.3829346	1487.721436	0.787904739	0	0	0	0	0
782.4953613	1503.885254	0.785845041	0	0	0	0	0
778.7263794	1490.766357	0.782335758	0	0	0	0	0
951.8010864	1738.369141	0.50404799	0	0	0	0	0
951.6234741	1744.186768	0.500813425	0	0	0	0	0
953.0016479	1739.724365	0.489465594	0	0	0	0	0
939.5571899	1741.328979	0.57917887	0	0	0	0	0
934.2268677	1738.262695	0.577001274	0	0	0	0	0
929.512207	1733	0.580826461	0	0	0	0	0
841.4424438	1620.958862	0.652940333	0	0	0	0	0
849.1555786	1628.280518	0.622536302	0	0	0	0	0
848.1936646	1633.595947	0.631807327	0	0	0	0	0
836.6671753	1596.797485	0.667601347	0	0	0	0	0
845.5047607	1609.02063	0.643484175	0	0	0	0	0
841.0637817	1600.198853	0.645504296	0	0	0	0	0
986.1825562	1774.258057	0.461416394	0	0	0	0	0
986.463562	1774.90918	0.447438747	0	0	0	0	0
977.5719604	1767.670898	0.471556276	0	0	0	0	0
941.6055908	1731.356689	0.518991113	0	0	0	0	0
941.7128906	1733.001831	0.528843284	0	0	0	0	0
932.1657715	1721.851807	0.549441695	0	0	0	0	0
806.319519	1564.913574	0.753280759	0	0	0	0	0
808.0541382	1574.100952	0.754141033	0	0	0	0	0
805.5090942	1571.507935	0.768671691	0	0	0	0	0
790.3718262	1541.800293	0.777132273	0	0	0	0	0
800.0039063	1557.871826	0.732485771	0	0	0	0	0
796.1230469	1546.931885	0.744001091	0	0	0	0	0
892.4830322	1663.662476	0.580735147	0	0	0	0	0
885.8071289	1650.161133	0.57936728	0	0	0	0	0
899.6187744	1668.671387	0.566199422	0	0	0	0	0
798.8046265	1551.717041	0.741264224	0	0	0	0	0

0	0	0	1.77765E-05	0.000286331	0.000761719	0.00173744	0.00354683
0	0	0	0.00010376	0.000508118	0.00106834	0.00227837	0.00415604
0	0	0	0.000107498	0.000529022	0.00110649	0.00233047	0.00415535
0	0	0	0.000119781	0.0005233	0.00107208	0.00224846	0.00406837
0	0	0	0.000141068	0.000559311	0.00111839	0.00230179	0.00409004
0	0	0	0.000146027	0.000580673	0.00116119	0.00239021	0.00425301
0	0	0	0.000166931	0.000611267	0.00119667	0.00243279	0.00430611
0	0	0	5.0354E-06	0.000404587	0.00101624	0.00235046	0.00432762
0	0	0	3.32642E-05	0.000435944	0.00102707	0.00230438	0.00418076
0	0	0	1.34277E-05	0.000404587	0.000996017	0.00228813	0.00420708
0	0	0	9.36127E-05	0.000378113	0.000810089	0.00184212	0.00362717
0	0	0	0.000108032	0.000387115	0.000807114	0.00180908	0.00355087
0	0	0	8.23975E-05	0.000339203	0.000784531	0.00173866	0.00356628
0	0	0	2.01416E-05	0.00025238	0.000686264	0.00160347	0.0033564
0	0	0	0.000014267	0.000232544	0.000649719	0.00153999	0.00327301
0	0	0	2.37274E-05	0.000262985	0.000703964	0.00163437	0.00341049
0	0	0	0.000171127	0.000668716	0.00131149	0.00261978	0.00447502
0	0	0	0.000178299	0.000678024	0.00131645	0.00260742	0.00443001
0	0	0	0.000177307	0.000682373	0.00132393	0.00260399	0.00435448
0	0	0	2.32697E-05	0.000272141	0.000725403	0.00167229	0.00345497
0	0	0	3.28064E-05	0.000288391	0.00073555	0.00165855	0.00337013
0	0	0	2.44141E-06	0.000234528	0.000688248	0.00163506	0.00344193
0	0	0	7.24792E-05	0.000370178	0.00082428	0.00191391	0.00386192
0	0	0	0.000102234	0.000398636	0.000835876	0.00188225	0.00377686
0	0	0	0.000096283	0.00040062	0.000847549	0.00190361	0.00378349
0	0	0	0.000148926	0.000529861	0.00103569	0.00213348	0.00392128
0	0	0	0.000132523	0.000485611	0.000966415	0.0020343	0.00382507
0	0	0	0.000142212	0.000509796	0.000999527	0.00206497	0.0038063
0	0	0	7.35474E-05	0.000471725	0.00103691	0.00225906	0.00411507
0	0	0	5.88226E-05	0.000441437	0.000991135	0.00218536	0.00400658
0	0	0	5.02014E-05	0.0004245	0.000973206	0.00218918	0.00411179
0	0	0	2.05994E-06	0.000203094	0.000620193	0.00152664	0.00335716
0	0	0	1.83105E-06	0.00018837	0.000596466	0.00148216	0.00327431
0	0	0	1.28937E-05	0.000227051	0.000647202	0.00155647	0.00336555
0	0	0	9.38416E-06	0.000259399	0.000731277	0.00172447	0.00364037
0	0	0	3.90625E-05	0.000302048	0.000767517	0.00174217	0.00359276
0	0	0	3.31879E-05	0.000309448	0.000799484	0.00181847	0.00372833
0	0	4.42505E-06	0.000232544	0.000638733	0.0011953	0.00241859	0.0044577
0	0	2.67029E-06	0.000232468	0.000649109	0.00121078	0.00242752	0.00441048
0	0	5.34058E-06	0.000248032	0.000667953	0.00123489	0.00246384	0.00448433
0	0	1.98364E-06	0.000238037	0.000671844	0.00125397	0.00250618	0.00452225
0	0	0	0.000199661	0.000621185	0.00117683	0.00237442	0.00431328
0	0	0	0.000219803	0.000650101	0.00121361	0.00240814	0.00429329
0	0	0	1.77765E-05	0.000347672	0.000855026	0.00199684	0.00376907
0	0	0	3.89099E-06	0.000328674	0.000843277	0.00200401	0.00380424
0	0	0	2.89917E-06	0.000285568	0.000836105	0.00192566	0.00380302
0	0	0	0.000181274	0.000620041	0.00119461	0.00242203	0.00436394

0.00405716	0.00446274	0.00714409	0.0123335	0.0219537	0.0248958	0.0586778	0.0801644
0.00457245	0.00520844	0.00907547	0.0168664	0.0305601	0.0340028	0.0768156	0.0987875
0.00443512	0.0049556	0.00865593	0.0163941	0.0302813	0.0340651	0.0774798	0.0999376
0.0044838	0.00515816	0.00908638	0.0169772	0.0307513	0.03415	0.0769693	0.0987666
0.00443527	0.00508049	0.00902878	0.0171111	0.0313165	0.0349297	0.0788226	0.100992
0.00462234	0.00529648	0.0093779	0.0176536	0.0320892	0.0356171	0.0800016	0.102023
0.00468262	0.00538651	0.00956642	0.0180027	0.0326331	0.0361178	0.0808738	0.102801
0.0044603	0.00456261	0.00733215	0.0136739	0.0262605	0.0307986	0.0730428	0.0978703
0.00430946	0.00447792	0.00734215	0.013783	0.026269	0.0305293	0.0717758	0.0955583
0.00434761	0.00447113	0.00722015	0.0134781	0.0258434	0.0302731	0.0717697	0.0962519
0.00412453	0.00445061	0.00683861	0.0112369	0.0194069	0.0218613	0.0518937	0.0721909
0.00406128	0.00442924	0.00687576	0.0113377	0.0195031	0.0218642	0.0516964	0.0717714
0.00411888	0.00446785	0.00682037	0.011048	0.0188842	0.0212275	0.0505459	0.0707825
0.00384621	0.00410667	0.00622169	0.0102274	0.0180175	0.0207426	0.0503542	0.0714746
0.00379669	0.00407974	0.00617599	0.0100822	0.0176587	0.0203071	0.0493975	0.0704019
0.00390907	0.00417671	0.00632011	0.0103418	0.0181137	0.020771	0.050268	0.0711929
0.00467422	0.0053009	0.00958252	0.0185833	0.0343761	0.0383063	0.0856713	0.107984
0.00462547	0.00526657	0.00955086	0.018506	0.0341167	0.0379029	0.0845551	0.106443
0.00445465	0.00503334	0.0092263	0.0182113	0.0340566	0.0381184	0.0854346	0.107816
0.00394371	0.00424736	0.00656509	0.0110148	0.0195322	0.0223933	0.0538089	0.0753107
0.00384315	0.00419807	0.00664406	0.0113557	0.0201765	0.022976	0.0546339	0.0756237
0.00395348	0.00424759	0.00651634	0.0108642	0.0192654	0.0221587	0.0534798	0.0751583
0.00457466	0.00517052	0.0082457	0.0136207	0.0228608	0.024897	0.0569641	0.0764492
0.00453697	0.0052494	0.00856117	0.0142843	0.0238448	0.0257043	0.0581186	0.0771547
0.00450142	0.00518898	0.0084906	0.0142843	0.0240312	0.0260043	0.058868	0.0780615
0.00451309	0.00539177	0.00957024	0.0174557	0.0305648	0.0331539	0.0734723	0.0934946
0.00447159	0.00534447	0.00939896	0.0169841	0.029656	0.0322392	0.0718394	0.0921321
0.00439346	0.00526245	0.00936401	0.0171198	0.0300397	0.0326385	0.0724698	0.0924421
0.00440918	0.00483879	0.00822189	0.0153092	0.0282637	0.0320013	0.073536	0.0960833
0.00430153	0.00470947	0.00797234	0.0148231	0.0274186	0.0311426	0.0718897	0.0944915
0.00453209	0.00503189	0.00847023	0.0154424	0.0280511	0.0315518	0.072393	0.0948142
0.00397682	0.00429352	0.00641579	0.0102032	0.0174946	0.019962	0.0485298	0.0694257
0.00388557	0.00420357	0.00631058	0.0101098	0.0174476	0.0199701	0.0486116	0.0695468
0.00396095	0.0042926	0.00650215	0.0105205	0.0181951	0.0207415	0.0500996	0.0709926
0.00423027	0.00460609	0.00712326	0.0118072	0.0205846	0.0233112	0.0554079	0.0767588
0.00416039	0.0045787	0.00720772	0.0121002	0.0210828	0.0237146	0.0558629	0.0767457
0.00426514	0.00463264	0.00722534	0.01213	0.0212859	0.0240925	0.0569959	0.0783824
0.00519295	0.00624565	0.0110266	0.0197985	0.0340152	0.0363367	0.0792321	0.0989925
0.0050676	0.00607079	0.0107809	0.01956	0.0338847	0.0363313	0.0793018	0.0989707
0.00518967	0.00625298	0.0111015	0.0200175	0.0344021	0.0366748	0.0796757	0.0990732
0.00516647	0.00620094	0.0111046	0.0203368	0.0354147	0.0379948	0.082691	0.102511
0.00496346	0.00599648	0.0107906	0.0198117	0.0345454	0.0371108	0.0809653	0.100791
0.00486115	0.0058461	0.010583	0.0196402	0.0345643	0.0373272	0.0817168	0.101899
0.00399643	0.00413452	0.00652977	0.0118017	0.0223084	0.0262004	0.0629539	0.0863779
0.0040213	0.00412521	0.00647202	0.0117255	0.0223419	0.0264002	0.063726	0.0876643
0.00403702	0.00409172	0.00625374	0.0110944	0.0211005	0.025103	0.0612163	0.085173
0.00493057	0.00586197	0.0104884	0.0193598	0.034099	0.036926	0.0811117	0.101474

0.105841	0.122128	0.125829	0.129036	0.114856	0.0894476	0.0593208	0.0326826
0.121744	0.130272	0.123696	0.115958	0.0938878	0.0668297	0.0413067	0.0217654
0.123071	0.131271	0.124052	0.115632	0.0930893	0.0659432	0.0406218	0.0213584
0.121531	0.129947	0.123407	0.115816	0.0939563	0.0670306	0.0415057	0.0218911
0.123763	0.131467	0.123701	0.11467	0.0916493	0.0643776	0.0393544	0.0205832
0.124474	0.131628	0.123251	0.113609	0.0902111	0.0629372	0.0382535	0.0199326
0.125054	0.131867	0.123095	0.113014	0.0892401	0.0618189	0.0373119	0.0193441
0.123972	0.134814	0.128805	0.120351	0.0962562	0.0672423	0.0407651	0.0211686
0.120809	0.131779	0.127013	0.120566	0.0987055	0.0709478	0.0441837	0.0233906
0.122226	0.133489	0.128368	0.121078	0.0980658	0.069521	0.0427267	0.0224082
0.097776	0.116388	0.12428	0.132686	0.123179	0.0997081	0.0680793	0.0381862
0.0972251	0.115912	0.124052	0.132786	0.123587	0.100251	0.0685439	0.0384727
0.096618	0.11589	0.12459	0.133769	0.124691	0.101162	0.0691246	0.0387711
0.098202	0.117949	0.126458	0.134929	0.124665	0.100166	0.0678907	0.0378778
0.0971803	0.117267	0.126304	0.13542	0.12578	0.1016	0.0691652	0.0386995
0.0977005	0.117323	0.12589	0.134598	0.124785	0.100705	0.0685447	0.0383595
0.129502	0.134021	0.122316	0.109375	0.0838937	0.0564695	0.0332895	0.0169921
0.127792	0.132759	0.121991	0.110177	0.0855809	0.0583838	0.0348057	0.0178941
0.129431	0.134127	0.122629	0.109882	0.0844481	0.0569092	0.0335491	0.0171126
0.101889	0.120388	0.126856	0.132854	0.12042	0.0950545	0.0635475	0.0351455
0.101446	0.119238	0.125434	0.131654	0.120043	0.0955472	0.064388	0.0358119
0.101943	0.120581	0.127065	0.133027	0.120572	0.0952379	0.0637459	0.0352959
0.100544	0.11684	0.122315	0.128415	0.117568	0.0941461	0.0638114	0.035637
0.100711	0.11647	0.121563	0.127396	0.116537	0.0933216	0.0632898	0.0353707
0.101606	0.117066	0.12168	0.126972	0.115678	0.0923233	0.0624687	0.0348655
0.115351	0.124904	0.121231	0.117372	0.0989771	0.0735629	0.0471448	0.0254381
0.114598	0.125027	0.122125	0.118821	0.100527	0.074843	0.0479984	0.0259062
0.11437	0.124253	0.121105	0.117928	0.100228	0.0751949	0.0486149	0.0263953
0.119964	0.129856	0.124711	0.118429	0.0973886	0.0705419	0.0442997	0.0236039
0.118753	0.129446	0.125218	0.119793	0.0992326	0.0723669	0.0457017	0.0244495
0.118964	0.129552	0.125172	0.119455	0.098487	0.0713091	0.044681	0.0237553
0.0963441	0.116856	0.126395	0.135945	0.126521	0.102301	0.0696652	0.0389806
0.0964555	0.116911	0.12639	0.135913	0.126518	0.102364	0.069768	0.0390678
0.0975735	0.117336	0.126017	0.134763	0.124873	0.100666	0.0684338	0.0382597
0.102896	0.120529	0.126003	0.131086	0.118295	0.0932304	0.0623649	0.0345357
0.102359	0.119698	0.125268	0.1307	0.118353	0.0935229	0.062637	0.0346929
0.10424	0.121161	0.125759	0.129963	0.116562	0.091356	0.0608355	0.0335826
0.119778	0.12689	0.120074	0.112768	0.0918111	0.0658084	0.0409134	0.0216338
0.119478	0.126299	0.119424	0.112389	0.0920641	0.0666523	0.0418946	0.0223437
0.119331	0.125975	0.119015	0.111923	0.091613	0.0662762	0.0416319	0.022193
0.122532	0.12788	0.119045	0.109943	0.0881509	0.0624493	0.0385576	0.0203245
0.121161	0.127343	0.119531	0.111446	0.0902735	0.0645827	0.0401862	0.0212889
0.122451	0.12841	0.120025	0.111187	0.0892978	0.063279	0.0390481	0.0205699
0.112977	0.127891	0.128304	0.127239	0.10901	0.0817104	0.0525244	0.028349
0.114659	0.129467	0.129215	0.127097	0.107706	0.0797638	0.0507478	0.0272075
0.112579	0.128395	0.129445	0.128742	0.110443	0.0828091	0.0532248	0.0287243
0.122229	0.128395	0.120185	0.111538	0.0898214	0.0638698	0.0395391	0.0208731

0.00081944	0
0.000538051	0
0.000527588	0
0.000541278	0
0.000507555	0
0.000490931	0
0.00047564	0
0.000520631	0
0.000579046	0
0.000552999	0
0.000962821	0
0.000970204	0
0.000977462	0
0.000953311	0
0.000974887	0
0.000966436	0
0.000415695	0
0.000438749	0
0.000418481	0
0.000882058	0
0.000900481	0
0.000886234	0
0.000897326	0
0.000890886	0
0.000877807	0
0.00063366	0
0.000645381	0
0.000658883	0
0.000585666	0
0.000607522	0
0.000588967	0
0.000981957	0
0.000984432	0
0.000963583	0
0.000867247	0
0.000871134	0
0.000842397	0
0.000535341	0
0.000554591	0
0.000550753	0
0.000502572	0
0.000527258	0
0.000508523	0
0.000706025	0
0.000676169	0
0.000715361	0
0.000516365	0

76980	1	12/18/18	12:51	36038	W1835253
76980	1	12/18/18	12:51	36038	W1835253
76980	1	12/18/18	12:56	30116	W1835254
76980	1	12/18/18	12:56	30116	W1835254
76980	1	12/18/18	12:56	30116	W1835254
76980	1	12/18/18	13:00	22496	W1835255
76980	1	12/18/18	13:00	22496	W1835255
76980	1	12/18/18	13:00	22496	W1835255
76980	1	12/18/18	13:04	35382	W1835256
76980	1	12/18/18	13:04	35382	W1835256
76980	1	12/18/18	13:04	35382	W1835256
76980	1	12/18/18	13:09	66547	W1835257
76980	1	12/18/18	13:09	66547	W1835257
76980	1	12/18/18	13:09	66547	W1835257
76980	1	12/18/18	13:13	99257	W1835258
76980	1	12/18/18	13:13	99257	W1835258
76980	1	12/18/18	13:13	99257	W1835258
76980	1	12/18/18	13:17	43901	W1835259
76980	1	12/18/18	13:17	43901	W1835259
76980	1	12/18/18	13:17	43901	W1835259
76980	1	12/18/18	13:21	77408	W1835260
76980	1	12/18/18	13:21	77408	W1835260
76980	1	12/18/18	13:21	77408	W1835260
76980	1	12/18/18	13:26	32892	W1835261
76980	1	12/18/18	13:26	32892	W1835261
76980	1	12/18/18	13:26	32892	W1835261
76980	1	12/18/18	13:30	24761	W1835262
76980	1	12/18/18	13:30	24761	W1835262
76980	1	12/18/18	13:30	24761	W1835262
76980	1	12/18/18	13:34	21083	W1835263
76980	1	12/18/18	13:34	21083	W1835263
76980	1	12/18/18	13:34	21083	W1835263
76980	1	12/18/18	14:43	37991	W1835264
76980	1	12/18/18	14:43	37991	W1835264
76980	1	12/18/18	14:43	37991	W1835264
76980	1	12/18/18	13:50	77803	W1835265
76980	1	12/18/18	13:50	77803	W1835265
76980	1	12/18/18	13:50	77803	W1835265
76980	1	12/18/18	13:55	35923	W1835266
76980	1	12/18/18	13:55	35923	W1835266
76980	1	12/18/18	13:55	35923	W1835266
76980	1	12/18/18	13:59	68831	W1835267
76980	1	12/18/18	13:59	68831	W1835267
76980	1	12/18/18	13:59	68831	W1835267
76980	1	12/18/18	14:03	28716	W1835268
76980	1	12/18/18	14:03	28716	W1835268
76980	1	12/18/18	14:03	28716	W1835268

XtendiMax+MVO+AU-243LFP13	TTI11004	63	2	385.7684937
XtendiMax+MVO+AU-243LFP13	TTI11004	63	3	384.8131714
XtendiMax+NDemandPolish+AU-243LFP13	TTI11004	63	1	467.4355164
XtendiMax+NDemandPolish+AU-243LFP13	TTI11004	63	2	469.4390869
XtendiMax+NDemandPolish+AU-243LFP13	TTI11004	63	3	469.5276184
XtendiMax+Nexum+AU-243LFP13	TTI11004	63	1	413.2311401
XtendiMax+Nexum+AU-243LFP13	TTI11004	63	2	410.2883301
XtendiMax+Nexum+AU-243LFP13	TTI11004	63	3	410.0322571
XtendiMax+NIS90_10+AU-243LFP13	TTI11004	63	1	452.1637268
XtendiMax+NIS90_10+AU-243LFP13	TTI11004	63	2	456.3877258
XtendiMax+NIS90_10+AU-243LFP13	TTI11004	63	3	459.1072388
XtendiMax+NoStunt+AU-243LFP13	TTI11004	63	1	398.5234375
XtendiMax+NoStunt+AU-243LFP13	TTI11004	63	2	399.5114746
XtendiMax+NoStunt+AU-243LFP13	TTI11004	63	3	396.914856
XtendiMax+Nu-Surf+AU-243LFP13	TTI11004	63	1	405.3561401
XtendiMax+Nu-Surf+AU-243LFP13	TTI11004	63	2	408.8805847
XtendiMax+Nu-Surf+AU-243LFP13	TTI11004	63	3	406.6687012
XtendiMax+NutriFuseZMn+AU-243LFP13	TTI11004	63	1	472.430542
XtendiMax+NutriFuseZMn+AU-243LFP13	TTI11004	63	2	473.1234741
XtendiMax+NutriFuseZMn+AU-243LFP13	TTI11004	63	3	476.6599731
XtendiMax+Optima+AU-243LFP13	TTI11004	63	1	442.2426453
XtendiMax+Optima+AU-243LFP13	TTI11004	63	2	434.2297974
XtendiMax+Optima+AU-243LFP13	TTI11004	63	3	440.3987427
XtendiMax+Outlook+AU-243LFP13	TTI11004	63	1	398.8097534
XtendiMax+Outlook+AU-243LFP13	TTI11004	63	2	402.6950073
XtendiMax+Outlook+AU-243LFP13	TTI11004	63	3	398.989563
XtendiMax+Overrule+AU-243LFP13	TTI11004	63	1	444.4112244
XtendiMax+Overrule+AU-243LFP13	TTI11004	63	2	450.2256165
XtendiMax+Overrule+AU-243LFP13	TTI11004	63	3	448.8983154
XtendiMax+Parachute+AU-243LFP13	TTI11004	63	1	401.7666321
XtendiMax+Parachute+AU-243LFP13	TTI11004	63	2	403.6176758
XtendiMax+Parachute+AU-243LFP13	TTI11004	63	3	401.3626099
XtendiMax+PenetratorPlus+AU-243LFP13	TTI11004	63	1	429.4760132
XtendiMax+PenetratorPlus+AU-243LFP13	TTI11004	63	2	430.5834961
XtendiMax+PenetratorPlus+AU-243LFP13	TTI11004	63	3	425.3835754
XtendiMax+PepperSpray+AU-243LFP13	TTI11004	63	1	441.0364075
XtendiMax+PepperSpray+AU-243LFP13	TTI11004	63	2	439.8929138
XtendiMax+PepperSpray+AU-243LFP13	TTI11004	63	3	435.1860657
XtendiMax+Peptoil+AU-243LFP13	TTI11004	63	1	421.2349854
XtendiMax+Peptoil+AU-243LFP13	TTI11004	63	2	425.8980103
XtendiMax+Peptoil+AU-243LFP13	TTI11004	63	3	422.8561096
XtendiMax+Permeate+AU-243LFP13	TTI11004	63	1	398.9606323
XtendiMax+Permeate+AU-243LFP13	TTI11004	63	2	398.3580017
XtendiMax+Permeate+AU-243LFP13	TTI11004	63	3	399.3138428
XtendiMax+PIN-DEE3.3EC+AU-243LFP13	TTI11004	63	1	406.1748352
XtendiMax+PIN-DEE3.3EC+AU-243LFP13	TTI11004	63	2	408.8768005
XtendiMax+PIN-DEE3.3EC+AU-243LFP13	TTI11004	63	3	406.321228

797.5734863	1543.483276	0.728067338	0	0	0	0	0
798.5113525	1546.587646	0.724356711	0	0	0	0	0
962.1086426	1745.570801	0.507485032	0	0	0	0	0
968.2805786	1753.657837	0.49010399	0	0	0	0	0
969.5352173	1757.163086	0.49917835	0	0	0	0	0
840.8293457	1593.077148	0.661609471	0	0	0	0	0
839.6746826	1597.571533	0.647945464	0	0	0	0	0
835.1512451	1585.165894	0.656866372	0	0	0	0	0
948.2578125	1739.396484	0.550434411	0	0	0	0	0
949.81427	1735.259644	0.53250134	0	0	0	0	0
965.0006714	1753.218506	0.525815248	0	0	0	0	0
801.774231	1520.907715	0.722613275	0	0	0	0	0
804.130188	1523.830811	0.695978403	0	0	0	0	0
795.9540405	1511.540039	0.729335308	0	0	0	0	0
844.4190674	1611.706421	0.64344269	0	0	0	0	0
844.4373169	1606.059204	0.647734821	0	0	0	0	0
848.6470947	1617.631836	0.633165181	0	0	0	0	0
967.3641357	1749.128174	0.48378408	0	0	0	0	0
962.9489746	1742.384766	0.482566506	0	0	0	0	0
971.0109253	1749.598389	0.475025475	0	0	0	0	0
954.8063965	1749.70459	0.532041132	0	0	0	0	0
939.9074707	1737.457397	0.569545388	0	0	0	0	0
954.5957642	1754.167114	0.536581099	0	0	0	0	0
835.3706665	1604.546875	0.716166258	0	0	0	0	0
842.6757813	1617.737427	0.710657239	0	0	0	0	0
841.847229	1622.814575	0.715719044	0	0	0	0	0
919.1178589	1703.267334	0.53250277	0	0	0	0	0
927.4310303	1708.782593	0.505299687	0	0	0	0	0
931.4422607	1718.163696	0.496384233	0	0	0	0	0
818.7888794	1559.35498	0.699898124	0	0	0	0	0
826.1710205	1574.359741	0.691398799	0	0	0	0	0
815.7626343	1551.48999	0.724200189	0	0	0	0	0
877.2830811	1644.587524	0.586183786	0	0	0	0	0
881.8971558	1652.227905	0.589349449	0	0	0	0	0
870.6176147	1637.333252	0.605373621	0	0	0	0	0
930.5641479	1721.471191	0.578386724	0	0	0	0	0
925.5665894	1714.147705	0.59125948	0	0	0	0	0
922.4584351	1714.244019	0.590425313	0	0	0	0	0
869.1737061	1643.025635	0.601596653	0	0	0	0	0
874.6774902	1644.806885	0.587658226	0	0	0	0	0
874.8981323	1649.36499	0.586690605	0	0	0	0	0
804.7678223	1527.901367	0.744295239	0	0	0	0	0
802.7282715	1534.514771	0.737641454	0	0	0	0	0
803.4202881	1531.642578	0.751916885	0	0	0	0	0
829.510498	1583.541016	0.681559265	0	0	0	0	0
836.1484985	1593.655151	0.663537085	0	0	0	0	0
833.9914551	1595.790039	0.676532686	0	0	0	0	0

0	0	0	0.000179825	0.000616455	0.00118416	0.00238304	0.00424103
0	0	0	0.000178452	0.000607071	0.00116837	0.00236633	0.00425949
0	0	0	2.36511E-06	0.000235825	0.000710068	0.00170067	0.00356903
0	0	0	2.21252E-06	0.000224686	0.000682907	0.00164154	0.00345978
0	0	0	2.36511E-06	0.000233688	0.000703125	0.00167564	0.0034938
0	0	0	2.99835E-05	0.000419388	0.000996857	0.00226791	0.00421997
0	0	0	6.36292E-05	0.000447464	0.000997162	0.0021946	0.00403755
0	0	0	3.28827E-05	0.000418777	0.000989914	0.00224777	0.00419044
0	0	0	6.30951E-05	0.000346298	0.000824356	0.00181068	0.0036058
0	0	0	2.39563E-05	0.000284729	0.000763397	0.00176689	0.00365852
0	0	0	2.89917E-05	0.000274353	0.000736465	0.00172966	0.00368065
0	0	0	8.47626E-05	0.000533447	0.00115311	0.00245285	0.00433502
0	0	0	9.01031E-05	0.000517197	0.00110695	0.00235207	0.0041861
0	0	0	7.66754E-05	0.00053009	0.00116035	0.00248314	0.00439369
0	0	0	9.40704E-05	0.000465164	0.000986938	0.00214195	0.00401695
0	0	0	8.86536E-05	0.000471039	0.00100586	0.00217018	0.00399323
0	0	0	7.20215E-05	0.000433426	0.000954208	0.0021199	0.00403229
0	0	0	2.13623E-06	0.000216141	0.00067131	0.0016227	0.00342247
0	0	0	1.75476E-06	0.000198059	0.000661545	0.00162491	0.00344093
0	0	0	1.60217E-06	0.00018158	0.000636215	0.00159447	0.00344696
0	0	0	0.000065155	0.000314331	0.000755386	0.00171631	0.00367027
0	0	0	8.17871E-05	0.0003685	0.000806274	0.00186958	0.00380859
0	0	0	8.76617E-05	0.000353699	0.000792694	0.00172745	0.00355888
0	0	0	0.000165024	0.000577011	0.0011335	0.0023484	0.00428093
0	0	0	0.000176239	0.000591736	0.00114273	0.0023275	0.00416733
0	0	1.14441E-06	0.0002108	0.000610199	0.00115143	0.00232002	0.00416779
0	0	0	1.70135E-05	0.000296555	0.000787964	0.0017836	0.00357307
0	0	0	2.59399E-06	0.000253906	0.000728607	0.00169762	0.00348022
0	0	0	1.53351E-05	0.000271606	0.00072731	0.00165848	0.00336311
0	0	0	8.09479E-05	0.000498581	0.00108871	0.0023642	0.00430817
0	0	0	5.40161E-05	0.000462036	0.00105408	0.00235046	0.00435654
0	0	0	5.92041E-05	0.000492783	0.0011161	0.00246613	0.00451118
0	0	0	1.77765E-05	0.000352631	0.000863113	0.0020105	0.00381798
0	0	0	1.13678E-05	0.000342484	0.00085701	0.0020237	0.00388359
0	0	0	3.56293E-05	0.000384674	0.000905762	0.00206619	0.00387611
0	0	0	5.21088E-05	0.000363083	0.000837631	0.0019429	0.00379997
0	0	0	6.14166E-05	0.00037941	0.00086113	0.00198151	0.00385735
0	0	0	8.67462E-05	0.000404892	0.000872574	0.00195648	0.00379517
0	0	0	6.87408E-05	0.00042244	0.000926666	0.00202866	0.00373909
0	0	0	3.92151E-05	0.00037735	0.000879974	0.00199989	0.00376167
0	0	0	0.000063858	0.000404129	0.000894241	0.00197662	0.00368668
0	0	0	6.72913E-05	0.000523529	0.00116776	0.00253784	0.00455154
0	0	0	8.09479E-05	0.000544205	0.00118271	0.00251205	0.0044062
0	0	0	8.00323E-05	0.000555115	0.00120934	0.00256569	0.00447571
0	0	0	0.000124893	0.000548935	0.00111221	0.00227982	0.00396774
0	0	0	9.49097E-05	0.000502014	0.00105942	0.00223503	0.0039698
0	0	0	0.000116806	0.000532608	0.00109161	0.00226395	0.00399208

0.00473297	0.00561523	0.0101391	0.0189823	0.0338332	0.0368893	0.0814256	0.102206
0.00481537	0.00574463	0.0103365	0.0191892	0.0339438	0.0368541	0.081142	0.101742
0.00400833	0.0041465	0.00609207	0.00993332	0.0178049	0.0208802	0.0514625	0.0736733
0.00390968	0.00407562	0.00603539	0.00987808	0.0176747	0.0206728	0.0508485	0.0727567
0.00390907	0.00404724	0.0059803	0.00981903	0.0176456	0.0206776	0.0508713	0.0727181
0.00451401	0.00483185	0.00794991	0.0145699	0.0270329	0.0309457	0.0720688	0.0954388
0.00436852	0.00481804	0.00817757	0.0151607	0.0279179	0.0316145	0.0728011	0.0954682
0.00452087	0.00490662	0.0081781	0.015047	0.0277985	0.0316464	0.0732566	0.0964285
0.00404068	0.00433609	0.00674004	0.0113824	0.0201682	0.0229966	0.0547977	0.0759631
0.00415535	0.00441383	0.00667915	0.0109989	0.019385	0.0222598	0.0537012	0.0754417
0.00430023	0.00463959	0.00697464	0.0111355	0.0189854	0.0214451	0.0514388	0.0724722
0.00451889	0.0049366	0.00856895	0.0164145	0.0307812	0.0349519	0.0799568	0.103333
0.00442726	0.00490768	0.00858002	0.0164087	0.030648	0.0347323	0.0794362	0.1028
0.00456856	0.00497414	0.00862953	0.0165784	0.0311916	0.0354752	0.0811655	0.104713
0.00454498	0.00521835	0.00894958	0.0161962	0.0288064	0.0318592	0.0721026	0.0935503
0.00439491	0.00494698	0.00846664	0.0155489	0.0281669	0.0315289	0.0720034	0.0940267
0.00458832	0.00524979	0.0089283	0.0160391	0.0284441	0.0314589	0.0712943	0.092715
0.00384422	0.0039669	0.00581863	0.00952667	0.0172371	0.0203784	0.0506086	0.072945
0.00383804	0.00391373	0.00568314	0.00931938	0.0170612	0.0203668	0.0509497	0.073746
0.00390495	0.00400322	0.00575432	0.00921822	0.0165889	0.019723	0.0494781	0.0721027
0.00448174	0.00512405	0.0081002	0.0130867	0.021589	0.0234302	0.0539851	0.0735609
0.00457161	0.00521393	0.00832863	0.013677	0.022781	0.0247175	0.0565334	0.0760789
0.00428307	0.00493629	0.00798645	0.0132351	0.0221053	0.0239807	0.05486	0.0740068
0.00476456	0.00544983	0.00936447	0.0169494	0.0299936	0.0329423	0.0738784	0.0948583
0.0045636	0.00518959	0.00896484	0.0164109	0.0293236	0.032376	0.0728703	0.0938316
0.00463829	0.00536934	0.00935532	0.0170412	0.0300806	0.0328674	0.073267	0.0935806
0.0039772	0.00426956	0.00676437	0.0118122	0.0214912	0.024759	0.0590352	0.0812074
0.00391441	0.00419029	0.00655594	0.0113147	0.0205627	0.0238163	0.0573073	0.0797041
0.00380295	0.00414474	0.00663322	0.0115887	0.0209766	0.0240817	0.0573694	0.0791171
0.00463554	0.00511368	0.00870781	0.0161655	0.029679	0.0334444	0.0764588	0.0992971
0.00472458	0.00518463	0.00870155	0.015937	0.0290884	0.032757	0.075005	0.0977038
0.00480896	0.00520699	0.00870712	0.0160471	0.0295341	0.0334229	0.0767329	0.0999596
0.00413551	0.00441383	0.00715172	0.0129362	0.0240175	0.0277354	0.0655896	0.088726
0.00422966	0.00449699	0.00719528	0.0128422	0.023695	0.0273407	0.064742	0.0877852
0.00417908	0.00448105	0.00733406	0.0133572	0.0247747	0.0284856	0.0669434	0.0899063
0.00428391	0.00464722	0.00731323	0.0123995	0.0217817	0.024537	0.0576114	0.0786098
0.00432945	0.00467728	0.00733719	0.012433	0.0218839	0.024706	0.0581219	0.0793913
0.00432869	0.00479744	0.00769226	0.013088	0.022753	0.0253481	0.0589054	0.0796917
0.00406715	0.0044989	0.0076162	0.014046	0.0258123	0.0292901	0.0678738	0.0900161
0.00409691	0.00445328	0.00736618	0.013434	0.0247972	0.0283865	0.0664787	0.0891076
0.00405945	0.00451805	0.00763123	0.0139642	0.0254918	0.0288448	0.0668186	0.0888023
0.00475861	0.00511765	0.00864708	0.0162363	0.0302702	0.0344109	0.079002	0.102543
0.00453819	0.00491081	0.00850693	0.0163623	0.0308037	0.0350229	0.0800737	0.103251
0.00455795	0.0048703	0.00837593	0.0161279	0.0305037	0.034807	0.0798241	0.103194
0.00415871	0.00463348	0.00817261	0.0156724	0.0291788	0.0329563	0.0752402	0.0975494
0.00420052	0.00464958	0.00807816	0.0153223	0.0284679	0.0322243	0.0738764	0.0962823
0.00423561	0.00473366	0.00828812	0.0157163	0.0290295	0.032672	0.0744687	0.0965182

0.123299	0.129511	0.121008	0.11183	0.0894287	0.063018	0.0386783	0.0202964
0.122777	0.129106	0.120822	0.111882	0.0896889	0.0633746	0.0389953	0.0205007
0.101253	0.120877	0.128193	0.134775	0.122435	0.0967719	0.0647487	0.0358276
0.10013	0.119895	0.127708	0.135028	0.12347	0.0982293	0.0660711	0.0366836
0.0999319	0.119514	0.12726	0.134701	0.123513	0.098656	0.0666197	0.0370946
0.120412	0.131275	0.126524	0.120085	0.0982441	0.0705281	0.0438667	0.0232054
0.119689	0.130076	0.125339	0.119275	0.0980978	0.0709069	0.0443833	0.0235803
0.121031	0.131351	0.126073	0.119168	0.097082	0.069394	0.0429961	0.0226808
0.101918	0.119678	0.125663	0.131536	0.11952	0.0947672	0.063644	0.0353117
0.102255	0.120821	0.127137	0.132845	0.120091	0.0945465	0.0630706	0.0348279
0.0990935	0.118472	0.126338	0.133923	0.122825	0.0979553	0.0659788	0.0366525
0.126932	0.134454	0.125526	0.114746	0.0897486	0.0612466	0.0363226	0.0185493
0.126578	0.13444	0.125834	0.115268	0.0902818	0.0616572	0.0365894	0.0187006
0.128149	0.135005	0.1252	0.113608	0.0882402	0.0599029	0.0354313	0.0180818
0.116956	0.127511	0.12384	0.119239	0.0994431	0.0728399	0.0460357	0.0245922
0.117957	0.128742	0.124899	0.119849	0.0993833	0.0722739	0.0453677	0.0241174
0.116242	0.127155	0.123953	0.119829	0.10034	0.073765	0.0467487	0.0250155
0.100795	0.12087	0.128671	0.1357	0.123538	0.0977275	0.0653767	0.0361552
0.10198	0.122064	0.129433	0.135748	0.122794	0.0965474	0.0642878	0.0354521
0.100517	0.121288	0.129575	0.136804	0.12442	0.0981903	0.0655111	0.0361546
0.0985255	0.116518	0.123759	0.131269	0.120775	0.0966914	0.065321	0.0363474
0.100488	0.117254	0.123059	0.129194	0.117918	0.0939082	0.0632769	0.0351805
0.0982778	0.115606	0.122589	0.130283	0.120461	0.0970734	0.0659851	0.036881
0.117449	0.126984	0.122501	0.117362	0.0975877	0.071432	0.0451954	0.0241836
0.116481	0.126337	0.122415	0.118038	0.099019	0.0732244	0.0467526	0.0251704
0.115578	0.125068	0.121228	0.117258	0.0989226	0.0736794	0.0473552	0.0256114
0.107402	0.123703	0.126896	0.129293	0.114166	0.0881487	0.0580217	0.0317992
0.106516	0.123787	0.127881	0.130933	0.115899	0.0895192	0.0588832	0.0322469
0.10525	0.122231	0.126634	0.130459	0.116499	0.0908699	0.060277	0.0331973
0.12308	0.131973	0.125126	0.116692	0.0936397	0.0658709	0.0402395	0.0210186
0.121591	0.131035	0.12502	0.117527	0.0952503	0.0677709	0.0418481	0.0220334
0.124016	0.132817	0.125523	0.116462	0.0928428	0.064862	0.0394005	0.0205063
0.114737	0.128572	0.127685	0.125213	0.105975	0.0785095	0.0500174	0.0268554
0.113822	0.127927	0.127499	0.125605	0.106901	0.0796597	0.050994	0.0274626
0.115478	0.128621	0.127072	0.124076	0.104644	0.077292	0.0491152	0.0263186
0.103974	0.120537	0.12509	0.129458	0.116326	0.0912743	0.060784	0.0335363
0.104955	0.121417	0.125548	0.129277	0.115458	0.0900325	0.0596583	0.0328116
0.104741	0.120762	0.124656	0.128321	0.11475	0.0897188	0.0596316	0.0328751
0.114643	0.127122	0.125508	0.122925	0.104343	0.0777355	0.0498052	0.0268441
0.114467	0.12776	0.126699	0.124361	0.105524	0.0784038	0.0500476	0.0268899
0.113566	0.126606	0.12573	0.12384	0.105608	0.0789081	0.0506177	0.0272887
0.126424	0.134287	0.125632	0.115078	0.0902852	0.0619437	0.0370105	0.0190392
0.126415	0.13345	0.124321	0.113796	0.0897158	0.0622497	0.0377291	0.0196444
0.126591	0.133846	0.124826	0.114272	0.0899285	0.0621191	0.0374195	0.0193755
0.120985	0.130261	0.124524	0.117641	0.0960486	0.0689013	0.0428346	0.0226486
0.120039	0.129913	0.124847	0.118621	0.0974482	0.0703362	0.0439463	0.0233101
0.119801	0.129225	0.123941	0.11775	0.0969693	0.0703323	0.0441924	0.0235454

0.000501106	0
0.000506482	0
0.000899322	0
0.000921809	0
0.000933054	0
0.000574374	0
0.000584463	0
0.00056083	0
0.000887156	0
0.000873611	0
0.000921123	0
0.000453524	0
0.000457408	0
0.000442102	0
0.000610509	0
0.000597734	0
0.000621345	0
0.000907308	0
0.00088888	0
0.000906632	0
0.000913881	0
0.00088445	0
0.000928725	0
0.000600807	0
0.000626561	0
0.000638493	0
0.000795868	0
0.000806855	0
0.000832174	0
0.000518017	0
0.000544528	0
0.000504813	0
0.000667819	0
0.000683557	0
0.000653993	0
0.000840996	0
0.000822009	0
0.000824292	0
0.000668337	0
0.000668708	0
0.0006794	0
0.000466888	0
0.000483849	0
0.000476224	0
0.000560483	0
0.000577416	0
0.000584163	0

76980	1	12/18/18	14:08	91786	W1835269
76980	1	12/18/18	14:08	91786	W1835269
76980	1	12/18/18	14:08	91786	W1835269
76980	1	12/18/18	14:11	99724	W1835270
76980	1	12/18/18	14:11	99724	W1835270
76980	1	12/18/18	14:11	99724	W1835270
76980	1	12/18/18	14:15	17299	W1835271
76980	1	12/18/18	14:15	17299	W1835271
76980	1	12/18/18	14:15	17299	W1835271
76980	1	12/18/18	14:19	86551	W1835272
76980	1	12/18/18	14:19	86551	W1835272
76980	1	12/18/18	14:19	86551	W1835272
76980	1	12/18/18	14:23	71478	W1835273
76980	1	12/18/18	14:23	71478	W1835273
76980	1	12/18/18	14:23	71478	W1835273
76980	1	12/18/18	14:27	63148	W1835274
76980	1	12/18/18	14:27	63148	W1835274
76980	1	12/18/18	14:27	63148	W1835274
76980	1	12/18/18	14:31	36467	W1835275
76980	1	12/18/18	14:31	36467	W1835275
76980	1	12/18/18	14:31	36467	W1835275
76980	1	12/18/18	14:35	81978	W1835276
76980	1	12/18/18	14:35	81978	W1835276
76980	1	12/18/18	14:35	81978	W1835276
76980	1	12/18/18	14:39	26199	W1835277
76980	1	12/18/18	14:39	26199	W1835277
76980	1	12/18/18	14:39	26199	W1835277

XtendiMax+PowerMax+AU-243LFP13	TTI11004	63	1	407.6152954
XtendiMax+PowerMax+AU-243LFP13	TTI11004	63	2	412.1933594
XtendiMax+PowerMax+AU-243LFP13	TTI11004	63	3	410.025116
XtendiMax+Preference+AU-243LFP13	TTI11004	63	1	450.1666565
XtendiMax+Preference+AU-243LFP13	TTI11004	63	2	454.4779663
XtendiMax+Preference+AU-243LFP13	TTI11004	63	3	447.1388855
XtendiMax+Primary+AU-243LFP13	TTI11004	63	1	443.7375183
XtendiMax+Primary+AU-243LFP13	TTI11004	63	2	444.598114
XtendiMax+Primary+AU-243LFP13	TTI11004	63	3	440.8810425
XtendiMax+Princep4L+AU-243LFP13	TTI11004	63	1	453.3868408
XtendiMax+Princep4L+AU-243LFP13	TTI11004	63	2	465.2625427
XtendiMax+Princep4L+AU-243LFP13	TTI11004	63	3	460.2856445
XtendiMax+PrincepCaliber90+AU-243LFP13	TTI11004	63	1	461.0264282
XtendiMax+PrincepCaliber90+AU-243LFP13	TTI11004	63	2	460.2395325
XtendiMax+PrincepCaliber90+AU-243LFP13	TTI11004	63	3	453.4884338
XtendiMax+Pro90+AU-243LFP13	TTI11004	63	1	435.5053711
XtendiMax+Pro90+AU-243LFP13	TTI11004	63	2	441.5957031
XtendiMax+Pro90+AU-243LFP13	TTI11004	63	3	435.3414001
XtendiMax+Pro-Tron+AU-243LFP13	TTI11004	63	1	375.1148987
XtendiMax+Pro-Tron+AU-243LFP13	TTI11004	63	2	377.9790039
XtendiMax+Pro-Tron+AU-243LFP13	TTI11004	63	3	373.36203
XtendiMax+ProvinceII+AU-243LFP13	TTI11004	63	1	466.536499
XtendiMax+ProvinceII+AU-243LFP13	TTI11004	63	2	461.5248413
XtendiMax+ProvinceII+AU-243LFP13	TTI11004	63	3	461.3007507
XtendiMax+EezyMan+AU-243LFP13	TTI11004	63	1	417.0041504
XtendiMax+EezyMan+AU-243LFP13	TTI11004	63	2	417.3651123
XtendiMax+EezyMan+AU-243LFP13	TTI11004	63	3	410.2248535

923.2710571	1740.513062	0.691170156	1.06812E-06	2.89917E-05	4.89807E-05	5.25665E-05	5.74493E-05
939.2220459	1754.484009	0.642376602	8.39233E-07	2.28882E-05	3.91388E-05	4.29535E-05	5.05829E-05
932.0796509	1749.116943	0.663873374	0	0	0	0	0
931.2628784	1717.421631	0.522227585	0	0	0	0	0
941.5115967	1726.045288	0.48839438	0	0	0	0	0
922.9920044	1707.175171	0.525371432	0	0	0	0	0
943.9539795	1738.786987	0.494539887	0	0	0	0	0
936.3955078	1728.692139	0.510009527	0	0	0	0	0
928.206543	1718.803101	0.514623106	0	0	0	0	0
935.5393677	1720.703735	0.529251635	0	0	0	0	0
955.5123901	1741.072998	0.494527817	0	0	0	0	0
944.6188354	1727.385498	0.501529276	0	0	0	0	0
961.020813	1751.054565	0.49891296	0	0	0	0	0
955.2979126	1744.460938	0.511911035	0	0	0	0	0
946.7195435	1737.667847	0.528051794	0	0	0	0	0
905.4634399	1692.348511	0.535817742	0	0	0	0	0
908.5073242	1691.840454	0.528554857	0	0	0	0	0
899.6694336	1683.93396	0.543221116	0	0	0	0	0
777.5748291	1507.921997	0.821743786	0	0	0	0	0
780.1732178	1516.465332	0.806725621	0	0	0	0	0
769.8111572	1490.041138	0.832209349	0	0	0	0	0
953.6834717	1734.070435	0.500537753	0	0	0	0	0
943.6525879	1724.273804	0.514861107	0	0	0	0	0
946.1705933	1728.23291	0.526838124	0	0	0	0	0
868.8532715	1653.106812	0.611653447	0	0	0	0	0
862.1337891	1636.933105	0.625135362	0	0	0	0	0
849.5128784	1625.893433	0.637394547	0	0	0	0	0

1.49536E-05	7.62939E-08	3.12042E-05	0.000242462	0.000545044	0.00100113	0.00209373	0.00414558
2.78473E-05	5.64575E-06	4.62341E-05	0.000219116	0.000480957	0.000894547	0.00192932	0.00397972
0	1.60217E-06	3.64685E-05	0.00024086	0.000534897	0.000982971	0.00206642	0.00412354
0	0	0	8.46863E-06	0.000282822	0.000771561	0.00175629	0.00351677
0	0	0	1.98364E-06	0.000210876	0.000673752	0.00163612	0.00348488
0	0	0	2.59399E-06	0.000257492	0.000758438	0.00177101	0.00361351
0	0	0	2.08282E-05	0.000265274	0.000704651	0.00162941	0.00344353
0	0	0	1.77765E-05	0.000278091	0.000739975	0.0016938	0.00349312
0	0	0	0.000021286	0.000283661	0.000747375	0.00170616	0.0035202
0	0	0	1.13678E-05	0.000280838	0.000771637	0.00177528	0.00359421
0	0	0	2.13623E-06	0.000222626	0.000696487	0.00166756	0.00345848
0	0	0	2.59399E-06	0.000248337	0.000718231	0.00168526	0.00346428
0	0	0	2.51007E-05	0.000271759	0.000720139	0.00165558	0.00340729
0	0	0	1.36566E-05	0.000271606	0.00074173	0.00171074	0.00349548
0	0	0	0.000039978	0.000316391	0.000789719	0.00175362	0.00348564
0	0	0	4.19617E-06	0.000283585	0.000786057	0.00180023	0.00364471
0	0	0	3.35693E-06	0.000291061	0.000794983	0.00178856	0.0035128
0	0	0	1.26648E-05	0.000308075	0.000816956	0.00182831	0.00360352
0	0	0	0.000170364	0.000664597	0.00131844	0.0027095	0.00488297
0	0	0	0.000173416	0.000673141	0.00132072	0.00266525	0.00468948
0	0	0	0.000179825	0.000685654	0.00134682	0.00274094	0.00489838
0	0	0	2.5177E-06	0.000246353	0.000715027	0.00168243	0.0034597
0	0	0	2.5177E-06	0.000248566	0.000736313	0.00173523	0.00355469
0	0	0	8.92639E-06	0.000270309	0.000758972	0.0017672	0.00360992
0	0	1.37329E-06	0.000200882	0.000558701	0.00102333	0.0019809	0.00339645
0	0	0	0.000187302	0.000564346	0.00104683	0.00203835	0.00348183
0	0	3.8147E-06	0.000233841	0.000613861	0.00109436	0.00205368	0.00341438

0.0051223	0.00614677	0.0102206	0.0168194	0.0269529	0.0279179	0.0606451	0.0776847
0.00508888	0.00618912	0.010244	0.0165755	0.0261013	0.0267968	0.0581123	0.0748782
0.00512589	0.00615562	0.0101934	0.0166534	0.0265079	0.0273623	0.0593839	0.0762236
0.00388863	0.00413422	0.00648972	0.0112922	0.0206009	0.0238383	0.0571738	0.0792159
0.00401993	0.00432854	0.0066629	0.0111606	0.0198552	0.0228482	0.0550481	0.0770525
0.00403008	0.0042807	0.00666893	0.0115153	0.0209588	0.024263	0.0582164	0.08057
0.00412048	0.00468391	0.00753975	0.0126685	0.0217193	0.0240587	0.0559465	0.0761978
0.00405266	0.00450249	0.00720444	0.012286	0.0215535	0.0242431	0.056923	0.0778154
0.00410225	0.00458817	0.00738838	0.0126313	0.0221152	0.024799	0.0580254	0.0790329
0.00397728	0.00417336	0.00640205	0.0109435	0.0199349	0.0232066	0.0561333	0.0784299
0.00383652	0.00396446	0.00592865	0.00997002	0.0182518	0.0215204	0.0529166	0.0752453
0.00385567	0.00403061	0.00612122	0.0103909	0.0189908	0.0222771	0.0544395	0.0769211
0.00387169	0.00415047	0.00639076	0.0107129	0.0190387	0.0218845	0.0527333	0.0740178
0.00391373	0.00413383	0.00630981	0.0106106	0.0190478	0.0220541	0.0533871	0.0750523
0.00387764	0.00415184	0.0065107	0.0111904	0.0201247	0.023102	0.0551986	0.076524
0.00411621	0.0045015	0.00725723	0.0127401	0.0229847	0.0261784	0.0615774	0.0834766
0.00383453	0.00410149	0.00662109	0.0119168	0.0221154	0.0256242	0.0610181	0.0834402
0.00398079	0.00431778	0.00702759	0.0126005	0.0231245	0.0265359	0.0625909	0.0847954
0.00544907	0.00636101	0.0111971	0.0204696	0.0358902	0.038754	0.0847816	0.105367
0.00513123	0.00598831	0.010723	0.0200298	0.0356296	0.0387015	0.0848345	0.105371
0.00544388	0.00636963	0.0112814	0.0207494	0.0365136	0.0394805	0.0863705	0.107167
0.0038205	0.00392838	0.00584206	0.00980553	0.0180155	0.0213431	0.0527562	0.0753872
0.00390587	0.00401016	0.00599014	0.0101318	0.0186763	0.0220901	0.0543424	0.0771193
0.00397728	0.00409157	0.00609146	0.0102072	0.0186544	0.0219771	0.053974	0.0765845
0.00365105	0.00425072	0.00772255	0.0148226	0.0272353	0.0304597	0.0692213	0.090066
0.00368355	0.00420937	0.00757683	0.0145977	0.0270878	0.0305421	0.0699058	0.0914345
0.00360771	0.00424782	0.00793182	0.0155697	0.0288437	0.0322256	0.0727729	0.0936934

0.0989952	0.11298	0.117483	0.123666	0.114296	0.0926748	0.0635076	0.0357232
0.0965201	0.111702	0.117786	0.125552	0.117194	0.095667	0.0658169	0.0370995
0.0975964	0.112119	0.117453	0.124558	0.115872	0.0944132	0.0649016	0.0365709
0.105594	0.122649	0.126938	0.130569	0.116429	0.0907336	0.0601618	0.0331254
0.103904	0.122004	0.127462	0.132127	0.118497	0.0926779	0.0615651	0.033928
0.10705	0.123704	0.127199	0.129849	0.114867	0.0888611	0.0585985	0.0321599
0.101289	0.118479	0.124324	0.130285	0.118633	0.094306	0.0634963	0.0353011
0.103239	0.120105	0.12509	0.12995	0.117273	0.0924811	0.0619028	0.0342945
0.104463	0.120993	0.125323	0.12931	0.115809	0.0906595	0.0603383	0.0333075
0.105208	0.122747	0.127426	0.131331	0.117251	0.0914474	0.0606809	0.0334364
0.102564	0.121442	0.127858	0.133652	0.12099	0.0955321	0.0639616	0.0354297
0.104224	0.122642	0.128214	0.132885	0.119106	0.0930869	0.0617991	0.0340434
0.100447	0.119159	0.126252	0.133221	0.121892	0.0971968	0.065556	0.0364783
0.101696	0.120183	0.126664	0.132838	0.12082	0.0958812	0.0644654	0.0358092
0.10252	0.120139	0.125865	0.131446	0.119192	0.0943769	0.0633541	0.0351574
0.108928	0.123932	0.125753	0.126938	0.111327	0.0856721	0.056383	0.0309404
0.109447	0.12488	0.126844	0.127952	0.111969	0.0858886	0.0563421	0.0308424
0.11031	0.124938	0.126078	0.126467	0.110184	0.0842814	0.0552202	0.0302221
0.125719	0.130335	0.119861	0.108625	0.0849188	0.0584955	0.0352686	0.01831
0.125509	0.129957	0.11956	0.108682	0.0854925	0.0594042	0.0361263	0.0188721
0.127409	0.13134	0.119842	0.107493	0.082983	0.0563899	0.0335947	0.0172964
0.10313	0.122376	0.128875	0.134395	0.120989	0.0947659	0.062938	0.0346578
0.104694	0.123241	0.128743	0.133188	0.119031	0.0926906	0.0613253	0.0336994
0.104055	0.122662	0.128393	0.133191	0.119447	0.0933596	0.0619545	0.03411
0.113222	0.124775	0.123255	0.12153	0.10435	0.0787892	0.051064	0.0277316
0.115153	0.126679	0.124452	0.121554	0.103025	0.0766629	0.0490542	0.026407
0.11628	0.126319	0.122855	0.1191	0.100468	0.0746022	0.0477244	0.0257052

0.000901565	0
0.000936884	0
0.000923443	0
0.000830282	0
0.000850619	0
0.000805297	0
0.000887559	0
0.000861323	0
0.000835574	0
0.000838355	0
0.000889729	0
0.000853403	0
0.000917393	0
0.000900101	0
0.000883439	0
0.000774908	0
0.000771789	0
0.000756312	0
0.000450619	0
0.000465418	0
0.000424484	0
0.000868604	0
0.000844067	0
0.000854862	0
0.000692119	0
0.000657136	0
0.000639872	0

Material	Batch	Date	Time	Material ID	Battelle_ID
76980	1	12/19/18	7:06	11117	W1835301A
76980	1	12/19/18	7:06	11117	W1835301A
76980	1	12/19/18	7:06	11117	W1835301A
76980	1	12/19/18	7:11	11116	W1835301B
76980	1	12/19/18	7:11	11116	W1835301B
76980	1	12/19/18	7:11	11116	W1835301B
76980	1	12/19/18	7:16	11115	W1835301C
76980	1	12/19/18	7:16	11115	W1835301C
76980	1	12/19/18	7:16	11115	W1835301C
76980	1	12/19/18	7:21	11114	W1835301D
76980	1	12/19/18	7:21	11114	W1835301D
76980	1	12/19/18	7:21	11114	W1835301D
76980	1	12/19/18	7:25	11113	W1835301E
76980	1	12/19/18	7:25	11113	W1835301E
76980	1	12/19/18	7:25	11113	W1835301E
76980	1	12/19/18	7:29	11112	W1835301F
76980	1	12/19/18	7:29	11112	W1835301F
76980	1	12/19/18	7:29	11112	W1835301F
76980	1	12/19/18	7:32	11117	W1835302A
76980	1	12/19/18	7:32	11117	W1835302A
76980	1	12/19/18	7:32	11117	W1835302A
76980	1	12/19/18	7:36	11116	W1835302B
76980	1	12/19/18	7:36	11116	W1835302B
76980	1	12/19/18	7:36	11116	W1835302B
76980	1	12/19/18	7:40	11115	W1835302C
76980	1	12/19/18	7:40	11115	W1835302C
76980	1	12/19/18	7:40	11115	W1835302C
76980	1	12/19/18	7:45	11114	W1835302D
76980	1	12/19/18	7:45	11114	W1835302D
76980	1	12/19/18	7:45	11114	W1835302D
76980	1	12/19/18	7:49	11113	W1835302E
76980	1	12/19/18	7:49	11113	W1835302E
76980	1	12/19/18	7:49	11113	W1835302E
76980	1	12/19/18	7:53	11112	W1835302F
76980	1	12/19/18	7:53	11112	W1835302F
76980	1	12/19/18	7:53	11112	W1835302F
76980	1	12/19/18	8:01	76980	W1835303
76980	1	12/19/18	8:01	76980	W1835303
76980	1	12/19/18	8:01	76980	W1835303
76980	1	12/19/18	8:05	89870	W1835304
76980	1	12/19/18	8:05	89870	W1835304
76980	1	12/19/18	8:05	89870	W1835304
76980	1	12/19/18	8:10	19551	W1835305
76980	1	12/19/18	8:10	19551	W1835305
76980	1	12/19/18	8:10	19551	W1835305
76980	1	12/19/18	8:14	96263	W1835306

Spray_solution_name	Nozzle	Pressure	Rep	DV10
Water+6515+21.7	6515	21.7	1	383.6894226
Water+6515+21.7	6515	21.7	2	383.5056152
Water+6515+21.7	6515	21.7	3	378.4394836
Water+6510+29.0	6510	29.0	1	260.1959534
Water+6510+29.0	6510	29.0	2	259.0921631
Water+6510+29.0	6510	29.0	3	259.3218994
Water+8008+36.3	8008	36.3	1	202.5895996
Water+8008+36.3	8008	36.3	2	201.1018066
Water+8008+36.3	8008	36.3	3	202.4185486
Water+11006+29.0	11006	29.0	1	162.0602722
Water+11006+29.0	11006	29.0	2	161.6988373
Water+11006+29.0	11006	29.0	3	161.2457275
Water+11003+43.5	11003	43.5	1	104.7119217
Water+11003+43.5	11003	43.5	2	105.050354
Water+11003+43.5	11003	43.5	3	104.4253845
Water+11001+65.3	11001	65.3	1	53.07779694
Water+11001+65.3	11001	65.3	2	52.98160934
Water+11001+65.3	11001	65.3	3	52.78881454
Water+NIS+6515+21.7	6515	21.7	1	328.3388367
Water+NIS+6515+21.7	6515	21.7	2	331.6969299
Water+NIS+6515+21.7	6515	21.7	3	327.2038574
Water+NIS+6510+29.0	6510	29.0	1	239.7263489
Water+NIS+6510+29.0	6510	29.0	2	237.3975372
Water+NIS+6510+29.0	6510	29.0	3	239.5718079
Water+NIS+8008+36.3	8008	36.3	1	185.1102448
Water+NIS+8008+36.3	8008	36.3	2	186.0082855
Water+NIS+8008+36.3	8008	36.3	3	185.4272156
Water+NIS+11006+29.0	11006	29.0	1	154.8252411
Water+NIS+11006+29.0	11006	29.0	2	153.5113678
Water+NIS+11006+29.0	11006	29.0	3	153.1466675
Water+NIS+11003+43.5	11003	43.5	1	100.5658264
Water+NIS+11003+43.5	11003	43.5	2	100.2697678
Water+NIS+11003+43.5	11003	43.5	3	99.99482727
Water+NIS+11001+65.3	11001	65.3	1	52.42773438
Water+NIS+11001+65.3	11001	65.3	2	52.64442444
Water+NIS+11001+65.3	11001	65.3	3	52.20228577
XtendiMax	TTI11004	63	1	375.5379334
XtendiMax	TTI11004	63	2	375.2148132
XtendiMax	TTI11004	63	3	374.9599304
XtendiMax+Induce	TTI11004	63	1	288.1946106
XtendiMax+Induce	TTI11004	63	2	289.8488159
XtendiMax+Induce	TTI11004	63	3	287.752533
XtendiMax+Provoke+AU-243LFP13	TTI11004	63	1	454.866333
XtendiMax+Provoke+AU-243LFP13	TTI11004	63	2	452.2738953
XtendiMax+Provoke+AU-243LFP13	TTI11004	63	3	459.3208923
XtendiMax+Pummel+AU-243LFP13	TTI11004	63	1	354.942749

VMD	DV90	%_141	18	22	26	30	36
807.0581665	1555.669556	1.119729996	3.28064E-06	7.75909E-05	0.000113983	0.000113525	0.000130081
798.5466309	1538.301392	1.129814029	3.35693E-06	7.95746E-05	0.000116806	0.000114975	0.00012619
790.0912476	1522.649658	1.174039006	3.66211E-06	8.56018E-05	0.000123367	0.000119247	0.000130081
567.9553223	1124.468384	2.892946482	9.38E-06	0.000200958	0.000238495	0.000199203	0.000243301
562.5036621	1095.932861	2.90344739	9.38E-06	0.00020134	0.000237885	0.000197525	0.000240631
562.9624634	1094.560669	2.918810368	9.31E-06	0.000199432	0.000233688	0.000191193	0.000229416
446.1215515	840.1594238	4.779601097	1.25E-05	0.000256653	0.000278549	0.000233231	0.000395508
444.9655151	840.8215332	4.859753132	1.24E-05	0.000254822	0.000278625	0.000237427	0.000409393
444.8829651	835.2260742	4.782450199	1.22E-05	0.000250473	0.000273056	0.000233307	0.000409164
360.1791077	659.9724121	7.430284977	1.37E-05	0.000285721	0.000352936	0.000397491	0.000848923
359.7522888	660.0139771	7.467453957	1.35E-05	0.000281143	0.000349274	0.000397034	0.000853119
359.0141296	661.5217896	7.507527828	1.36E-05	0.000282364	0.000346909	0.00039238	0.000848694
238.376358	440.3709106	19.06295204	2.84E-05	0.000671158	0.0011261	0.00154297	0.00318047
239.1610565	441.5802612	18.94932365	2.91E-05	0.000685272	0.00113174	0.00152885	0.00312141
237.7058716	439.2127686	19.17736435	2.91E-05	0.000688934	0.00115196	0.00157097	0.00322083
110.6428909	218.5131226	67.23203278	1.52E-04	0.00543823	0.00691429	0.00738014	0.0131415
110.3019485	217.8256989	67.41737366	1.47E-04	5.27E-03	0.00672867	0.00726959	0.0131713
110.5336456	219.305542	67.20271301	1.52E-04	0.00543945	0.00697327	0.00751846	0.013466
710.9940796	1423.323975	0.828255296	0	0	0	0	0
718.5906982	1447.797607	0.791623235	0	0	0	0	0
706.8455811	1411.273315	0.844772458	0	0	0	0	0
525.9175415	1017.47876	2.583968401	4.58E-06	9.67407E-05	0.000105438	6.99615E-05	4.75311E-05
522.2294922	1014.56958	2.654833078	4.58E-06	9.51385E-05	0.00010231	6.72913E-05	4.92859E-05
523.907959	1011.776001	2.585047483	4.65E-06	9.81903E-05	0.000106201	6.88171E-05	4.26483E-05
406.518158	772.7219238	5.194022179	6.33E-06	0.000123138	0.000116882	9.13239E-05	0.000200882
407.6071777	775.6560059	5.131796837	6.33E-06	0.000121765	0.000114212	8.78906E-05	0.00019516
407.151825	771.5689087	5.188947201	6.33E-06	0.000122299	0.000115585	8.94928E-05	0.000196686
338.5875854	627.1575317	7.946437836	5.42E-06	0.000106812	0.000117111	0.000139389	0.000393448
335.3733215	618.4161987	8.117407799	5.34E-06	0.000104218	0.000114136	0.000139923	0.000406647
335.770752	621.409668	8.167320251	5.80E-06	0.000113831	0.000125275	0.000146027	0.000401611
224.4451752	416.932373	21.50320625	2.27E-05	0.000557632	0.00101082	0.00144173	0.00301636
224.3414612	416.4768066	21.57651711	2.18E-05	0.000533676	0.000967789	0.00139259	0.00295921
224.248642	415.7529602	21.59266853	2.20E-05	0.000539474	0.000984268	0.0014254	0.00304298
108.5792007	214.8083344	68.62081146	1.49E-04	5.36E-03	6.92E-03	7.54E-03	1.37E-02
108.8432007	213.5234222	68.57144928	1.46E-04	5.26E-03	6.80E-03	7.43E-03	1.35E-02
108.5151672	213.7461243	68.71282959	1.50E-04	5.42E-03	7.08E-03	7.76E-03	1.40E-02
836.5075684	1636.686401	0.727257788	7.63E-08	5.72E-06	3.00E-05	4.59E-05	7.15E-05
839.1973267	1641.552612	0.712813735	0	3.36E-06	2.45E-05	4.14E-05	6.90E-05
836.3720703	1636.947754	0.717027605	0	3.43E-06	2.45E-05	4.07E-05	6.61E-05
562.190979	1036.781128	1.281621933	0	0	0	0	0
565.8363647	1038.668945	1.287749529	0	0	0	0	0
560.4696655	1028.83667	1.286473036	0	0	0	0	0
935.4055786	1721.933472	0.56370604	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
935.2744141	1722.639404	0.550766766	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
941.1472778	1725.68042	0.541110158	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
788.6471558	1594.535278	0.866356134	0	0	0	0	0

44	52	62	74	86	100	120	150
9.39941E-05	7.35474E-05	0.000206223	0.000604095	0.00106522	0.00175674	0.00319572	0.00542496
7.70569E-05	4.95148E-05	0.000179138	0.000591965	0.00107903	0.0017971	0.00326843	0.00548355
8.39996E-05	6.54602E-05	0.000214539	0.000651398	0.00114632	0.00187248	0.00335716	0.00558456
0.000409241	0.000727768	0.00155876	0.00273293	0.00345673	0.00455261	0.00695511	0.0110912
0.00040802	0.000730667	0.00156784	0.0027475	0.00347198	0.00456886	0.00697693	0.0111414
0.000395279	0.000725632	0.00157661	0.00277504	0.00351044	0.00461563	0.00702881	0.011161
0.000943451	0.00170975	0.0031974	0.00497063	0.00569145	0.0070565	0.0106534	0.0183284
0.000970459	0.00174057	0.00323692	0.00502235	0.00575623	0.00715736	0.0108538	0.0187267
0.000978928	0.00175285	0.00324341	0.00500015	0.00569099	0.00702919	0.0105961	0.0182809
0.00198502	0.0030423	0.0050219	0.00717781	0.00795517	0.0100541	0.0163591	0.0311398
0.00199516	0.00305405	0.00503922	0.00720612	0.00799385	0.0101114	0.016458	0.0313035
0.00200485	0.0030793	0.00507957	0.0072493	0.00802605	0.0101453	0.016535	0.0315396
0.0058564	0.00742249	0.0110572	0.0156151	0.0184245	0.0254288	0.0444009	0.0821906
0.00573639	0.00729691	0.0109295	0.0155132	0.0183553	0.025347	0.0442225	0.0817717
0.00590279	0.00746124	0.0111028	0.0156818	0.0185182	0.0255772	0.0446733	0.0826451
0.0252251	0.0360981	0.0586948	0.0832729	0.0890065	0.102057	0.131521	0.154128
0.0255699	0.0366256	0.0593771	0.0839128	0.0893765	0.1022	0.131396	0.153711
0.0257349	0.0365343	0.0590114	0.083308	0.0887628	0.10159	0.130779	0.153241
0	2.82288E-06	0.000061264	0.000345383	0.000687256	0.00120018	0.00248619	0.00529869
0	0	4.24957E-05	0.000304871	0.000638199	0.00113815	0.00239609	0.00514587
0	0	4.57001E-05	0.000324249	0.000679398	0.0012149	0.00256149	0.00548088
7.98798E-05	0.000270233	0.00081543	0.00169998	0.00253403	0.00385818	0.00703583	0.0137801
0.000100327	0.000311356	0.000885468	0.00179329	0.00262238	0.00395096	0.00716759	0.0140531
7.15637E-05	0.000264893	0.000816879	0.00171043	0.00254875	0.00387161	0.00703865	0.0137572
0.000694122	0.00137276	0.00267799	0.00439987	0.00542946	0.00742142	0.0127761	0.0249169
0.000688171	0.00136848	0.00267021	0.00437721	0.00538261	0.00733177	0.0125885	0.0245615
0.000688171	0.00137047	0.00268433	0.00441925	0.00545296	0.00743958	0.0127595	0.0247752
0.00119003	0.00210472	0.00387749	0.00626404	0.00785675	0.0111089	0.019907	0.0394776
0.00123528	0.00217621	0.0039904	0.0064196	0.0080291	0.0113365	0.020304	0.0402499
0.00120743	0.00214149	0.00396309	0.0064315	0.00809242	0.0114557	0.0205026	0.0404748
0.00561508	0.00731293	0.0114306	0.0171386	0.0211936	0.0299158	0.0521595	0.0938569
0.00560745	0.00739021	0.0116087	0.0173901	0.0214136	0.0300864	0.0522373	0.0937476
0.00576706	0.00756454	0.0117893	0.0175024	0.0214059	0.0299683	0.0519855	0.093457
2.64E-02	3.76E-02	0.0609313	0.0860148	0.0914288	0.104156	0.132924	0.15324
2.61E-02	3.73E-02	0.0604829	0.085617	0.0912801	0.104295	0.133546	0.154525
2.67E-02	3.77E-02	0.0607777	0.085691	0.0911712	0.104051	0.133091	0.153754
8.08E-05	8.90E-05	0.000189209	0.000415039	0.000654907	0.00106194	0.00199257	0.00393852
8.63E-05	1.01E-04	0.000203629	0.00042099	0.000643539	0.00102882	0.00192902	0.00386253
8.00E-05	9.43E-05	0.000199585	0.000424118	0.000654221	0.00104614	0.00195107	0.00386986
0.00E+00	3.25012E-05	0.000484009	0.00125732	0.00174103	0.00227402	0.00332893	0.00550407
0.00E+00	2.40326E-05	0.000417404	0.00118652	0.00170601	0.00228951	0.0034301	0.00566841
0.00E+00	2.93732E-05	0.000460129	0.00123329	0.00173004	0.00228142	0.00337059	0.00559258
0	0	0	4.03595E-05	0.000354462	0.000833969	0.00192116	0.00361855
0	0	0	5.43976E-05	0.000344009	0.000833893	0.00182785	0.00357147
0	0	0	2.34985E-05	0.000306854	0.000806122	0.00181618	0.00358559
0.00E+00	7.62939E-07	6.39343E-05	0.000413589	0.000811996	0.00140785	0.00262871	0.00492874

180	210	250	300	360	410	500	600
0.00567467	0.0061689	0.0101744	0.0179922	0.0316017	0.034655	0.0775859	0.0991283
0.00562233	0.00602776	0.00995667	0.0178738	0.0318949	0.0352835	0.0793404	0.101383
0.00574142	0.00622528	0.0103903	0.01867	0.0330765	0.0363037	0.0809583	0.102623
0.0129708	0.0164802	0.0292997	0.0488794	0.0734192	0.0685086	0.127128	0.130917
0.0130779	0.0166756	0.0297223	0.0496557	0.0746177	0.0696103	0.12906	0.132672
0.0130273	0.0165761	0.0295552	0.0494501	0.0744321	0.0695223	0.12904	0.132794
0.0237129	0.0309145	0.0526561	0.0801451	0.107055	0.089746	0.147534	0.131371
0.0241569	0.0313242	0.0530648	0.080388	0.107006	0.0895167	0.146926	0.130664
0.0237687	0.0310764	0.0529855	0.080623	0.107578	0.0900788	0.147887	0.131498
0.0413544	0.0514535	0.0806384	0.110364	0.13118	0.0991706	0.14496	0.110886
0.0415145	0.0515928	0.0807751	0.110441	0.13114	0.0990537	0.144657	0.110547
0.0418742	0.0519802	0.0811768	0.110612	0.130873	0.0985876	0.143692	0.109727
0.0945026	0.0982998	0.125495	0.135277	0.123423	0.0728639	0.0793099	0.03913
0.0940165	0.097889	0.125193	0.135312	0.123869	0.073359	0.0801065	0.0396465
0.0948999	0.098572	0.125645	0.135191	0.123091	0.0725234	0.0787467	0.0386907
0.105164	0.0677542	0.0516517	0.0290692	0.0106156	0.00115239	0	0
0.104798	0.0675076	0.0514434	0.0288614	0.0103348	0.000942857	0	0
0.104668	0.0675638	0.0516657	0.0292306	0.0107662	0.00118351	0	0
0.00752205	0.0102509	0.0186268	0.031629	0.0493011	4.84E-02	0.0969103	0.111227
0.00731384	0.00996185	0.0181142	0.0308429	0.0482769	4.76E-02	0.0956036	1.10E-01
0.00771919	0.0104125	0.0187695	0.0317433	0.0494792	4.86E-02	0.097661	1.12E-01
0.0181991	0.023226	0.0390766	0.0603452	0.0843443	0.0749071	0.133253	0.131936
0.0186324	0.0238142	0.0399933	0.0614567	0.0853189	0.0753225	0.133205	0.131158
0.0181874	0.0232722	0.0392644	0.0607629	0.0849924	0.0754519	0.134031	0.132374
0.0332395	0.0417005	0.0666261	0.094223	0.117226	0.0929966	0.144816	0.121575
0.0328777	0.0413914	0.0663306	0.0940241	0.117156	0.0930104	0.144901	0.121694
0.0329879	0.0414074	0.0662751	0.0939578	0.117201	0.0931638	0.145326	0.12216
0.0510806	0.0606798	0.0904475	0.117665	0.133432	0.0972396	0.137024	0.100421
0.0520199	0.0616826	0.0917162	0.118935	0.134353	0.0975269	0.136693	0.0992748
0.052066	0.061551	0.0913515	0.118357	0.1337	0.0971058	0.136258	0.0991902
0.103582	0.103775	0.127628	0.132112	0.115427	0.065438	0.0678541	0.0307955
0.103403	0.103644	0.127566	0.132147	0.115502	0.0654689	0.0678133	0.0306563
0.103356	0.103791	0.127871	0.132447	0.115591	0.0653618	0.0674612	0.0303331
0.102088	0.0639036	0.0467368	0.0243148	0.00691112	7.7939E-06	0	0
0.103268	0.0647628	0.0473981	0.0246226	0.00694108	7.76052E-06	0	0
0.102497	0.0640746	0.046672	0.0240245	0.00657013	7.10011E-06	0	0
0.00524033	0.00692375	0.012514	0.0215971	0.0347686	0.035351	0.0742282	0.0908227
0.0052327	0.00698486	0.0126527	0.0217554	0.0348148	0.0352429	0.0737753	0.0901546
0.00520584	0.00694153	0.0126085	0.0217743	0.0349783	0.0354767	0.0743092	0.0907449
0.00812653	0.0130505	0.0273197	0.0502402	0.0791692	0.0752103	0.140316	0.143884
0.00811813	0.0127869	0.0266196	0.0490633	0.0777632	0.0742994	0.139505	0.144065
0.0082074	0.0131187	0.0274217	0.0504408	0.0795465	0.0756028	0.141044	0.144526
0.00381935	0.00388885	0.00596687	0.010512	0.0197318	0.0232791	0.0565715	0.0789706
0.00388283	0.0040696	0.00632362	0.0109917	0.0201717	0.0234711	0.0565583	0.078641
0.00385071	0.00392624	0.00592339	0.0102101	0.0190218	0.0225182	0.0551839	0.0778291
0.00617416	0.00794174	0.0143293	0.0249213	0.0401827	0.0404992	0.0832146	0.0982504

720	860	1020	1220	1460	1740	2060	2460
0.12152	0.129318	0.12204	0.113652	0.0914448	0.0647674	0.0399065	0.0209932
0.123788	0.130788	0.12223	0.112472	0.0893085	0.0624748	0.0381409	0.019957
0.124492	0.130823	0.121641	0.111259	0.0876241	0.0606457	0.0366203	0.019001
0.129418	0.11074	0.0833998	0.0609619	0.0379974	0.0211749	0.0109564	0.00524627
0.130776	0.111357	0.0831131	0.0596556	0.035837	0.0187083	0.00890033	0.00396878
0.131019	0.111669	0.0834181	0.0598813	0.0358731	0.0185472	0.00866629	0.00378886
0.111453	0.0805508	0.0495903	0.027547	0.0111006	0.00269019	0.000206079	0
0.110768	0.0800417	0.0493246	0.027519	0.0112832	0.00298541	0.000373714	0
0.111423	0.0804185	0.0493578	0.0270887	0.0105737	0.00189319	0	0
0.0785401	0.0446457	0.018664	0.0035087	0	0	0	0
0.0782555	0.0445301	0.0187649	0.00367296	0	0	0	0
0.0778294	0.0446079	0.019237	0.00426023	0	0	0	0
0.0137893	0.000965148	0	0	0	0	0	0
0.0139701	0.000969836	0	0	0	0	0	0
0.0135012	0.000915919	0	0	0	0	0	0
4.14538E-05	0.000481787	0.00123215	0.00237618	0.00367885	0.00477729	0.0049432	0.0039195
2.86007E-05	0.00036211	0.000994226	0.00205163	0.00337723	0.004655	0.00514958	0.00459799
2.7895E-07	6.58941E-05	0.000497448	0.00179924	0.00413794	0.006505	0.00654948	0.00274652
0.124894	0.123411	0.109045	0.095345	0.0720872	0.048154	0.0283168	0.0144562
1.24E-01	0.122784	0.108957	0.0960835	0.0737833	0.0504305	0.0303944	0.0158125
1.26E-01	0.124126	0.109035	0.0945419	0.0707832	0.0468478	0.0273684	0.0139239
0.126069	0.104145	0.0750194	0.0511854	0.0282937	0.0128151	0.00502393	0.00168798
0.124846	0.10292	0.0741056	0.0506177	0.0280376	0.0127074	0.00495077	0.00163694
0.126083	0.103768	0.0744238	0.0505037	0.027702	0.0123917	0.00476101	0.00156005
0.0974892	0.0664103	0.0380549	0.0189175	0.00608401	0.000412864	0	0
0.0976565	0.0666565	0.0383902	0.0193357	0.00646696	0.000615318	0	0
0.097981	0.0666649	0.0380562	0.0187202	0.00579624	0.000183175	0	0
0.0679185	0.036334	0.0135278	0.00168119	0	0.00E+00	0	0
0.0661649	0.0343278	0.0117303	0.00106375	0	0.00E+00	0	0
0.0664207	0.0348657	0.0124346	0.00156973	0	0.00E+00	0	6.07633E-05
0.00834796	0.000368579	0	0	0	0	0	0
0.00814398	0.000299281	0	0	0	0	0	0
0.00802983	0.000303246	0	0	0	0	0	0
0	8.27312E-06	0.000216444	0.0017639	0.00659621	0.01181	0.00818843	0.00110155
1.70827E-05	0.000297453	0.00102109	0.00247032	0.0045747	0.00666844	0.0070336	0.00456093
2.19345E-07	0.000085659	0.000627899	0.00238862	0.00576844	0.00906881	0.00819076	0.00252075
0.110044	0.118877	0.116387	0.114565	0.0986991	0.0750147	0.0489744	0.0267493
0.109319	0.118346	0.116209	0.114786	0.0992543	0.0757012	0.0495603	0.0271192
0.109855	0.118675	0.116251	0.114513	0.0987153	0.075054	0.0490062	0.0267674
0.140278	0.117032	0.0843833	0.0570071	0.0306366	0.0130085	0.00445803	0.00120771
0.141363	0.118601	0.0858785	0.0581052	0.0310703	0.012903	0.00413788	0.000961733
0.140708	0.117148	0.0841915	0.0565102	0.0299206	0.0122623	0.00367191	0.000967911
0.105566	0.122739	0.127149	0.131022	0.117158	0.091582	0.0608708	0.0335635
0.10507	0.122278	0.126837	0.130854	0.11712	0.0916374	0.060969	0.0336487
0.104983	0.122905	0.127909	0.13215	0.118298	0.0925023	0.0614899	0.03391
0.114058	0.117898	0.110897	0.105717	0.0892766	0.067412	0.0441322	0.0242329

2740	3000
0.000518719	0
0.000492334	0
0.000467377	0
0.00012642	0
9.32756E-05	0
8.83372E-05	0
0	0
0	0
0	0
0.00E+00	0
0	0
0	0
0	0
0	0
0.00E+00	0
0.000113419	0
0.000142271	0
0.000109994	0
0.000353826	0
0.000389553	0
0.000340496	0
7.60516E-05	0
7.32582E-05	0
6.96777E-05	0
0	0
0.00E+00	0
0	0
0	0
0	0
7.53092E-06	0
0.00E+00	0
0	0
0.00E+00	0
6.50973E-06	0
0.000108978	0
7.80168E-05	0
0.000668951	0
0.000678623	0
0.000669411	0
4.97399E-05	0
3.63706E-05	0
1.50377E-05	0
0.000841612	0
0.000844061	0
0.000850363	0
0.000607429	0

76980	1	12/19/18	8:14	96263	W1835306
76980	1	12/19/18	8:14	96263	W1835306
76980	1	12/19/18	8:18	13994	W1835307
76980	1	12/19/18	8:18	13994	W1835307
76980	1	12/19/18	8:18	13994	W1835307
76980	1	12/19/18	8:23	52478	W1835308
76980	1	12/19/18	8:23	52478	W1835308
76980	1	12/19/18	8:23	52478	W1835308
76980	1	12/19/18	8:27	46007	W1835309
76980	1	12/19/18	8:27	46007	W1835309
76980	1	12/19/18	8:27	46007	W1835309
76980	1	12/19/18	8:31	76471	W1835310
76980	1	12/19/18	8:31	76471	W1835310
76980	1	12/19/18	8:31	76471	W1835310
76980	1	12/19/18	8:34	41762	W1835311
76980	1	12/19/18	8:34	41762	W1835311
76980	1	12/19/18	8:34	41762	W1835311
76980	1	12/19/18	8:38	83917	W1835312
76980	1	12/19/18	8:38	83917	W1835312
76980	1	12/19/18	8:38	83917	W1835312
76980	1	12/19/18	8:42	88919	W1835313
76980	1	12/19/18	8:42	88919	W1835313
76980	1	12/19/18	8:42	88919	W1835313
76980	1	12/19/18	8:47	33767	W1835314
76980	1	12/19/18	8:47	33767	W1835314
76980	1	12/19/18	8:47	33767	W1835314
76980	1	12/19/18	8:51	25206	W1835315
76980	1	12/19/18	8:51	25206	W1835315
76980	1	12/19/18	8:51	25206	W1835315
76980	1	12/19/18	8:55	67390	W1835316
76980	1	12/19/18	8:55	67390	W1835316
76980	1	12/19/18	8:55	67390	W1835316
76980	1	12/19/18	8:59	20615	W1835317
76980	1	12/19/18	8:59	20615	W1835317
76980	1	12/19/18	8:59	20615	W1835317
76980	1	12/19/18	9:02	22556	W1835318
76980	1	12/19/18	9:02	22556	W1835318
76980	1	12/19/18	9:02	22556	W1835318
76980	1	12/19/18	9:12	38414	W1835319
76980	1	12/19/18	9:12	38414	W1835319
76980	1	12/19/18	9:12	38414	W1835319
76980	1	12/19/18	9:16	80947	W1835320
76980	1	12/19/18	9:16	80947	W1835320
76980	1	12/19/18	9:16	80947	W1835320
76980	1	12/19/18	9:20	85494	W1835321
76980	1	12/19/18	9:20	85494	W1835321
76980	1	12/19/18	9:20	85494	W1835321

XtendiMax+Pummel+AU-243LFP13	TTI11004	63	2	358.2676086
XtendiMax+Pummel+AU-243LFP13	TTI11004	63	3	358.7454224
XtendiMax+Radiate+AU-243LFP13	TTI11004	63	1	450.3608704
XtendiMax+Radiate+AU-243LFP13	TTI11004	63	2	448.9369202
XtendiMax+Radiate+AU-243LFP13	TTI11004	63	3	450.0321045
XtendiMax+Rainier-EA+AU-243LFP13	TTI11004	63	1	411.8057556
XtendiMax+Rainier-EA+AU-243LFP13	TTI11004	63	2	415.5290527
XtendiMax+Rainier-EA+AU-243LFP13	TTI11004	63	3	409.507782
XtendiMax+Ravage+AU-243LFP13	TTI11004	63	1	411.6862488
XtendiMax+Ravage+AU-243LFP13	TTI11004	63	2	414.9375
XtendiMax+Ravage+AU-243LFP13	TTI11004	63	3	414.0611877
XtendiMax+Reflex+AU-243LFP13	TTI11004	63	1	369.3257751
XtendiMax+Reflex+AU-243LFP13	TTI11004	63	2	368.0839844
XtendiMax+Reflex+AU-243LFP13	TTI11004	63	3	367.8791809
XtendiMax+RendurDefoamer+AU-243LFP13	TTI11004	63	1	445.9187927
XtendiMax+RendurDefoamer+AU-243LFP13	TTI11004	63	2	444.3047485
XtendiMax+RendurDefoamer+AU-243LFP13	TTI11004	63	3	442.2532349
XtendiMax+Resource+AU-243LFP13	TTI11004	63	1	417.8742981
XtendiMax+Resource+AU-243LFP13	TTI11004	63	2	417.1255188
XtendiMax+Resource+AU-243LFP13	TTI11004	63	3	417.647583
XtendiMax+Response+AU-243LFP13	TTI11004	63	1	452.3395081
XtendiMax+Response+AU-243LFP13	TTI11004	63	2	454.7345276
XtendiMax+Response+AU-243LFP13	TTI11004	63	3	454.2542419
XtendiMax+RevealEndurx+AU-243LFP13	TTI11004	63	1	399.5928345
XtendiMax+RevealEndurx+AU-243LFP13	TTI11004	63	2	397.6632385
XtendiMax+RevealEndurx+AU-243LFP13	TTI11004	63	3	397.0272827
XtendiMax+SatelliteFlex+AU-243LFP13	TTI11004	63	1	375.5142517
XtendiMax+SatelliteFlex+AU-243LFP13	TTI11004	63	2	376.7438049
XtendiMax+SatelliteFlex+AU-243LFP13	TTI11004	63	3	375.2972412
XtendiMax+Savvy+AU-243LFP13	TTI11004	63	1	394.5058594
XtendiMax+Savvy+AU-243LFP13	TTI11004	63	2	395.8997192
XtendiMax+Savvy+AU-243LFP13	TTI11004	63	3	392.972168
XtendiMax+Section3+AU-243LFP13	TTI11004	63	1	393.8474731
XtendiMax+Section3+AU-243LFP13	TTI11004	63	2	397.2427979
XtendiMax+Section3+AU-243LFP13	TTI11004	63	3	396.3435059
XtendiMax+SedateMax+AU-243LFP13	TTI11004	63	1	400.1636353
XtendiMax+SedateMax+AU-243LFP13	TTI11004	63	2	402.2678833
XtendiMax+SedateMax+AU-243LFP13	TTI11004	63	3	395.7226563
XtendiMax+SelectMax+AU-243LFP13	TTI11004	63	1	389.1643677
XtendiMax+SelectMax+AU-243LFP13	TTI11004	63	2	389.7938538
XtendiMax+SelectMax+AU-243LFP13	TTI11004	63	3	388.4417114
XtendiMax+Sequestar6Mn+AU-243LFP13	TTI11004	63	1	458.6077576
XtendiMax+Sequestar6Mn+AU-243LFP13	TTI11004	63	2	458.0664978
XtendiMax+Sequestar6Mn+AU-243LFP13	TTI11004	63	3	461.9249878
XtendiMax+Shadow+AU-243LFP13	TTI11004	63	1	393.2431641
XtendiMax+Shadow+AU-243LFP13	TTI11004	63	2	397.7609863
XtendiMax+Shadow+AU-243LFP13	TTI11004	63	3	394.9352722

798.5305176	1603.394165	0.843714893	0	0	0	0	0
794.6177368	1596.070801	0.846936882	0	0	0	0	0
958.7410889	1756.351807	0.543045223	0	0	0	0	0
941.6519775	1734.75769	0.574631333	0	0.00E+00	0.00E+00	0.00E+00	0.00E+00
948.1712646	1741.457153	0.5790295	0	0	0	0.00E+00	0
918.079834	1731.892212	0.680265307	0	0	0	0	0
927.2840576	1739.865601	0.685925543	0	0	0	0	0
906.8952026	1719.661865	0.716425061	0	0	0	0	0
827.6998901	1569.50769	0.723818064	0	0	0	0	0
837.348938	1589.982544	0.689264238	0	0.00E+00	0.00E+00	0.00E+00	0.00E+00
834.8095703	1585.154175	0.69842875	0	0.00E+00	0.00E+00	0.00E+00	0.00E+00
873.1187744	1701.899536	1.049639225	2.13623E-06	5.27954E-05	8.04901E-05	8.00323E-05	8.61359E-05
879.774231	1718.150146	1.062813282	2.5177E-06	5.82123E-05	7.90405E-05	7.01904E-05	6.56128E-05
878.7184448	1716.973511	1.072895765	2.21252E-06	5.31769E-05	7.53021E-05	6.95801E-05	6.92749E-05
911.6907959	1693.000244	0.568917274	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
909.7593384	1691.105347	0.568639815	0	0.00E+00	0.00E+00	0.00E+00	0.00E+00
912.046814	1697.192871	0.567947686	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
866.4023438	1642.354248	0.604355812	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
865.3609009	1644.250732	0.610888302	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
858.5858765	1628.777954	0.627380788	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
934.9299316	1720.938843	0.550100029	0	0	0	0	0
937.1959839	1721.332764	0.530030489	0	0	0	0	0
932.7496948	1716.729736	0.538744271	0	0	0	0	0
794.7210083	1499.116699	0.773877501	0	0	0	0	0
796.75177	1512.41394	0.772042096	0	0	0	0	0
794.1608887	1501.236938	0.775533378	0	0	0	0	0
813.0161133	1600.874146	0.739336669	0	0	0	0	0
812.3832397	1594.762085	0.743875921	0	0	0	0	0
811.6773682	1596.453247	0.728838384	0	0	0	0	0
789.2700806	1498.734009	0.752918124	0	0	0	0	0
790.2650757	1503.157227	0.762655795	0	0	0	0	0
789.7530518	1507.432007	0.746593535	0	0	0	0	0
802.3096313	1538.796997	0.735901237	0	0	0	0	0
805.2235107	1536.273438	0.711532533	0	0	0	0	0
807.7210083	1547.942383	0.731833339	0	0	0	0	0
810.0513916	1547.147583	0.733300805	0	0	0	0	0
815.3867798	1558.960815	0.712105632	0	0	0	0	0
800.7799072	1536.478027	0.746634066	0	0	0	0	0
775.8664551	1475.597046	0.799915314	0	0	0	0	0
776.0103149	1475.472412	0.821986914	0	0	0	0	0
772.605957	1465.444092	0.816935241	0	0	0	0	0
929.6171265	1702.678711	0.558275759	0	0	0	0	0
925.5315552	1697.942017	0.567533612	0	0	0	0	0
937.9915161	1713.105469	0.541481912	0	0	0	0	0
787.4406128	1505.461792	0.784531295	0	0	0	0	0
793.508606	1509.45813	0.771173596	0	0	0	0	0
788.1312256	1495.443359	0.789674222	0	0	0	0	0

0.00E+00	5.34058E-07	5.50842E-05	0.000371704	0.000753326	0.00134262	0.002575	0.00494469
0.00E+00	1.14441E-06	6.39343E-05	0.000404358	0.000792923	0.00137535	0.00256981	0.00481674
0	0	0	8.12E-05	0.000353775	0.000809784	0.00176659	0.00355888
0.00E+00	0.00E+00	0.00E+00	4.75E-05	0.000348816	0.000820312	0.00193443	0.00381004
0.00E+00	0	0.00E+00	7.90E-05	0.000384979	0.000847168	0.00192825	0.00374031
0	0	1.98364E-05	2.19E-04	0.000541992	0.00102219	0.00215515	0.00420174
0	0	2.32697E-05	2.34E-04	0.000559921	0.0010405	0.00216583	0.00418297
0	0	0.000010376	2.22E-04	0.000587006	0.00110672	0.00229065	0.00433029
0.00E+00	0.00E+00	0	9.00269E-05	0.000534363	0.00115433	0.00246071	0.00431747
0.00E+00	0.00E+00	0	8.34656E-05	0.000505676	0.00109627	0.00234352	0.00412636
0.00E+00	0.00E+00	0	8.74329E-05	0.00051857	0.00111801	0.00237572	0.00415031
4.81E-05	0.000032959	0.000150299	0.000488815	0.000904617	0.00158363	0.00304672	0.00580956
3.34E-05	4.69208E-05	0.000202713	0.000574646	0.000982666	0.00163391	0.00303383	0.00566093
4.10E-05	5.30243E-05	0.000207977	0.000580292	0.000990524	0.0016481	0.00306152	0.00570663
0.00E+00	0.00E+00	0	1.24359E-05	0.000319672	0.000857239	0.00192398	0.00374817
0.00E+00	0.00E+00	0	3.83759E-05	0.000359116	0.000845566	0.00194008	0.00364166
0.00E+00	0.00E+00	0	4.79889E-05	0.000364838	0.000843201	0.00192642	0.0036396
0.00E+00	0	0	6.96564E-05	0.000415649	0.00091629	0.00203033	0.00381424
0.00E+00	0	0	7.28607E-05	0.000427704	0.000935745	0.00205429	0.00381691
0	0	0	6.79016E-05	0.000436707	0.000965805	0.00212151	0.00389809
0	0	0.00E+00	5.56183E-05	0.00034317	0.000831375	0.00182442	0.00357071
0	0	0.00E+00	0.00003479	0.000304871	0.000782166	0.00176331	0.00353622
0	0	0.00E+00	3.70789E-05	0.000318298	0.00080658	0.00179802	0.00354332
0	0	0.00E+00	0.000102005	0.000593262	0.00126129	0.00263382	0.00451736
0	0	0.00E+00	0.000116501	0.000601196	0.00125702	0.00261162	0.00450554
0	0	0.00E+00	0.000124741	0.000609589	0.00126358	0.00261658	0.00451675
0	0	1.34E-05	0.000258179	0.000647278	0.00117455	0.00233719	0.00436203
0	0	1.85E-05	0.000278244	0.000670319	0.00119675	0.00234268	0.00430763
0	0	1.55E-05	0.000257721	0.000636215	0.00115204	0.00229752	0.00431976
0	0.00E+00	0.00E+00	8.37708E-05	0.000556107	0.0012072	0.00256332	0.00449615
0	0	0.00E+00	0.00010643	0.000595627	0.00125221	0.0025898	0.0044239
0	0.00E+00	0.00E+00	9.82666E-05	0.000569534	0.0012088	0.00253014	0.00440941
0.00E+00	0	0	0.000150757	0.000602951	0.00120041	0.00244591	0.00427689
0.00E+00	0.00E+00	0	0.00012291	0.000559616	0.00114769	0.00238129	0.00419968
0.00E+00	0.00E+00	0	0.000135574	0.000584793	0.00118576	0.00244339	0.00429123
0.00E+00	0.00E+00	0	0.000101624	0.000555191	0.00117615	0.00247787	0.00436249
0	0.00E+00	0	8.82721E-05	0.000526733	0.00113365	0.00241295	0.00427536
0.00E+00	0.00E+00	0	0.000123444	0.00059166	0.00121811	0.00251167	0.0043531
0.00E+00	0	0	0.00018692	0.000706253	0.00136307	0.00266472	0.00440262
0.00E+00	0	0	0.000181122	0.000714569	0.0013958	0.00274925	0.00454285
0.00E+00	0	0	0.000195465	0.000727158	0.00139694	0.00272018	0.00447136
0.00E+00	0.00E+00	0	2.97546E-06	0.000284958	0.00081604	0.00188873	0.00377907
0.00E+00	0.00E+00	0	3.05176E-06	0.000293808	0.000837784	0.00192642	0.0038047
0.00E+00	0.00E+00	0	3.7384E-06	0.000278015	0.000789108	0.001828	0.0036747
0	0.00E+00	0	0.000190811	0.000700989	0.00134346	0.00261108	0.00428322
0	0.00E+00	0	0.000165558	0.000663986	0.00130524	0.00258369	0.00427658
0	0.00E+00	0	0.00016304	0.000666504	0.00132233	0.00264633	0.00443672

0.00622536	0.00791725	0.0140607	0.0241705	0.0388377	0.039231	0.0810999	0.0966232
0.00601524	0.00770882	0.0138794	0.0241631	0.0391257	0.0396408	0.0820107	0.0976225
0.00409729	0.00451881	0.00712486	0.0119034	0.020544	0.0229494	0.0538486	0.0740022
0.00425735	0.00451309	0.00690804	0.0115493	0.0204323	0.0233279	0.0556326	0.0770289
0.00417366	0.0044606	0.00689835	0.0115722	0.0203647	0.0231111	0.0548562	0.0758229
0.00503685	0.00589317	0.00969528	0.0160885	0.0263091	0.0277306	0.0611277	0.0790635
0.00497925	0.00579712	0.00949493	0.0156948	0.0256091	0.0269926	0.059637	0.0775223
0.00503838	0.00581398	0.00959015	0.0161376	0.026765	0.0284129	0.0627785	0.0810317
0.00435753	0.00452286	0.00753159	0.0143681	0.0275249	0.0319359	0.0747042	0.0986996
0.00419357	0.00439507	0.00738152	0.0141192	0.0270142	0.0313051	0.0732048	0.096834
0.00418083	0.00436417	0.00735718	0.0141748	0.0272343	0.0315845	0.0737849	0.0973954
0.00696922	0.00819	0.0132827	0.0211045	0.0324032	0.0323218	0.0674041	0.0826898
0.0067997	0.00810661	0.013363	0.0214394	0.0328843	0.0325784	0.0672449	0.0815981
0.00683357	0.00812065	0.0133556	0.0214156	0.0328802	0.0326137	0.0673837	0.0817888
0.00398453	0.00408463	0.00631828	0.0112041	0.021063	0.0248006	0.0599681	0.0830032
0.00386246	0.00400658	0.00633316	0.0114111	0.0214847	0.0251888	0.0605517	0.0833604
0.00392036	0.00413544	0.0065873	0.0117707	0.0218304	0.0253281	0.0604148	0.0827531
0.00423988	0.00474777	0.00801346	0.0145595	0.0263528	0.0296391	0.0682661	0.0901667
0.00420326	0.00469818	0.00797722	0.0146163	0.0265773	0.0299045	0.0687452	0.0904885
0.00419708	0.00459152	0.00773529	0.0143153	0.0264507	0.0300857	0.069678	0.0920606
0.00388596	0.00407326	0.00632545	0.0109875	0.0201588	0.0234566	0.0565365	0.0786446
0.00390762	0.00410851	0.00632233	0.0108361	0.019769	0.0230369	0.0558033	0.0781263
0.00384369	0.00399353	0.00615395	0.0107095	0.0198454	0.0232979	0.0565906	0.0791589
0.00449638	0.00472046	0.00811737	0.0158777	0.0305303	0.0351815	0.081248	0.105503
0.00455971	0.00487175	0.00841896	0.0162992	0.0309169	0.0353095	0.0809838	0.104635
0.00458427	0.00490952	0.00848198	0.0163884	0.0310413	0.0354399	0.0813103	0.105139
0.00529625	0.0066275	0.0119069	0.0211677	0.0354401	0.0369748	0.0787925	0.0965118
0.00518173	0.0064827	0.0117078	0.0209538	0.0352666	0.0369072	0.0788467	0.096807
0.00529419	0.00666069	0.0119776	0.0212531	0.0355064	0.0370102	0.0788791	0.0967149
0.00463463	0.00502693	0.0087397	0.0168602	0.0317799	0.0361309	0.0825183	0.106138
0.00444687	0.00478531	0.00842949	0.0165904	0.0316588	0.0361496	0.0826509	0.106236
0.00456932	0.00503799	0.00889908	0.0172359	0.0323102	0.0364925	0.082767	0.105782
0.00454834	0.00514481	0.00912201	0.0173607	0.0318913	0.0356018	0.0802328	0.102447
0.00446144	0.00500763	0.00882721	0.0168285	0.0311299	0.0349889	0.0794315	0.102183
0.00454407	0.00508438	0.00892616	0.0169398	0.031203	0.0349591	0.07911	0.101462
0.00453644	0.00493576	0.00850922	0.0161923	0.0302467	0.0342974	0.0784528	0.101498
0.00446098	0.00485695	0.00837517	0.0159547	0.0298502	0.0338879	0.0775996	0.100516
0.00450584	0.00496521	0.00874474	0.0168642	0.031516	0.0355576	0.0806801	0.10334
0.00440353	0.00487381	0.00889336	0.0177479	0.0336677	0.0380512	0.0859322	0.109004
0.00448807	0.00487	0.00876801	0.0174899	0.0333598	0.0378709	0.0858245	0.109123
0.00443649	0.00487617	0.00888229	0.0177763	0.0338338	0.0383073	0.0865813	0.109813
0.00403603	0.00402809	0.00590347	0.0100263	0.0188217	0.02255	0.0559113	0.0795342
0.00399559	0.00393288	0.00574982	0.00990097	0.0188818	0.0227873	0.0566392	0.0804919
0.00395081	0.00396553	0.00582314	0.00985695	0.0184322	0.0220591	0.0547478	0.0780986
0.00424416	0.00467194	0.00853798	0.0171271	0.0326345	0.0369843	0.0837495	0.106608
0.00420807	0.00453247	0.0081366	0.0163172	0.0314156	0.0359612	0.0822601	0.105731
0.00441734	0.00476082	0.00844666	0.0167045	0.0318923	0.0363773	0.0830478	0.106601

0.113273	0.1182	0.112113	0.107586	0.0912223	0.0689546	0.0450971	0.0247256
0.114197	0.118787	0.112211	0.10715	0.0903667	0.0679697	0.0442905	0.0242311
0.0991888	0.11701	0.123938	0.131324	0.121091	0.0974907	0.0663297	0.0371324
0.102976	0.12026	0.125467	0.130512	0.118058	0.0934661	0.062838	0.0349344
0.101572	0.119205	0.125189	0.131152	0.11937	0.094893	0.0639238	0.0355624
0.101007	0.114929	0.118696	0.123806	0.113342	0.09118	0.062171	0.0348847
0.0997344	0.114386	0.119055	0.125025	0.115045	0.0928558	0.0634342	0.0356321
0.102957	0.116256	0.118973	0.122827	0.111307	0.0887948	0.0602208	0.0336997
0.123606	0.133284	0.126697	0.1183	0.0951135	0.067211	0.0413305	0.0217208
0.121651	0.131882	0.126357	0.119279	0.0972402	0.0697867	0.0435226	0.023106
0.122065	0.132043	0.126277	0.118988	0.0967775	0.0692199	0.0429953	0.0227457
0.101401	0.111934	0.113153	0.116311	0.105504	0.0844521	0.057468	0.0322324
0.0993639	0.109539	0.111275	0.115651	0.106549	0.0867099	0.0597888	0.033809
0.0995419	0.109639	0.111282	0.115563	0.106371	0.0864901	0.0596068	0.0337033
0.109653	0.125563	0.127692	0.128777	0.112573	0.0862427	0.0565174	0.0309202
0.109736	0.125413	0.127426	0.128457	0.112245	0.0859248	0.0562541	0.030751
0.108728	0.124323	0.126628	0.128186	0.112628	0.0867434	0.0570929	0.0313247
0.114548	0.126772	0.124947	0.122205	0.103696	0.0773623	0.0497039	0.0268642
0.114542	0.126396	0.124372	0.121649	0.103428	0.0774313	0.0499304	0.0270588
0.116497	0.128114	0.125295	0.121461	0.10207	0.075418	0.0480639	0.0258332
0.105138	0.122433	0.127049	0.131045	0.117152	0.0914724	0.060722	0.0334556
0.105033	0.122793	0.127677	0.131721	0.117629	0.0917024	0.0607994	0.0334753
0.106068	0.123454	0.127763	0.131215	0.116725	0.0907411	0.0600636	0.0330456
0.129572	0.136663	0.126543	0.114209	0.0877824	0.0586876	0.0341451	0.017198
0.128175	0.135129	0.125371	0.113772	0.0883597	0.0600001	0.0355194	0.0181433
0.128891	0.135916	0.125975	0.113932	0.087831	0.0589124	0.0343631	0.017331
0.115446	0.122041	0.116434	0.111545	0.0936778	0.0696915	0.0448047	0.0242446
0.116024	0.122799	0.117137	0.111952	0.0935473	0.0691067	0.0441213	0.0237538
0.115821	0.12249	0.116764	0.111591	0.0933653	0.0691661	0.0443101	0.0239216
0.129383	0.135626	0.124981	0.112493	0.0865481	0.0582135	0.0342023	0.0173935
0.129329	0.135423	0.124758	0.11241	0.0867394	0.0586334	0.0346513	0.0177082
0.128397	0.134338	0.123904	0.112001	0.0868604	0.0590657	0.0350893	0.0179937
0.124934	0.131935	0.123325	0.113481	0.0899914	0.0627543	0.0381604	1.99E-02
0.125377	0.13298	0.124569	0.114564	0.0905212	0.0627225	0.03787	0.0196422
0.124252	0.13175	0.123666	0.114328	0.0911548	0.0639396	0.039082	0.0204545
0.124947	0.132799	0.124652	0.115026	0.0914349	0.0639334	0.0389862	0.0203772
0.123945	0.132088	0.124503	0.115593	0.0926354	0.0653842	0.0402252	0.0211647
0.125949	0.13261	0.12343	0.113076	0.0893882	0.062297	0.0379489	0.01984
0.131104	0.13573	0.123635	0.109999	0.0835687	0.0554191	0.0321057	0.0161484
0.131366	0.135983	0.123763	0.109989	0.0834913	0.0553667	0.0321033	0.0161668
0.131936	0.136333	0.123826	0.109676	0.0827551	0.0543632	0.0311701	0.0155458
0.107646	0.125818	0.130065	0.1327	0.116613	0.0891736	0.0580622	0.0315511
0.108612	0.126451	0.130169	0.132242	0.115758	0.0882503	0.0573552	0.0311408
0.106154	0.124756	0.129817	0.133459	0.118236	0.0910975	0.0596457	3.25E-02
0.128826	0.134265	0.123474	0.111405	0.0863347	0.0587249	0.0349191	0.0179247
0.128779	0.135069	0.124808	0.112954	0.0876138	0.0594971	0.0352524	0.0180275
0.129672	0.13573	0.124977	0.112419	0.0863661	0.0579059	0.033871	0.0171571

0.000619389	0
0.000606608	0
0.000935717	0
0.000878488	0
0.000894387	0
0.000879839	0
0.000899004	0
0.000849349	0
0.000536574	0
0.000572793	0
0.000563104	0
0.000812976	0
0.000854888	0
0.000852258	0
0.000773593	0
0.000769136	0
0.000784456	0
0.000669559	0
0.000675016	0
0.000642645	0
0.000838723	0
0.00083906	0
0.000828137	0
0.000418484	0
0.000443731	0
0.000421858	0
0.00060454	0
0.000591269	0
0.000596037	0
0.000424892	0
0.000433354	0
0.000440826	0
0.000490466	0
0.00048309	0
0.000504603	0
5.02E-04	0
0.000523148	0
0.000489385	0
0.000392914	0
0.000393582	0
0.000377089	0
7.87E-04	0
0.000776897	0
0.000812095	0
0.000439327	0
0.000441161	0
0.000418512	0

76980	1	12/19/18	9:24	54436	W1835322
76980	1	12/19/18	9:24	54436	W1835322
76980	1	12/19/18	9:24	54436	W1835322
76980	1	12/19/18	9:28	43920	W1835323
76980	1	12/19/18	9:28	43920	W1835323
76980	1	12/19/18	9:28	43920	W1835323
76980	1	12/19/18	9:31	21390	W1835324
76980	1	12/19/18	9:31	21390	W1835324
76980	1	12/19/18	9:31	21390	W1835324
76980	1	12/19/18	9:36	94035	W1835325
76980	1	12/19/18	9:36	94035	W1835325
76980	1	12/19/18	9:36	94035	W1835325
76980	1	12/19/18	9:39	70115	W1835326
76980	1	12/19/18	9:39	70115	W1835326
76980	1	12/19/18	9:39	70115	W1835326
76980	1	12/19/18	9:43	19852	W1835327
76980	1	12/19/18	9:43	19852	W1835327
76980	1	12/19/18	9:43	19852	W1835327
76980	1	12/19/18	9:47	13944	W1835328
76980	1	12/19/18	9:47	13944	W1835328
76980	1	12/19/18	9:47	13944	W1835328
76980	1	12/19/18	9:51	24259	W1835329
76980	1	12/19/18	9:51	24259	W1835329
76980	1	12/19/18	9:51	24259	W1835329
76980	1	12/19/18	9:55	32912	W1835330
76980	1	12/19/18	9:55	32912	W1835330
76980	1	12/19/18	9:55	32912	W1835330
76980	1	12/19/18	10:02	83158	W1835331
76980	1	12/19/18	10:02	83158	W1835331
76980	1	12/19/18	10:02	83158	W1835331
76980	1	12/19/18	10:06	49799	W1835332
76980	1	12/19/18	10:06	49799	W1835332
76980	1	12/19/18	10:06	49799	W1835332
76980	1	12/19/18	10:10	11672	W1835333
76980	1	12/19/18	10:10	11672	W1835333
76980	1	12/19/18	10:10	11672	W1835333
76980	1	12/19/18	10:13	42209	W1835334
76980	1	12/19/18	10:13	42209	W1835334
76980	1	12/19/18	10:13	42209	W1835334
76980	1	12/19/18	10:20	50788	W1835335
76980	1	12/19/18	10:20	50788	W1835335
76980	1	12/19/18	10:20	50788	W1835335
76980	1	12/19/18	10:24	61680	W1835336
76980	1	12/19/18	10:24	61680	W1835336
76980	1	12/19/18	10:24	61680	W1835336
76980	1	12/19/18	10:27	92307	W1835337
76980	1	12/19/18	10:27	92307	W1835337

XtendiMax+Sharpen+AU-243LFP13	TTI11004	63	1	451.3587952
XtendiMax+Sharpen+AU-243LFP13	TTI11004	63	2	458.9051514
XtendiMax+Sharpen+AU-243LFP13	TTI11004	63	3	451.2162476
XtendiMax+Sitka+AU-243LFP13	TTI11004	63	1	425.4353943
XtendiMax+Sitka+AU-243LFP13	TTI11004	63	2	431.2539368
XtendiMax+Sitka+AU-243LFP13	TTI11004	63	3	427.2001953
XtendiMax+SmartKB+AU-243LFP13	TTI11004	63	1	456.1075439
XtendiMax+SmartKB+AU-243LFP13	TTI11004	63	2	464.9674988
XtendiMax+SmartKB+AU-243LFP13	TTI11004	63	3	463.8164368
XtendiMax+SmartMnPlus+AU-243LFP13	TTI11004	63	1	460.6410828
XtendiMax+SmartMnPlus+AU-243LFP13	TTI11004	63	2	451.3907166
XtendiMax+SmartMnPlus+AU-243LFP13	TTI11004	63	3	452.3807068
XtendiMax+Soiltrate+AU-243LFP13	TTI11004	63	1	415.6343689
XtendiMax+Soiltrate+AU-243LFP13	TTI11004	63	2	417.7497559
XtendiMax+Soiltrate+AU-243LFP13	TTI11004	63	3	415.6109924
XtendiMax+Spreader90+AU-243LFP13	TTI11004	63	1	444.8329773
XtendiMax+Spreader90+AU-243LFP13	TTI11004	63	2	444.1204834
XtendiMax+Spreader90+AU-243LFP13	TTI11004	63	3	443.006897
XtendiMax+Stake+AU-243LFP13	TTI11004	63	1	406.8695374
XtendiMax+Stake+AU-243LFP13	TTI11004	63	2	409.0746765
XtendiMax+Stake+AU-243LFP13	TTI11004	63	3	405.3227844
XtendiMax+StapleLX+AU-243LFP13	TTI11004	63	1	453.9648132
XtendiMax+StapleLX+AU-243LFP13	TTI11004	63	2	458.1845398
XtendiMax+StapleLX+AU-243LFP13	TTI11004	63	3	456.2946472
XtendiMax+Stealth+AU-243LFP13	TTI11004	63	1	403.4338074
XtendiMax+Stealth+AU-243LFP13	TTI11004	63	2	401.9561768
XtendiMax+Stealth+AU-243LFP13	TTI11004	63	3	400.2450256
XtendiMax+Stimtide+AU-243LFP13	TTI11004	63	1	453.759613
XtendiMax+Stimtide+AU-243LFP13	TTI11004	63	2	452.9769592
XtendiMax+Stimtide+AU-243LFP13	TTI11004	63	3	450.0039063
XtendiMax+Streamline+AU-243LFP13	TTI11004	63	1	396.3203125
XtendiMax+Streamline+AU-243LFP13	TTI11004	63	2	399.077301
XtendiMax+Streamline+AU-243LFP13	TTI11004	63	3	396.54245
XtendiMax+StrikeForce+AU-243LFP13	TTI11004	63	1	390.0907593
XtendiMax+StrikeForce+AU-243LFP13	TTI11004	63	2	390.1065063
XtendiMax+StrikeForce+AU-243LFP13	TTI11004	63	3	388.8329468
XtendiMax+StrikeLock+AU-243LFP13	TTI11004	63	1	369.9572754
XtendiMax+StrikeLock+AU-243LFP13	TTI11004	63	2	367.7169189
XtendiMax+StrikeLock+AU-243LFP13	TTI11004	63	3	368.8583984
XtendiMax+SucceedUltra+AU-243LFP13	TTI11004	63	1	358.2270813
XtendiMax+SucceedUltra+AU-243LFP13	TTI11004	63	2	353.6000671
XtendiMax+SucceedUltra+AU-243LFP13	TTI11004	63	3	354.3241272
XtendiMax+Sultrus+AU-243LFP13	TTI11004	63	1	384.8452454
XtendiMax+Sultrus+AU-243LFP13	TTI11004	63	2	384.9037781
XtendiMax+Sultrus+AU-243LFP13	TTI11004	63	3	382.6870422
XtendiMax+SundanceII+AU-243LFP13	TTI11004	63	1	365.569397
XtendiMax+SundanceII+AU-243LFP13	TTI11004	63	2	365.0971375

930.3641357	1716.196899	0.553191781	0	0	0	0	0
941.3865356	1724.78772	0.535904706	0	0	0	0	0
932.9594727	1717.792603	0.539107382	0	0	0	0	0
880.9779053	1659.570557	0.595810235	0	0	0	0	0
891.0842285	1668.440552	0.565337598	0	0	0	0	0
883.1204224	1661.251221	0.588175237	0	0	0	0	0
935.7473145	1717.546387	0.540229201	0	0	0	0	0
949.9144897	1727.920776	0.517626286	0	0	0	0	0
943.8460083	1721.290405	0.51960361	0	0	0	0	0
941.8389282	1721.528564	0.544078469	0	0.00E+00	0.00E+00	0.00E+00	0.00E+00
920.0949707	1696.608887	0.567210972	0	0.00E+00	0.00E+00	0.00E+00	0.00E+00
928.0548096	1709.727295	0.566982388	0	0.00E+00	0.00E+00	0.00E+00	0.00E+00
851.47229	1613.787842	0.636350214	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
845.0383301	1598.168701	0.655081749	0	0.00E+00	0.00E+00	0.00E+00	0.00E+00
847.8706665	1607.644897	0.653616905	0	0.00E+00	0.00E+00	0.00E+00	0.00E+00
936.1118164	1726.98291	0.552238345	0	0	0	0	0
930.383667	1720.00647	0.574768305	0	0	0	0	0
928.3806152	1716.710693	0.573795974	0	0	0	0	0
849.257019	1623.772339	0.644744754	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
846.7229614	1611.732788	0.640558362	0	0.00E+00	0.00E+00	0.00E+00	0.00E+00
852.0563965	1629.828247	0.636219859	0	0.00E+00	0.00E+00	0.00E+00	0.00E+00
952.9108887	1744.875977	0.585681856	0	0	0	0	0
949.7335815	1734.087891	0.572465777	0	0	0	0	0
949.5319214	1738.038574	0.574081719	0	0	0	0	0
829.2432861	1586.442505	0.703564584	0	0.00E+00	0.00E+00	0.00E+00	0.00E+00
829.8986206	1590.888184	0.692283332	0	0.00E+00	0.00E+00	0.00E+00	0.00E+00
831.9874268	1597.778076	0.671233296	0	0.00E+00	0.00E+00	0.00E+00	0.00E+00
959.7908325	1754.598633	0.521262348	0	0.00E+00	0.00E+00	0.00E+00	0.00E+00
948.8502808	1741.882202	0.527557254	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
957.4561768	1754.7229	0.511915267	0	0.00E+00	0.00E+00	0.00E+00	0.00E+00
787.7885132	1490.104004	0.825182199	0	0.00E+00	0.00E+00	0.00E+00	0.00E+00
792.5346069	1510.413086	0.819810987	0	0.00E+00	0.00E+00	0.00E+00	0.00E+00
794.2419434	1517.289551	0.795069218	0	0.00E+00	0.00E+00	0.00E+00	0.00E+00
805.5405884	1556.157959	0.761956871	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
810.8690186	1568.062744	0.758785129	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
806.0856934	1556.001953	0.759493649	0	0.00E+00	0.00E+00	0.00E+00	0.00E+00
748.0489502	1437.317993	0.867456794	0	0.00E+00	0.00E+00	0.00E+00	0.00E+00
746.5338745	1436.707642	0.883409441	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
748.7975464	1452.890503	0.88732028	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
730.718689	1422.381348	0.912463009	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
722.5571899	1400.19812	0.936255813	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
734.4245605	1465.896973	0.89533639	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
770.8828125	1477.412842	0.827278137	0	0	0	0	0
765.5004883	1452.856079	0.85302031	0	0	0	0	0
762.2664795	1445.692261	0.848145664	0	0	0	0	0
733.1270752	1409.41626	0.912976444	0	0	0	0	0
740.2419434	1428.004517	0.891471446	0	0	0	0	0

0.00E+00	0	0	2.31171E-05	0.000317459	0.000829086	0.00185768	0.00365311
0.00E+00	0	0	1.49536E-05	0.000298996	0.00079895	0.00180428	0.00356148
0.00E+00	0	0	3.25775E-05	0.000316162	0.000806122	0.00179916	0.00356232
0.00E+00	0	0	0.000032196	0.000375061	0.000886459	0.0020298	0.00384628
0.00E+00	0	0	1.64795E-05	0.000325699	0.000852203	0.00189926	0.00374153
0.00E+00	0	0	1.08337E-05	0.000339737	0.000851135	0.00201561	0.00389923
0.00E+00	0	0	2.14386E-05	0.000305328	0.000804596	0.00181343	0.00358635
0.00E+00	0.00E+00	0	2.28882E-06	0.000235596	0.00072731	0.00174278	0.00362282
0.00E+00	0	0	2.44141E-06	0.000242691	0.000735931	0.00175102	0.00361206
0.00E+00	0.00E+00	0	2.74658E-06	0.000268402	0.000781555	0.00183342	0.00374001
0.00E+00	0.00E+00	0	1.85394E-05	0.00031662	0.000844345	0.00190903	0.00376648
0.00E+00	0	0	2.92206E-05	0.00033577	0.000817642	0.0019339	0.00372833
0.00E+00	0.00E+00	0	7.65228E-05	0.000454559	0.000989456	0.00214783	0.00391319
0.00E+00	0	0	5.64575E-05	0.000455627	0.00102455	0.00223877	0.00401024
0.00E+00	0.00E+00	0	8.10242E-05	0.000476074	0.00102936	0.0022113	0.00396278
0.00E+00	0.00E+00	0	5.20325E-05	0.000334473	0.000818481	0.00181946	0.00366959
0	0.00E+00	0	5.53131E-05	0.000359726	0.000828934	0.00193001	0.00377655
0.00E+00	0.00E+00	0	4.03595E-05	0.000327148	0.000836334	0.00189735	0.00387634
0.00E+00	0	0	6.30951E-05	0.000438309	0.000978165	0.00217209	0.00408585
0.00E+00	0	0	5.28717E-05	0.000425797	0.000967865	0.00216759	0.00407639
0	0	0	8.20923E-05	0.000447006	0.000966187	0.0021225	0.00402115
0	0.00E+00	0	8.52966E-05	0.000394516	0.000860901	0.00195023	0.00375565
0.00E+00	0.00E+00	0	5.45502E-05	0.000347519	0.00081192	0.00192253	0.00379875
0	0.00E+00	0	7.61414E-05	0.00038063	0.000843124	0.00192017	0.00368515
0.00E+00	0.00E+00	0	0.000110855	0.000539017	0.00112312	0.00235985	0.00420341
0.00E+00	0	0	0.000127869	0.000549469	0.00111427	0.00230537	0.00409546
0.00E+00	0	0	0.000144119	0.000547791	0.00108109	0.00221275	0.00396393
0.00E+00	0	0	6.52313E-05	0.000326691	0.000772018	0.0017038	0.00345009
0	0	0	0.000035553	0.000302887	0.000774689	0.00174927	0.00354248
0	0	0	6.47736E-05	0.000312576	0.000744171	0.00166397	0.00344818
0.00E+00	0.00E+00	0	0.000117035	0.00064209	0.00135155	0.00280434	0.00478233
0.00E+00	0.00E+00	0	0.00015213	0.000696411	0.00139893	0.00277702	0.0045108
0.00E+00	0.00E+00	0	0.000137253	0.000648422	0.00132271	0.00268486	0.0045208
0.00E+00	0	0	0.000144043	0.000611191	0.00123123	0.00253357	0.00449249
0.00E+00	0	0	0.000156021	0.00061882	0.00122841	0.0025106	0.00446014
0.00E+00	0.00E+00	0	0.000152664	0.000613708	0.00122391	0.00251335	0.00448967
0	0	0	0.000222778	0.00077507	0.001465	0.00285271	0.00484238
0.00E+00	0.00E+00	0	0.000246811	0.00078804	0.00152679	0.00286728	0.00491257
0.00E+00	0	0	0.000261688	0.000816727	0.00155838	0.0028791	0.00482567
0.00E+00	0.00E+00	0	0.000268631	0.00083168	0.00158401	0.00294464	0.00505432
0	0	0	0.000287094	0.00084816	0.00160667	0.00300545	0.00524521
0.00E+00	0	2.05994E-06	0.000327606	0.000858231	0.00156425	0.00284271	0.00486969
0	0	0	0.000164795	0.000703812	0.00139557	0.0027739	0.00463379
0	0	0	0.000160522	0.000716324	0.00143585	0.00287117	0.00478752
0	0	0	0.000171967	0.000722275	0.0014299	0.0028421	0.00474869
0	0	0	0.000328293	0.000889282	0.00163338	0.00293686	0.00478401
0	0	3.43323E-06	0.00031929	0.000842361	0.0015583	0.00285339	0.00481026

0.00394485	0.00408691	0.0062944	0.0109497	0.0202359	0.0236669	0.0572014	0.0795728
0.00383095	0.00392441	0.00595612	0.0102924	0.0191348	0.0225889	0.0552122	0.0777277
0.00391228	0.00413055	0.00643486	0.0111469	0.0203509	0.0236074	0.0567858	0.0788902
0.00422081	0.00459717	0.00754814	0.0135746	0.0247527	0.0281468	0.0656338	0.0877702
0.0041465	0.00450882	0.00732254	0.0130306	0.0237203	0.0270813	0.0636319	0.0859479
0.0043103	0.0046566	0.00751709	0.0133478	0.0243021	0.0277345	0.0650195	0.0874081
0.00387413	0.00398834	0.00607971	0.0105188	0.0195171	0.0229832	0.0560155	0.0786111
0.00400429	0.00408325	0.0059742	0.00987267	0.0180456	0.0213962	0.0529967	0.07584
0.00396446	0.00402725	0.00590714	0.00985779	0.0181961	0.0216789	0.0538124	0.0769938
0.00407883	0.00413414	0.00606628	0.0101188	0.0185971	0.022038	0.0543599	0.0772931
0.0040313	0.00409821	0.00618477	0.0107053	0.0200174	0.0237083	0.057959	0.0812758
0.00400818	0.00410057	0.00621727	0.010737	0.0199294	0.023466	0.0571078	0.07989
0.00419823	0.00460594	0.00781059	0.0145294	0.0268893	0.0305781	0.0707533	0.0933468
0.00414108	0.00437645	0.0073336	0.0139141	0.0264762	0.0306406	0.0717352	0.0952219
0.00416107	0.00449982	0.00763458	0.0143795	0.0269321	0.0308073	0.0714698	0.094287
0.00417526	0.00455246	0.00716614	0.0121236	0.0212936	0.0240388	0.0566734	0.0777444
0.00422493	0.00452538	0.00705063	0.0119747	0.021281	0.0242283	0.0574137	0.0788669
0.00440041	0.00472694	0.00728416	0.0121384	0.0212907	0.0241468	0.0572631	0.0788879
0.00457466	0.00517792	0.00879951	0.0159209	0.0284342	0.031542	0.0715027	0.0928154
0.00452629	0.00506729	0.00855583	0.0155244	0.0279794	0.0312979	0.0715342	0.0935275
0.00459572	0.00530663	0.00908913	0.0163194	0.0287447	0.0315717	0.0710619	0.0918897
0.00413292	0.00434273	0.0066246	0.0111002	0.0197274	0.0226003	0.0540861	0.0752303
0.00420906	0.00436211	0.00647469	0.0106273	0.018933	0.0219693	0.0534554	0.0755242
0.00401749	0.00418221	0.00636375	0.0107639	0.0194212	0.0224934	0.0542894	0.0759451
0.00447533	0.00496445	0.0085672	0.01604	0.0294272	0.0330239	0.0751115	0.0971466
0.00441589	0.00500023	0.00875771	0.0164067	0.0298598	0.0332651	0.075181	0.0967844
0.00438934	0.00510986	0.00906425	0.016876	0.030293	0.0334057	0.0749217	0.0959972
0.00396904	0.00436821	0.00688972	0.0115701	0.0201338	0.0226452	0.0534795	0.0739206
0.00399368	0.0042923	0.00668251	0.011321	0.0201256	0.0229898	0.0548347	0.0760317
0.00406883	0.00456207	0.00724365	0.0120669	0.0206887	0.0230206	0.0539258	0.0741121
0.00471596	0.00488785	0.00830559	0.016162	0.031064	0.0358002	0.082597	0.106946
0.00424774	0.00437149	0.00773499	0.0157793	0.031013	0.0358997	0.0826278	0.106419
0.00447472	0.00475426	0.00832321	0.0163912	0.0313518	0.0358424	0.0819786	0.105349
0.00485779	0.00552483	0.00967903	0.0180085	0.0323993	0.0357014	0.079648	0.100951
0.00486664	0.00558289	0.00979431	0.0181068	0.0323028	0.035397	0.0786746	0.0995722
0.00492653	0.00566505	0.009925	0.0182925	0.0325696	0.035676	0.0793323	0.100475
0.00516464	0.00605049	0.011115	0.0213248	0.0384911	0.0419622	0.0917169	0.112844
0.00528633	0.00623619	0.011439	0.0217733	0.038965	0.0422382	0.0919067	0.112697
0.00509727	0.00600754	0.0111675	0.0215748	0.038927	0.0422865	0.0919214	0.112371
0.00557045	0.00676819	0.0126005	0.0238493	0.0419613	0.0447498	0.0956407	0.115015
0.00589554	0.0072065	0.0133021	0.0248118	0.043119	0.045655	0.0970603	0.11623
0.00554436	0.00701164	0.0133194	0.0250792	0.0432951	0.0453483	0.0951711	0.112557
0.00466881	0.00516075	0.00932556	0.0183894	0.034554	0.0388039	0.0870677	0.109657
0.00475433	0.00514847	0.00919296	0.0181733	0.0344436	0.038947	0.0879084	0.111218
0.00477638	0.00525955	0.00947182	0.018659	0.035086	0.0394399	0.0885857	0.111645
0.00497215	0.00592278	0.0112926	0.0222742	0.0405583	0.0441245	0.0956956	0.116337
0.00519394	0.0062487	0.0116902	0.0224417	0.040098	0.0432633	0.0935493	0.113896

0.106115	0.123073	0.127115	0.130512	0.116235	0.0905095	0.0599744	3.30E-02
0.104796	0.122766	0.127931	0.132332	0.118486	0.0925328	0.0613797	0.0337835
0.10538	0.122627	0.127143	0.130979	0.116874	0.0910187	0.0602526	0.0331207
0.112739	0.126096	0.125633	0.124299	0.106684	0.0803505	0.0519337	0.0281487
0.111537	0.125965	0.126572	0.126101	0.108765	0.0821452	0.0531526	0.028819
0.112686	0.126311	0.125988	0.124715	0.107074	0.0806708	0.0521592	0.0282781
0.105649	0.123343	0.128052	0.131894	0.117522	0.091293	0.0602577	0.0330428
0.103753	0.122972	0.129232	0.134359	0.120458	0.0938575	0.0619924	0.0339821
0.105077	0.124005	0.12957	0.133822	0.11922	0.0924467	0.060897	0.0333473
0.104989	0.123531	0.1289	0.133132	0.118738	0.0922503	0.0609006	0.0334113
0.108675	0.125741	0.128932	0.130753	0.11452	0.0875493	0.0571116	0.0311056
0.106876	0.124076	0.128002	0.130962	0.115958	0.0896523	0.059024	0.0323387
0.117884	0.129236	0.125791	0.121057	0.100697	0.0734844	0.0462819	0.0246642
0.12028	0.131325	0.126871	0.120806	0.0991766	0.0713816	0.0444436	0.0235099
0.118822	0.129846	0.125902	0.120649	0.0999006	0.0725814	0.0455499	0.0242179
0.103369	0.120384	0.125396	0.130176	0.117301	0.0923092	0.0616511	0.0340956
0.104639	0.12135	0.125731	0.129753	0.116232	0.0909945	0.0605425	3.34E-02
0.104946	0.121837	0.126119	0.129799	0.115846	0.0903926	0.0600229	0.0330927
0.11604	0.126609	0.123265	0.119292	0.10032	0.074294	0.0474713	0.025567
0.117453	0.128323	0.124666	0.1199	0.0997916	0.0729426	0.0460354	0.0245753
0.114866	0.125632	0.122814	0.119468	0.101012	0.0751621	0.0481831	0.0259967
0.101192	0.119131	0.125479	0.131863	0.120348	0.0958108	0.064527	0.0358563
0.102619	0.121306	0.127551	0.133083	0.120091	0.0943882	0.0628919	0.0347094
0.102377	0.120444	0.126472	0.132213	0.119861	0.0947621	0.063465	0.0351425
0.120328	0.129506	0.123894	0.117293	0.0960961	0.0692107	0.0431594	0.0228545
0.119616	0.128711	0.123306	0.117077	0.0963159	0.0696986	0.0436514	0.0231871
0.118497	0.12767	0.122692	0.117042	0.0968548	0.0705351	0.0444232	0.0236916
0.0994907	0.117662	0.12473	0.132036	0.121437	0.0974335	0.0660792	0.0369092
0.101967	0.119639	0.125516	0.131334	0.119437	0.0949386	0.0639826	0.0356134
0.0994021	0.117281	0.124131	0.131317	0.120852	0.097149	0.0660468	0.036967
0.130696	0.136923	0.125781	0.11258	0.0859339	0.0572669	0.0333629	0.0168685
0.129441	0.135339	0.1246	0.11243	0.0871491	0.0593651	0.0353902	0.0182103
0.128226	0.134365	0.124106	0.112481	0.0876962	0.0601483	0.0360873	0.0186536
0.122682	0.129603	0.121693	0.113046	0.0909761	0.0646142	0.0399761	0.0211061
0.121168	0.128484	0.121348	0.113609	0.0922802	0.0661613	0.0412486	0.0218873
0.122258	0.129428	0.12178	0.113282	0.0911781	0.0646821	0.0399503	0.0210658
0.132279	0.133847	0.119339	0.103977	0.0774373	0.0505065	0.0289484	0.0144875
0.131861	0.133325	0.118883	0.103645	0.0772509	0.0504163	0.0289095	0.0144742
0.131009	0.132128	0.117833	0.103243	0.0778967	0.0518643	0.0304297	0.0155213
0.132134	0.131365	0.115422	0.0995073	0.0738042	0.0483562	0.0280303	0.0141954
0.133067	0.131769	0.115115	0.0983188	0.0718508	0.0461189	0.0261524	0.0130183
0.127921	0.126734	0.112012	0.0984152	0.0756582	0.0522046	0.0319633	0.0168821
0.130952	0.13466	0.121982	0.108222	0.0824102	0.0551603	0.0324033	0.0165079
0.13308	0.136715	0.123245	0.108191	0.0808791	0.0527144	0.0300805	0.0149742
0.133264	0.136671	0.123008	0.107727	0.0801998	0.0519424	0.029429	0.0145675
0.134498	0.134059	0.117624	0.100721	0.0736734	0.0472655	0.0267725	0.0133138
0.132363	0.132975	0.11785	0.102156	0.0757796	0.049323	0.0282737	0.014168

8.27E-04	0
0.000846583	0
0.000829629	0
0.000702075	0
0.000718842	0
0.000705358	0
0.000826929	0
0.000850215	0
0.000834183	0
0.000836369	0
0.000776885	0
0.00080922	0
0.000611797	0
0.000581804	0
0.000600275	0
0.000855777	0
0.000837834	0
0.000829884	0
0.000636495	0
0.000609975	0
0.000647522	0
0.000901217	0
0.000870516	0
0.00088231	0
0.000565738	0
0.000574592	0
0.000587912	0
0.000929388	0
0.000895844	0
0.000931551	0
0.000411287	0
0.000446713	0
0.000458281	0
0.000522207	0
0.000542421	0
0.000521008	0
0.000352104	0
0.000351854	0
0.000379832	0
0.000346651	0
0.000315987	0
0.000418357	0
0.000403619	0
0.000363121	0
0.000352573	0
0.000323025	0
0.000344565	0

76980	1	12/19/18	10:27	92307	W1835337
76980	1	12/19/18	10:31	14354	W1835338
76980	1	12/19/18	10:31	14354	W1835338
76980	1	12/19/18	10:31	14354	W1835338
76980	1	12/19/18	10:35	99209	W1835339
76980	1	12/19/18	10:35	99209	W1835339
76980	1	12/19/18	10:35	99209	W1835339
76980	1	12/19/18	10:39	31243	W1835340
76980	1	12/19/18	10:39	31243	W1835340
76980	1	12/19/18	10:39	31243	W1835340
76980	1	12/19/18	10:43	14938	W1835341
76980	1	12/19/18	10:43	14938	W1835341
76980	1	12/19/18	10:43	14938	W1835341
76980	1	12/19/18	10:47	77113	W1835342
76980	1	12/19/18	10:47	77113	W1835342
76980	1	12/19/18	10:47	77113	W1835342
76980	1	12/19/18	10:51	76369	W1835343
76980	1	12/19/18	10:51	76369	W1835343
76980	1	12/19/18	10:51	76369	W1835343
76980	1	12/19/18	10:57	99319	W1835344
76980	1	12/19/18	10:57	99319	W1835344
76980	1	12/19/18	10:57	99319	W1835344
76980	1	12/19/18	11:01	69347	W1835345
76980	1	12/19/18	11:01	69347	W1835345
76980	1	12/19/18	11:01	69347	W1835345
76980	1	12/19/18	11:05	29300	W1835346
76980	1	12/19/18	11:05	29300	W1835346
76980	1	12/19/18	11:05	29300	W1835346
76980	1	12/19/18	11:13	65041	W1835347
76980	1	12/19/18	11:13	65041	W1835347
76980	1	12/19/18	11:13	65041	W1835347
76980	1	12/19/18	11:17	31207	W1835348
76980	1	12/19/18	11:17	31207	W1835348
76980	1	12/19/18	11:17	31207	W1835348
76980	1	12/19/18	11:21	19946	W1835349
76980	1	12/19/18	11:21	19946	W1835349
76980	1	12/19/18	11:21	19946	W1835349
76980	1	12/19/18	11:25	35080	W1835350
76980	1	12/19/18	11:25	35080	W1835350
76980	1	12/19/18	11:25	35080	W1835350
76980	1	12/19/18	11:29	50412	W1835351
76980	1	12/19/18	11:29	50412	W1835351
76980	1	12/19/18	11:29	50412	W1835351
76980	1	12/19/18	11:34	64350	W1835352
76980	1	12/19/18	11:34	64350	W1835352
76980	1	12/19/18	11:34	64350	W1835352
76980	1	12/19/18	11:38	83994	W1835353

XtendiMax+SundanceII+AU-243LFP13	TTI11004	63	3	364.4353943
XtendiMax+Supr-Spred+AU-243LFP13	TTI11004	63	1	414.9003601
XtendiMax+Supr-Spred+AU-243LFP13	TTI11004	63	2	412.6838684
XtendiMax+Supr-Spred+AU-243LFP13	TTI11004	63	3	414.1036377
XtendiMax+Surf-AC820+AU-243LFP13	TTI11004	63	1	413.6017761
XtendiMax+Surf-AC820+AU-243LFP13	TTI11004	63	2	414.6504517
XtendiMax+Surf-AC820+AU-243LFP13	TTI11004	63	3	411.7834778
XtendiMax+Surf-AC910+AU-243LFP13	TTI11004	63	1	381.8199768
XtendiMax+Surf-AC910+AU-243LFP13	TTI11004	63	2	385.0661621
XtendiMax+Surf-AC910+AU-243LFP13	TTI11004	63	3	382.2384644
XtendiMax+SweetNEezy+AU-243LFP13	TTI11004	63	1	456.4457703
XtendiMax+SweetNEezy+AU-243LFP13	TTI11004	63	2	453.9382324
XtendiMax+SweetNEezy+AU-243LFP13	TTI11004	63	3	462.8274536
XtendiMax+SymbolRelease+AU-243LFP13	TTI11004	63	1	460.6132507
XtendiMax+SymbolRelease+AU-243LFP13	TTI11004	63	2	464.1557007
XtendiMax+SymbolRelease+AU-243LFP13	TTI11004	63	3	457.8369751
XtendiMax+Tapout+AU-243LFP13	TTI11004	63	1	379.917572
XtendiMax+Tapout+AU-243LFP13	TTI11004	63	2	380.8704224
XtendiMax+Tapout+AU-243LFP13	TTI11004	63	3	380.9336243
XtendiMax+Targa+AU-243LFP13	TTI11004	63	1	419.2235107
XtendiMax+Targa+AU-243LFP13	TTI11004	63	2	420.6064758
XtendiMax+Targa+AU-243LFP13	TTI11004	63	3	417.3058777
XtendiMax+Tordon22K+AU-243LFP13	TTI11004	63	1	421.5464783
XtendiMax+Tordon22K+AU-243LFP13	TTI11004	63	2	425.6637268
XtendiMax+Tordon22K+AU-243LFP13	TTI11004	63	3	423.1750488
XtendiMax+TordonK+AU-243LFP13	TTI11004	63	1	417.6546021
XtendiMax+TordonK+AU-243LFP13	TTI11004	63	2	418.190094
XtendiMax+TordonK+AU-243LFP13	TTI11004	63	3	422.717041
XtendiMax+TordonRTU+AU-243LFP13	TTI11004	63	1	412.6959839
XtendiMax+TordonRTU+AU-243LFP13	TTI11004	63	2	417.6994324
XtendiMax+TordonRTU+AU-243LFP13	TTI11004	63	3	413.7986145
XtendiMax+Torment+AU-243LFP13	TTI11004	63	1	379.2368164
XtendiMax+Torment+AU-243LFP13	TTI11004	63	2	375.0814209
XtendiMax+Torment+AU-243LFP13	TTI11004	63	3	374.7927551
XtendiMax+Tradition93+AU-243LFP13	TTI11004	63	1	418.8837585
XtendiMax+Tradition93+AU-243LFP13	TTI11004	63	2	418.4836426
XtendiMax+Tradition93+AU-243LFP13	TTI11004	63	3	419.2292786
XtendiMax+TraplinePro+AU-243LFP13	TTI11004	63	1	345.494812
XtendiMax+TraplinePro+AU-243LFP13	TTI11004	63	2	342.894104
XtendiMax+TraplinePro+AU-243LFP13	TTI11004	63	3	346.3074036
XtendiMax+TrevoTRZ+AU-243LFP13	TTI11004	63	1	395.2557373
XtendiMax+TrevoTRZ+AU-243LFP13	TTI11004	63	2	398.4830017
XtendiMax+TrevoTRZ+AU-243LFP13	TTI11004	63	3	393.1229248
XtendiMax+TrifluralinHF+AU-243LFP13	TTI11004	63	1	414.2725525
XtendiMax+TrifluralinHF+AU-243LFP13	TTI11004	63	2	419.1089783
XtendiMax+TrifluralinHF+AU-243LFP13	TTI11004	63	3	418.4726868
XtendiMax+TripleFlexII+AU-243LFP13	TTI11004	63	1	364.0778503

737.2494507	1418.265991	0.905202925	0	0	0	0	0
846.5994263	1606.745605	0.656608522	0	0	0	0	0
847.7652588	1612.481445	0.652339518	0	0	0	0	0
847.8695068	1607.197021	0.655384719	0	0	0	0	0
852.2477417	1617.015747	0.649894714	0	0	0	0	0
860.4845581	1631.203979	0.63359046	0	0	0	0	0
856.3353271	1627.072144	0.61537081	0	0	0	0	0
771.5171509	1472.588867	0.799115539	0	0	0	0	0
773.0547485	1467.316406	0.82072401	0	0	0	0	0
773.2737427	1480.172241	0.812777996	0	0	0	0	0
935.9110107	1715.605957	0.580866754	0	0	0	0	0
927.1167603	1703.401123	0.583244801	0	0	0	0	0
944.993042	1723.915283	0.547042847	0	0	0	0	0
952.5343018	1738.133301	0.543846786	0	0	0	0	0
954.4909058	1738.931274	0.524344206	0	0	0	0	0
951.6060791	1739.08606	0.524889946	0	0	0	0	0
759.5436401	1449.628174	0.879634857	0	0	0	0	0
759.1624146	1451.235962	0.879741073	0	0	0	0	0
764.5119629	1460.296265	0.849322796	0	0	0	0	0
839.6817017	1583.918335	0.683279037	0	0	0	0	0
842.15625	1586.387451	0.683460891	0	0	0	0	0
846.2095947	1599.289185	0.665624738	0	0	0	0	0
895.2400513	1683.972412	0.652444661	0	0	0	0	0
904.1411133	1695.690186	0.620934963	0	0	0	0	0
896.5354614	1685.823364	0.632719874	0	0	0	0	0
899.3685913	1698.592285	0.607425451	0	0	0	0	0
904.2027588	1705.353882	0.589420259	0	0	0	0	0
910.8777466	1711.033813	0.58637619	0	0	0	0	0
897.0325317	1698.997681	0.662024677	0	0	0	0	0
897.7936401	1694.000244	0.657663107	0	0	0	0	0
897.2910767	1699.111816	0.667650521	0	0	0	0	0
870.0377808	1690.005249	0.963703632	0	3.05176E-07	2.66266E-05	0.000185852	6.10352E-05
875.015686	1702.824219	0.948919237	0	0	5.76019E-05	0.000171509	4.19617E-06
867.3121948	1693.751587	0.945929706	0	0	0.000078125	0.000163498	2.89917E-06
889.3156738	1685.437866	0.636222661	0	0	0	0	0
884.7282104	1676.699341	0.626308322	0	0	0	0	0
894.2133789	1693.67395	0.612988472	0	0	0	0	0
706.7041626	1374.67334	1.02576685	0	0	0	0	0
701.6357422	1358.9021	1.059228063	0	0	0	0	0
706.8789063	1362.850342	1.051404238	0	0	0	0	0
838.164856	1618.885986	0.708127081	0	0	0	0	0
842.4405518	1618.190918	0.679442883	0	0	0	0	0
839.2459717	1624.725708	0.6846928	0	0	0	0	0
844.7874146	1600.583984	0.669426024	0	0	0	0	0
858.8546143	1621.232666	0.656096816	0	0	0	0	0
860.0311279	1629.277588	0.65693593	0	0	0	0	0
770.5324097	1518.199585	0.838056922	0	0	0	0	0

0	0	1.60217E-06	0.000312958	0.000846252	0.00157852	0.00290558	0.00490898
0	0	0	6.17981E-05	0.000454865	0.00101753	0.00223289	0.00405754
0	0	0	5.82886E-05	0.000449524	0.00100861	0.00221718	0.00405029
0	0	0	6.06537E-05	0.000448227	0.00100662	0.0022245	0.00408829
0	0	0	5.66101E-05	0.000435257	0.000985947	0.00220177	0.00410843
0	0	0	4.57764E-05	0.000404129	0.000938568	0.002145	0.00410034
0	0	0	6.30188E-05	0.000414352	0.000925064	0.00206795	0.00392792
0	0	0	0.000150909	0.00065506	0.00131386	0.00266663	0.00462723
0	0	0	0.000123138	0.000643768	0.00133949	0.0027697	0.00479874
0	0	0	0.000153732	0.000669861	0.00134254	0.00271576	0.00467964
0	0	0	4.04358E-05	0.000351257	0.000838547	0.00197296	0.00380463
0	0	0	3.24249E-05	0.000350494	0.000847168	0.00199081	0.00380707
0	0	0	1.54877E-05	0.000293808	0.000799942	0.00183678	0.00368912
0	0	0	3.15094E-05	0.000303726	0.000794067	0.00180992	0.00366196
0	0	0	1.65558E-05	0.000277786	0.00075798	0.00175308	0.00357361
0	0	0	4.10461E-05	0.00030365	0.000769272	0.00173706	0.00351875
0	0	0	0.000238113	0.000788345	0.00154465	0.00288506	0.00477455
0	0	0	0.000239639	0.000794449	0.0015538	0.0028894	0.0047364
0	0	0	0.000208359	0.000745926	0.00143036	0.00281235	0.00473343
0	0	0	7.08008E-05	0.000492706	0.00108734	0.00233772	0.00408897
0	0	0	4.88281E-05	0.000466537	0.0010688	0.0023513	0.00417587
0	0	0	6.53076E-05	0.000460892	0.00103043	0.00226433	0.00410622
0	0	0	0.000106735	0.000465851	0.000982819	0.00216049	0.004114
0	0	0	9.33838E-05	0.000432281	0.00092598	0.0020591	0.00395905
0	0	0	0.000091629	0.000437317	0.000942459	0.00210152	0.00403938
0	0	0	0.000100861	0.000428085	0.000901184	0.00199738	0.00390015
0	0	0	0.000107727	0.000425034	0.000877914	0.00192795	0.00377045
0	0	0	7.51495E-05	0.000388565	0.000853271	0.00194099	0.00384598
0	0	1.60217E-06	0.000173416	0.000514069	0.00100388	0.002136	0.00410896
0	0	0	0.000121765	0.000470505	0.000976639	0.00215706	0.00419418
0	0	0	0.000151825	0.000512238	0.00101646	0.00217178	0.00414955
0	1.75476E-06	9.15527E-05	0.000411148	0.000821228	0.00147995	0.00286873	0.0054248
0	3.50952E-06	0.000107422	0.000432205	0.000827484	0.00145844	0.0028035	0.00534561
0	5.0354E-06	0.000121613	0.000454636	0.000847549	0.00146683	0.00277603	0.0052182
0	0	0	7.97272E-05	0.000441284	0.000961838	0.00212769	0.00402565
0	0	0	9.60541E-05	0.000459213	0.000967636	0.00208595	0.00387398
0	0	0	0.000107727	0.000452271	0.000936584	0.00202354	0.00382355
0	0	2.57874E-05	0.000449371	0.00103844	0.00181648	0.00321396	0.00536377
0	0	2.49481E-05	0.000443497	0.00104057	0.00184822	0.00332695	0.00565781
0	0	1.02234E-05	0.000405273	0.00101402	0.00183723	0.00333412	0.00565498
0	0	0	0.000154877	0.000570374	0.00112335	0.00232117	0.00425148
0	0	0	0.00012764	0.00052124	0.00105782	0.00223732	0.00417274
0	0	0	0.000168915	0.00056839	0.00109047	0.00222359	0.00409294
0	0	0	8.96454E-05	0.000496292	0.00106087	0.00226067	0.00403023
0	0	0	5.76782E-05	0.000443192	0.00100365	0.00223068	0.00410378
0	0	0	7.36237E-05	0.000468597	0.00102631	0.00222534	0.00402168
0	0	7.40051E-06	0.000279846	0.000737534	0.00134933	0.00267288	0.00488472

0.00527603	0.00629585	0.0117142	0.0224772	0.0402485	0.0435066	0.0941893	0.114694
0.00428741	0.00461456	0.00773727	0.0144305	0.0269398	0.0308198	0.0715674	0.0944852
0.00433517	0.00473747	0.00800545	0.0148491	0.0273933	0.0310503	0.0715512	0.0939413
0.0043808	0.0047522	0.00793602	0.0146159	0.0269865	0.0307094	0.0711411	0.0939223
0.00448166	0.00490883	0.00815994	0.0148019	0.0269604	0.0304715	0.070348	0.0927953
0.00457138	0.0050502	0.00832771	0.0148347	0.0266234	0.0298921	0.0688525	0.0909383
0.00443314	0.00502518	0.00850952	0.0153489	0.0274648	0.0306152	0.0699271	0.0916273
0.0049099	0.00559448	0.0100219	0.019145	0.0349988	0.0387579	0.086338	0.108566
0.00496223	0.00545563	0.00956062	0.0183106	0.0339754	0.0381022	0.0858192	0.108854
0.00491493	0.00555679	0.00993256	0.0190125	0.0348399	0.038625	0.0860697	0.108202
0.00408096	0.00413116	0.00613808	0.010397	0.0191827	0.0226463	0.0554792	0.0782933
0.00404343	0.00407654	0.00609871	0.0104912	0.019577	0.0231933	0.0567974	0.0799135
0.00398666	0.00402321	0.00590691	0.0099054	0.018311	0.0217757	0.0538708	0.0768128
0.0040419	0.00418488	0.00625244	0.010405	0.0187608	0.0218847	0.0533569	0.0753963
0.00394196	0.00405876	0.00602959	0.0100475	0.0182775	0.0215047	0.0528616	0.0752089
0.00394402	0.00418625	0.00642281	0.0108159	0.0193595	0.0223376	0.0538844	0.0755208
0.00478493	0.0053231	0.00970001	0.019167	0.0358784	0.0400921	0.0894205	0.111866
0.00468483	0.00518013	0.0094928	0.0189603	0.0357798	0.0401392	0.089708	0.112277
0.00485954	0.00544373	0.00980881	0.0190788	0.0353931	0.0394564	0.0880881	0.110562
0.00407135	0.00416534	0.00692795	0.013418	0.0261666	0.0307158	0.0725655	0.0967703
0.00418388	0.00424202	0.00691582	0.0132043	0.025702	0.0302617	0.0718242	0.0962495
0.00429306	0.004543	0.00751114	0.0139948	0.0263536	0.0304099	0.0712148	0.0947238
0.00463188	0.00513016	0.008311	0.0143156	0.0249499	0.0276215	0.0633384	0.0841045
0.00449539	0.00500443	0.00812019	0.0139734	0.0243375	0.0269689	0.0620097	0.0827013
0.0045726	0.00507172	0.00821312	0.0141508	0.0247189	0.027443	0.0631246	0.0840429
0.00458305	0.00529572	0.00881172	0.0151673	0.0259155	0.028156	0.0634716	0.0831654
0.00448174	0.00525398	0.00883865	0.015253	0.0259481	0.0280503	0.0629573	0.0822906
0.00453888	0.0052153	0.00858582	0.0146443	0.024957	0.0271717	0.0615711	0.0812836
0.00482086	0.005578	0.00924362	0.0157289	0.0265032	0.0285104	0.0637617	0.0830589
0.00485199	0.00546692	0.00884697	0.0149506	0.025462	0.0277801	0.0630646	0.0832208
0.00480644	0.00550446	0.00908768	0.0155163	0.026307	0.0284209	0.0637454	0.0831668
0.00639427	0.00744156	0.0121384	0.0197321	0.0312527	0.0319453	0.0680061	0.0846545
0.00645767	0.00769409	0.0127115	0.0205946	0.0321078	0.032299	0.0677006	0.0832422
0.00627319	0.00751945	0.0125838	0.0206857	0.032589	0.0329308	0.0690902	0.0847667
0.00451447	0.00504074	0.00832504	0.0146255	0.0257252	0.0284831	0.0649883	0.0855476
0.00431366	0.00486115	0.00819435	0.0146831	0.0260768	0.028924	0.0658958	0.0864901
0.00435852	0.00498039	0.00837738	0.0147874	0.0258577	0.0284397	0.0645189	0.0846411
0.00598244	0.00749428	0.0142005	0.0267352	0.0461284	0.0482446	0.100937	0.118686
0.00634346	0.0078437	0.0145908	0.0271122	0.0465269	0.0486119	0.101743	0.119684
0.00623779	0.00758995	0.0140313	0.0261726	0.045293	0.0476742	0.100535	0.119172
0.00482185	0.00563904	0.00980721	0.0176653	0.0307925	0.0333647	0.073877	0.093848
0.00478172	0.00558601	0.00964195	0.0172548	0.0300555	0.0326667	0.072751	0.093126
0.00475479	0.00571594	0.0101118	0.0182203	0.0314357	0.0337206	0.0739732	0.0932999
0.00422043	0.0045594	0.00772446	0.0145126	0.0271218	0.0309898	0.0718487	0.094754
0.00436378	0.00465851	0.00764381	0.0139626	0.0258498	0.0295874	0.0690511	0.0919213
0.00424484	0.00456604	0.00761909	0.0140935	0.0261427	0.0298347	0.0692999	0.0917912
0.00576103	0.00708817	0.0127237	0.0228477	0.0386687	0.0405449	0.0863253	0.104797

0.133144	0.133471	0.117914	0.101747	0.0749797	0.0483639	0.0274495	0.0136441
0.119053	0.129962	0.125809	0.120353	0.0995497	0.0723342	0.0454426	0.0241895
0.118072	0.128894	0.125039	0.12009	0.0998681	0.0730077	0.04612	0.0246499
0.118559	0.129768	0.125957	0.120726	0.0999093	0.0725264	0.0454932	0.0241891
0.117281	0.128716	0.125448	0.120936	0.100842	0.0738322	0.0466677	0.0249435
0.115413	0.127448	0.125169	0.12178	0.102597	0.0758864	0.0483573	0.0259789
0.115613	0.12717	0.124593	0.121031	0.101831	0.0752131	0.047866	0.0256936
0.130051	0.134463	0.122491	0.109053	0.0829077	0.0550036	0.0318684	0.0160269
0.131054	0.135792	0.12367	0.1098	0.0830056	0.0546039	0.031339	0.0156406
0.129563	0.133956	0.122152	0.109052	0.0833463	0.0557328	0.0325773	0.0165036
0.105675	0.123705	0.128551	0.132314	0.117647	0.0911262	0.0599803	0.0328239
0.107369	0.124978	0.12901	0.13173	0.116056	0.0890471	0.0581479	0.0316525
0.104609	0.123398	0.129079	0.133632	0.119415	0.0928719	0.0613103	0.0336155
0.102399	0.121042	0.127387	0.133178	0.120537	0.0950594	0.0635175	0.0351151
0.102588	0.121531	0.127967	0.133707	0.120899	0.095277	0.0636484	0.0351897
0.102108	0.120475	0.126775	0.132677	0.120296	0.0950658	0.0636431	0.035234
0.132707	0.135499	0.121674	0.106613	0.0797221	0.0521124	0.0298894	0.0149565
0.133059	0.135589	0.121471	0.106242	0.0794608	0.0521313	0.0300911	0.0151516
0.131739	0.135158	0.121981	0.10749	0.0809329	0.0533373	0.0308381	0.0155243
0.122265	0.133082	0.127805	0.120615	0.0978888	0.0695719	0.0428443	0.0224947
0.122077	0.133244	0.12819	0.12112	0.098386	0.069977	0.0431134	0.0226379
0.119954	0.131264	0.127015	0.121056	0.0994275	0.0715795	0.0445722	0.0235762
0.108343	0.122428	0.123905	0.125033	0.109635	0.0842167	0.0552397	0.0302107
0.107094	0.121709	0.123932	0.125921	0.11126	0.0861302	0.0568603	0.0312309
0.108416	0.122557	0.124021	0.125152	0.109812	0.0844684	0.0554869	0.0303772
0.106369	0.119995	0.12186	0.124041	0.110229	0.0860178	0.0572145	0.031588
0.105296	0.119115	0.121506	0.124367	0.111156	0.0871786	0.0581938	0.0321964
0.104833	0.119281	0.122171	0.125414	0.112355	0.0883009	0.0590448	0.0327074
0.105891	0.119272	0.121078	0.123315	0.10975	0.085843	0.0572432	0.0316698
0.106928	0.120818	0.122553	0.124313	0.109935	0.0853686	0.056573	0.0311663
0.106067	0.119444	0.121196	0.123375	0.10977	0.0858558	0.0572589	0.0316811
0.104356	0.114924	0.115258	0.117093	0.104809	0.0828561	0.0558483	0.0311346
0.102058	0.112513	0.113581	0.116646	0.105782	0.0846774	0.0576119	0.0322982
0.103458	0.113377	0.11367	0.115876	0.104342	0.0830597	0.056322	0.0315271
0.109087	0.122044	0.122525	0.123117	0.108105	0.0836203	0.0553521	0.0305
0.109976	0.122737	0.122894	0.122999	0.107357	0.0824303	0.0542032	0.0297363
0.107913	0.121026	0.122033	0.12334	0.109022	0.0848768	0.0564751	0.0312248
0.133611	0.130349	0.112391	0.0948324	0.0684658	0.0433998	0.0243315	0.0120124
0.134627	0.130967	0.112303	0.0939187	0.0669553	0.0417938	0.0230873	0.0112771
0.134945	0.132012	0.11368	0.0953008	0.0679408	0.0422979	0.0232682	0.0113206
0.115479	0.124664	0.120678	0.116646	0.0983327	0.0731277	0.0468956	0.0253093
0.115457	0.125429	0.121921	0.11798	0.0992207	0.0734083	0.0468134	0.0251646
0.114422	0.123511	0.119856	0.116369	0.098662	0.0738145	0.0475781	0.0257688
0.119365	0.130325	0.126143	0.120502	0.0993044	0.071707	0.0447274	0.0236721
0.116986	0.12913	0.126471	0.122409	0.102295	0.0748608	0.0471948	0.0251528
0.116379	0.128187	0.125538	0.12183	0.102425	0.0756306	0.0481286	0.0258318
0.123099	0.126559	0.11626	0.106075	0.0841543	0.059157	0.036379	0.0191547

0.000330858	0
0.000599858	0
0.00061215	0
0.00059965	0
0.00061941	0
0.000646148	0
0.0006389	0
0.000389926	0
0.000379484	0
0.000402609	0
0.000820869	0
0.000790199	0
0.000841198	0
0.000881143	0
0.000883071	0
0.000884565	0
0.000363431	0
0.000369065	0
0.000378013	0
0.000555304	0
0.000558815	0
0.000583398	0
0.000755611	0
0.000782228	0
0.000760019	0
0.000792511	0
0.000808301	0
0.000821478	0
0.000795182	0
0.000781428	0
0.000795472	0
0.000783739	0
0.000814426	0
0.000794694	0
0.000764904	0
0.000744718	0
0.000783953	0
0.000290739	0
0.00027197	0
0.000272596	0
0.000630447	0
0.000626036	0
0.000642671	0
0.000585842	0
0.00062391	0
0.000642303	0
0.00047365	0

76980	1	12/19/18	11:38	83994	W1835353
76980	1	12/19/18	11:38	83994	W1835353
76980	1	12/19/18	11:42	92581	W1835354
76980	1	12/19/18	11:42	92581	W1835354
76980	1	12/19/18	11:42	92581	W1835354
76980	1	12/19/18	11:46	97553	W1835355
76980	1	12/19/18	11:46	97553	W1835355
76980	1	12/19/18	11:46	97553	W1835355
76980	1	12/19/18	12:46	61700	W1835356
76980	1	12/19/18	12:46	61700	W1835356
76980	1	12/19/18	12:46	61700	W1835356
76980	1	12/19/18	12:46	56210	W1835357
76980	1	12/19/18	12:46	56210	W1835357
76980	1	12/19/18	12:46	56210	W1835357
76980	1	12/19/18	12:55	12580	W1835358
76980	1	12/19/18	12:55	12580	W1835358
76980	1	12/19/18	12:55	12580	W1835358
76980	1	12/19/18	12:59	90564	W1835359
76980	1	12/19/18	12:59	90564	W1835359
76980	1	12/19/18	12:59	90564	W1835359
76980	1	12/19/18	13:03	17669	W1835360
76980	1	12/19/18	13:03	17669	W1835360
76980	1	12/19/18	13:03	17669	W1835360
76980	1	12/19/18	13:07	90811	W1835361
76980	1	12/19/18	13:07	90811	W1835361
76980	1	12/19/18	13:07	90811	W1835361
76980	1	12/19/18	13:10	80492	W1835362
76980	1	12/19/18	13:10	80492	W1835362
76980	1	12/19/18	13:10	80492	W1835362
76980	1	12/19/18	13:14	48000	W1835363
76980	1	12/19/18	13:14	48000	W1835363
76980	1	12/19/18	13:14	48000	W1835363
76980	1	12/19/18	13:18	22079	W1835364
76980	1	12/19/18	13:18	22079	W1835364
76980	1	12/19/18	13:18	22079	W1835364
76980	1	12/19/18	13:23	13061	W1835365
76980	1	12/19/18	13:23	13061	W1835365
76980	1	12/19/18	13:23	13061	W1835365
76980	1	12/19/18	13:27	49995	W1835366
76980	1	12/19/18	13:27	49995	W1835366
76980	1	12/19/18	13:27	49995	W1835366
76980	1	12/19/18	13:31	40896	W1835367
76980	1	12/19/18	13:31	40896	W1835367
76980	1	12/19/18	13:31	40896	W1835367
76980	1	12/19/18	13:37	26865	W1835368
76980	1	12/19/18	13:37	26865	W1835368
76980	1	12/19/18	13:37	26865	W1835368

XtendiMax+TripleFlexII+AU-243LFP13	TTI11004	63	2	366.6362
XtendiMax+TripleFlexII+AU-243LFP13	TTI11004	63	3	365.0982971
XtendiMax+Troubadour+AU-243LFP13	TTI11004	63	1	452.1305237
XtendiMax+Troubadour+AU-243LFP13	TTI11004	63	2	450.8080444
XtendiMax+Troubadour+AU-243LFP13	TTI11004	63	3	454.7096252
XtendiMax+TundraSupreme+AU-243LFP13	TTI11004	63	1	399.4678955
XtendiMax+TundraSupreme+AU-243LFP13	TTI11004	63	2	399.8772888
XtendiMax+TundraSupreme+AU-243LFP13	TTI11004	63	3	401.0861816
XtendiMax+Unfoamer+AU-243LFP13	TTI11004	63	1	452.6808167
XtendiMax+Unfoamer+AU-243LFP13	TTI11004	63	2	450.0629578
XtendiMax+Unfoamer+AU-243LFP13	TTI11004	63	3	450.1341858
XtendiMax+Vandal4SC+AU-243LFP13	TTI11004	63	1	440.5420837
XtendiMax+Vandal4SC+AU-243LFP13	TTI11004	63	2	438.1595459
XtendiMax+Vandal4SC+AU-243LFP13	TTI11004	63	3	446.942688
XtendiMax+Vaquero+AU-243LFP13	TTI11004	63	1	374.7861023
XtendiMax+Vaquero+AU-243LFP13	TTI11004	63	2	381.3809814
XtendiMax+Vaquero+AU-243LFP13	TTI11004	63	3	382.9878845
XtendiMax+VarsityD+AU-243LFP13	TTI11004	63	1	415.0163879
XtendiMax+VarsityD+AU-243LFP13	TTI11004	63	2	415.3440247
XtendiMax+VarsityD+AU-243LFP13	TTI11004	63	3	412.8048706
XtendiMax+Velomax+AU-243LFP13	TTI11004	63	1	393.9904785
XtendiMax+Velomax+AU-243LFP13	TTI11004	63	2	397.2885742
XtendiMax+Velomax+AU-243LFP13	TTI11004	63	3	395.5587463
XtendiMax+VelomaxDRT+AU-243LFP13	TTI11004	63	1	386.0177917
XtendiMax+VelomaxDRT+AU-243LFP13	TTI11004	63	2	387.8326111
XtendiMax+VelomaxDRT+AU-243LFP13	TTI11004	63	3	386.2572632
XtendiMax+Venturi+AU-243LFP13	TTI11004	63	1	421.5323486
XtendiMax+Venturi+AU-243LFP13	TTI11004	63	2	426.1671448
XtendiMax+Venturi+AU-243LFP13	TTI11004	63	3	429.8873596
XtendiMax+VeracityElite+AU-243LFP13	TTI11004	63	1	343.34729
XtendiMax+VeracityElite+AU-243LFP13	TTI11004	63	2	338.763916
XtendiMax+VeracityElite+AU-243LFP13	TTI11004	63	3	341.0557251
XtendiMax+Vertex+AU-243LFP13	TTI11004	63	1	397.5233154
XtendiMax+Vertex+AU-243LFP13	TTI11004	63	2	396.0639648
XtendiMax+Vertex+AU-243LFP13	TTI11004	63	3	399.5262756
XtendiMax+VisorS-MOCII+AU-243LFP13	TTI11004	63	1	380.1207581
XtendiMax+VisorS-MOCII+AU-243LFP13	TTI11004	63	2	375.4855042
XtendiMax+VisorS-MOCII+AU-243LFP13	TTI11004	63	3	379.4784546
XtendiMax+Volunteer+AU-243LFP13	TTI11004	63	1	384.0922241
XtendiMax+Volunteer+AU-243LFP13	TTI11004	63	2	380.6225281
XtendiMax+Volunteer+AU-243LFP13	TTI11004	63	3	383.3448792
XtendiMax+WarrantUltra+AU-243LFP13	TTI11004	63	1	367.8277893
XtendiMax+WarrantUltra+AU-243LFP13	TTI11004	63	2	374.9561157
XtendiMax+WarrantUltra+AU-243LFP13	TTI11004	63	3	375.4624329
XtendiMax+WaterMark+AU-243LFP13	TTI11004	63	1	359.2684631
XtendiMax+WaterMark+AU-243LFP13	TTI11004	63	2	356.2854614
XtendiMax+WaterMark+AU-243LFP13	TTI11004	63	3	360.0582886

771.8787842	1519.692017	0.831078589	0	0	0	0	0
779.0054321	1542.019531	0.821821392	0	0	0	0	0
927.6478271	1710.50415	0.562369049	0	0	0	0	0
924.9544067	1706.887207	0.555747807	0	0	0	0	0
942.5794067	1728.283691	0.502829432	0	0	0	0	0
817.020874	1571.608032	0.721875966	0	0	0	0	0
812.9656982	1558.031006	0.701901674	0	0	0	0	0
812.409668	1549.18042	0.717199147	0	0	0	0	0
924.8386841	1704.925171	0.542862058	0	0	0	0	0
925.5546265	1710.365479	0.541941524	0	0	0	0	0
919.2016602	1699.338013	0.54773587	0	0	0	0	0
939.4009399	1736.14502	0.571265638	0	0	0	0	0
940.1629639	1741.320557	0.585441113	0	0	0	0	0
958.651062	1758.689209	0.541068316	0	0	0	0	0
771.3913574	1495.674805	0.809526324	0	0	0	0	0
783.4238281	1514.82605	0.777645886	0	0	0	0	0
789.1244507	1526.981201	0.757899523	0	0	0	0	0
905.0718994	1712.25	0.665298343	0	0	0	0	0
899.397583	1698.459351	0.683145523	0	0	0	0	0
894.0297241	1695.892578	0.695295393	0	0	0	0	0
787.1732788	1493.369873	0.778207302	0	0	0	0	0
797.2231445	1512.131836	0.755714357	0	0	0	0	0
793.5774536	1512.857056	0.774119973	0	0	0	0	0
777.6547852	1488.979004	0.789058745	0	0	0	0	0
773.6769409	1466.226318	0.808767617	0	0	0	0	0
771.0424805	1471.178467	0.797117114	0	0	0	0	0
849.6223145	1599.997314	0.654595613	0	0	0	0	0
870.3504028	1635.641846	0.610268593	0	0	0	0	0
869.6660156	1631.183472	0.623635411	0	0	0	0	0
696.7058105	1332.639648	1.090166926	0	0	0	0	0
694.9420776	1353.206909	1.06856668	0	0	0	0	0
698.3579102	1354.696777	1.077070594	0	0	0	0	0
870.7487183	1675.309082	0.713014483	0	0	0	0	0
874.1411743	1680.114502	0.736196637	0	0	0	0	0
887.7163086	1700.000122	0.70613116	0	0	0	0	0
808.0668335	1580.838623	0.801593959	0	0	0	0	0
802.9850464	1571.659668	0.822977304	0	0	0	0	0
807.9572754	1587.116943	0.813218415	0	0	0	0	0
770.3151855	1476.187988	0.837649941	0	0	0	0	0
762.2357788	1459.697632	0.869751275	0	0	0	0	0
770.1157227	1480.44104	0.832988679	0	0	0	0	0
781.3070068	1545.229248	0.761111856	0	0	0	0	0
788.4790039	1549.094604	0.741759419	0	0	0	0	0
789.0332642	1552.78125	0.733634114	0	0	0	0	0
741.0627441	1446.260742	0.906450689	0	0	0	0	0
738.9985352	1449.863037	0.946827352	0	0	0	0	0
747.0576172	1461.853516	0.904401481	0	0	0	0	0

0	0	5.87463E-06	0.000283661	0.000748215	0.00135857	0.00265457	0.00476143
0	0	5.95093E-06	0.000265198	0.000709534	0.0013089	0.00262177	0.00485695
0	0	0	4.65393E-06	0.000299606	0.000833054	0.0019017	0.00376991
0	0	0	3.05176E-06	0.000292816	0.000820618	0.00187889	0.00374001
0	0	0	1.09863E-05	0.000259552	0.000719986	0.00167702	0.00347382
0	0	0	0.000124741	0.000569077	0.00116699	0.00241829	0.00424698
0	0	0	0.000109024	0.000543137	0.00113106	0.00236046	0.00415489
0	0	0	0.000101471	0.00054039	0.00114464	0.00241966	0.00428642
0	0	0	1.04523E-05	0.00029686	0.000807419	0.00183182	0.00361984
0	0	0	2.15912E-05	0.000310745	0.000813065	0.00182076	0.00357834
0	0	0	1.19019E-05	0.000304184	0.000820007	0.00184975	0.00362968
0	0	0	0.000101929	0.000397568	0.000836716	0.00187614	0.00368095
0	0	0	0.000107498	0.000411072	0.000860214	0.00192093	0.00376015
0	0	0	0.000103836	0.000364227	0.000801926	0.00173889	0.00354538
0	0	0	0.000213699	0.000705719	0.0013324	0.00264099	0.00464981
0	0	0	0.000186157	0.000665283	0.00128082	0.00255707	0.00447243
0	0	0	0.000172119	0.000635681	0.00123718	0.00249451	0.00441208
0	0	4.42505E-06	0.000189819	0.000534134	0.00102554	0.00214256	0.00404579
0	0	0	0.000152817	0.000518799	0.00103493	0.00222389	0.00426254
0	0	0	0.00017746	0.000544586	0.00106544	0.00225433	0.00427063
0	0	0	0.000122223	0.000615082	0.00127502	0.00262894	0.00451363
0	0	0	0.000125198	0.000599518	0.00123482	0.00254532	0.00439156
0	0	0	0.000137024	0.00063385	0.0012867	0.00260742	0.00441139
0	0	0	0.000165329	0.000670929	0.00132095	0.0026313	0.00445961
0	0	0	0.000135345	0.000651245	0.00133438	0.00272621	0.00465515
0	0	0	0.000171814	0.000692825	0.00135422	0.0026638	0.00442192
0	0	0	4.92096E-05	0.000442657	0.00101288	0.00224236	0.00404579
0	0	0	4.86755E-05	0.000403748	0.000925446	0.00207626	0.00385094
0	0	0	3.85284E-05	0.00040947	0.000954514	0.0021405	0.00389786
0	0	1.01471E-05	0.000428696	0.00106857	0.00192284	0.00345726	0.00578865
0	0	3.74603E-05	0.00048584	0.00108055	0.00187469	0.00332436	0.00562691
0	0	2.99072E-05	0.000468292	0.00107574	0.00188995	0.00337196	0.00569298
0	0	2.67029E-06	0.000210648	0.000589294	0.00111214	0.00228615	0.00430489
0	0	7.17163E-06	0.000226364	0.000607452	0.00114075	0.00235039	0.00445877
0	0	1.53351E-05	0.000237732	0.00059433	0.00109566	0.00223579	0.00424652
0	0	2.42615E-05	0.00031189	0.000739975	0.00131485	0.00253731	0.00449829
0	0	3.19672E-05	0.000323563	0.000743637	0.00132385	0.00259094	0.00470551
0	0	2.57874E-05	0.00032135	0.000750504	0.0013723	0.00255989	0.0045089
0	0	0	0.000200653	0.000748062	0.00143456	0.00278648	0.00458565
0	0	0	0.000215759	0.000761185	0.001521	0.00286537	0.00476906
0	0	0	0.000217133	0.000758667	0.00143112	0.00275551	0.00453247
0	0	1.60217E-05	0.000294037	0.000709686	0.00124962	0.00239395	0.0043235
0	0	5.34058E-07	0.000242004	0.000669861	0.00121918	0.00237518	0.00425346
0	0	2.82288E-06	0.000258942	0.000685577	0.00122505	0.0023391	0.00411972
0	0	4.57764E-07	0.000306549	0.00083374	0.00155769	0.00289513	0.00503433
0	0	1.90735E-06	0.000325012	0.000870895	0.00162392	0.00302017	0.005261
0	0	0.000001297	0.000304413	0.000823746	0.00154366	0.00288589	0.0050618

0.0055291	0.00678894	0.0122968	0.0223753	0.0382875	0.0403957	0.0863568	0.10507
0.00579468	0.00714684	0.0127596	0.0227087	0.0381476	0.0398448	0.0846838	0.102826
0.00404778	0.00412811	0.00623688	0.0107507	0.0199532	0.0234992	0.0571916	0.0799874
0.00403999	0.00415024	0.00631218	0.0109041	0.0201968	0.0237296	0.0576202	0.0804201
0.00395416	0.00424599	0.00656914	0.011098	0.019849	0.0228687	0.0550659	0.0769814
0.00447205	0.00496613	0.00868126	0.0164912	0.0304789	0.0342369	0.0776421	0.0997648
0.00438225	0.00488564	0.00859833	0.0164494	0.0305607	0.0344365	0.0782938	0.100793
0.00449379	0.00491989	0.00849678	0.0161362	0.0300748	0.0340739	0.0779565	0.100978
0.00389297	0.00400032	0.00612671	0.0107062	0.0200117	0.0236219	0.0575523	0.0805486
0.00387115	0.00403778	0.00629242	0.0110658	0.0205353	0.0240148	0.0579516	0.0804436
0.0038826	0.00398849	0.00615295	0.0108691	0.0204361	0.0241331	0.0586415	0.0816824
0.00424828	0.00473038	0.00755524	0.0127316	0.0219534	0.024379	0.0566654	0.0769431
0.00433762	0.00483307	0.00772079	0.0129813	0.0222725	0.0246085	0.0568826	0.0768221
0.00417595	0.00469795	0.0074733	0.0123988	0.0210679	0.0232549	0.0540608	0.0738202
0.00516441	0.00612968	0.0110717	0.020659	0.0365634	0.0395615	0.0864418	0.10705
0.00488533	0.00572617	0.0103433	0.0195069	0.0349761	0.0382006	0.084189	0.105155
0.00487076	0.00572746	0.0103035	0.0193047	0.0344715	0.0376134	0.0829787	0.103919
0.00468071	0.00539894	0.00900009	0.01546	0.0262077	0.0282298	0.0630618	0.0819862
0.00491776	0.00556747	0.0090519	0.0152715	0.0258048	0.0279372	0.0629723	0.0826698
0.00489677	0.00555321	0.00910088	0.0155039	0.0263439	0.0285386	0.0641478	0.0837469
0.00457817	0.00494591	0.00866104	0.0168715	0.031965	0.036384	0.0830494	0.106656
0.00449005	0.00487381	0.00851486	0.0164855	0.0311095	0.0353871	0.0809239	0.104391
0.0044323	0.00480049	0.00849785	0.0166966	0.0316975	0.0360408	0.082102	0.105261
0.00461449	0.00521255	0.00944969	0.0184239	0.0342094	0.0381849	0.0854795	0.107809
0.00473259	0.00516777	0.00914474	0.0178362	0.0335805	0.0379503	0.0859069	0.109301
0.00446274	0.00499428	0.00917183	0.0182785	0.0344887	0.0387832	0.0871079	0.109854
0.00416008	0.00431999	0.00708885	0.0133456	0.0255511	0.0298273	0.0705061	0.0944672
0.00411819	0.00440262	0.00722229	0.0132269	0.0246561	0.0284322	0.0669585	0.0900532
0.00402214	0.00414917	0.00671425	0.0125176	0.0239746	0.0281229	0.067001	0.090717
0.00632172	0.00769226	0.014309	0.0268525	0.0465843	0.049014	0.103109	0.121667
0.00640808	0.00809891	0.0152557	0.0283258	0.0481802	0.0498761	0.103348	0.120335
0.00638367	0.00793983	0.0148436	0.0276016	0.047234	0.0491808	0.102521	0.120087
0.00506638	0.00600128	0.0102251	0.0176533	0.0295673	0.0313245	0.0685336	0.0869903
0.0052771	0.00623268	0.0104974	0.0178417	0.0295059	0.0310582	0.0677438	0.0859773
0.0050766	0.0060672	0.0103083	0.0175663	0.0289768	0.0303977	0.0661066	0.0838216
0.00512207	0.00616127	0.0110045	0.0199669	0.0343943	0.036644	0.0794439	0.0985332
0.00547691	0.00661148	0.0116523	0.0207156	0.0350932	0.037054	0.079891	0.0987827
0.00508293	0.00611282	0.0109868	0.0200664	0.0346594	0.0369045	0.0797944	0.0985671
0.0045977	0.00512413	0.00936966	0.0185689	0.0348327	0.0389987	0.0872348	0.109613
0.00479202	0.00532646	0.00967545	0.019062	0.0356357	0.0398179	0.0888544	0.111249
0.00458206	0.00516273	0.00948898	0.0187677	0.0350597	0.0391379	0.087339	0.109526
0.005214	0.00667191	0.0123859	0.0226102	0.0383253	0.0400437	0.0848888	0.102774
0.00498138	0.00622055	0.0114738	0.0211703	0.0365516	0.0387907	0.0834798	0.102464
0.00480553	0.00606369	0.0113514	0.0211728	0.0367108	0.0389642	0.0837048	0.102469
0.00565002	0.00689667	0.0127013	0.0236398	0.0410599	0.0435316	0.0928976	0.112057
0.00590134	0.00716484	0.0130796	0.0241236	0.0415919	0.0438763	0.0931953	0.111897
0.00571335	0.00695511	0.0127035	0.0234466	0.0405155	0.042871	0.0914655	0.110483

0.123483	0.126909	0.116518	0.106281	0.0843382	0.0593278	0.0365149	0.01924
0.121062	0.125027	0.115708	0.106811	0.0861563	0.0617696	0.0386676	0.0206073
0.106951	0.124068	0.127883	0.130747	0.115767	0.0896052	0.059111	0.0324517
0.107342	0.124317	0.12792	0.130525	0.115297	0.0890086	0.0585769	0.0321018
0.103701	0.121715	0.127206	0.132023	0.118637	0.0930048	0.0619123	0.0341702
0.122424	0.130256	0.123017	0.114943	0.0931492	0.0667064	0.0416015	0.0220954
0.123761	0.131543	0.123832	0.114972	0.0922274	0.0651817	0.0401373	0.0211252
0.124561	0.132734	0.12495	0.115609	0.092047	0.0643481	0.0391783	0.0204463
0.107722	0.124873	0.128453	0.130861	0.1153	0.0887648	0.0582926	0.0319081
0.10702	0.123759	0.127341	0.13012	0.115281	0.0893695	0.0590652	0.0324732
0.108631	0.125231	0.128181	0.130032	0.114182	0.0876772	0.0574674	0.031412
0.101825	0.11855	0.123884	0.129428	0.117669	0.0935379	0.063038	0.0350854
0.101261	0.117628	0.122901	0.128699	0.117577	0.0940724	0.0637879	0.0356572
0.0986234	0.116211	0.123157	0.130762	0.12096	0.0977363	0.0666947	0.0374078
0.127084	0.13095	0.119602	0.107572	0.0834217	0.0570032	0.0341255	0.0176244
0.125874	0.130859	0.120705	0.109776	0.086132	0.0594967	0.0359122	0.0186415
0.124848	0.130352	0.120836	0.110573	0.0874289	0.0609272	0.0370702	0.0193477
0.104451	0.117877	0.120271	0.123518	0.111117	0.0878949	0.0591532	0.0329221
0.106008	0.119849	0.121869	0.124093	0.11024	0.0859902	0.057191	0.0315818
0.106671	0.119808	0.121167	0.122937	0.109087	0.0851882	0.0567853	0.0314229
0.129777	0.135805	0.124952	0.112272	0.0861387	0.0576661	0.0336754	0.0170326
0.127867	0.134945	0.125416	0.114016	0.0886169	0.0600962	0.0354676	0.0180621
0.128073	0.134342	0.124289	0.112758	0.0877708	0.0598525	0.0356028	0.0182597
0.129375	0.134021	0.122487	0.109709	0.0842586	0.0567153	0.0333825	0.0170034
0.131743	0.136468	0.124116	0.109959	0.0829245	0.0544507	0.031237	0.0156013
0.131406	0.135346	0.122708	0.108745	0.0824294	0.0546911	0.0317859	0.0160519
0.120204	0.131949	0.127922	0.122011	0.100141	0.0719252	0.0446485	0.0235575
0.115739	0.128924	0.127324	0.124205	0.104591	0.0771044	0.04891	0.0261768
0.116842	0.130063	0.128129	0.124521	0.104379	0.076581	0.0483748	0.0258115
0.136899	0.132812	0.11312	0.0933809	0.0651129	0.0393421	0.0209462	0.00992467
0.134204	0.129657	0.110607	0.0922043	0.0656936	0.0411072	0.0228104	0.0111886
0.134583	0.130513	0.111613	0.0931257	0.0662718	0.0413276	0.0228262	0.01115
0.108226	0.119281	0.118858	0.119188	0.104805	0.0812996	0.0539529	0.0297752
0.107205	0.118577	0.118655	0.119511	0.105514	0.0821035	0.0545927	0.0301602
0.104801	0.116695	0.11799	0.120478	0.108019	0.0852783	0.057319	0.0318716
0.118476	0.125052	0.11838	0.111849	0.0922254	0.0673047	0.0426108	0.0228379
0.118615	0.125062	0.118166	0.111266	0.0912679	0.0661838	0.041656	0.0222346
0.118047	0.124246	0.117513	0.111241	0.0922034	0.0678233	0.0432896	0.0233412
0.130782	0.134505	0.121913	0.108195	0.0823435	0.0550368	0.0322868	0.0164403
0.132088	0.134995	0.121407	0.106721	0.0803215	0.0530731	0.0308471	0.0156197
0.130478	0.134033	0.121407	0.107808	0.082288	0.0553307	0.032713	0.0167719
0.120846	0.124899	0.115856	0.107264	0.0867292	0.0622492	0.0389731	0.020768
0.121661	0.126481	0.117601	0.108832	0.0878233	0.0629052	0.0393346	0.0209499
0.121391	0.12605	0.11723	0.108697	0.0880154	0.0633023	0.0397184	0.0211964
0.129684	0.130323	0.116056	0.101643	0.0766722	0.0510236	0.0299144	0.0152486
0.129007	0.129293	0.115017	0.100864	0.0764215	0.0512406	0.0302972	0.0155462
0.128252	0.129499	0.116099	0.102611	0.0782905	0.0527556	0.0312686	0.0160562

0.000475889	0
0.000511573	0
0.000812719	0
0.00080346	0
0.000857132	0
0.000547831	0
0.000522193	0
0.000503946	0
0.000798342	0
0.000813652	0
0.000785514	0
0.000882534	0
0.000898231	0
0.000943225	0
0.00043294	0
0.000458658	0
0.000476874	0
0.000828206	0
0.000792462	0
0.000789095	0
0.000415209	0
0.000441261	0
0.000447278	0
0.0004156	0
0.000378737	0
0.000391254	0
0.000582452	0
0.000650207	0
0.000640443	0
0.000236739	0
0.000270267	0
0.000268908	0
0.000747073	0
0.000756974	0
0.000801503	0
0.00056779	0
0.000552034	0
0.000581484	0
0.000401995	0
0.000381317	0
0.000411161	0
0.000515549	0
0.000520009	0
0.000526417	0
0.00037307	0
0.000381223	0
0.000393763	0

76980	1	12/19/18	13:41	68948	W1835369
76980	1	12/19/18	13:41	68948	W1835369
76980	1	12/19/18	13:41	68948	W1835369
76980	1	12/19/18	13:45	21450	W1835370
76980	1	12/19/18	13:45	21450	W1835370
76980	1	12/19/18	13:45	21450	W1835370
76980	1	12/19/18	13:50	52734	W1835371
76980	1	12/19/18	13:50	52734	W1835371
76980	1	12/19/18	13:50	52734	W1835371
76980	1	12/19/18	13:56	61981	W1835372
76980	1	12/19/18	13:56	61981	W1835372
76980	1	12/19/18	13:56	61981	W1835372
76980	1	12/19/18	14:00	36045	W1835373
76980	1	12/19/18	14:00	36045	W1835373
76980	1	12/19/18	14:00	36045	W1835373
76980	1	12/19/18	14:03	97825	W1835374
76980	1	12/19/18	14:03	97825	W1835374
76980	1	12/19/18	14:03	97825	W1835374

XtendiMax+WeatherMax+AU-243LFP13	TTI11004	63	1	374.984375
XtendiMax+WeatherMax+AU-243LFP13	TTI11004	63	2	372.0274353
XtendiMax+WeatherMax+AU-243LFP13	TTI11004	63	3	371.4693604
XtendiMax+Wetcit+AU-243LFP13	TTI11004	63	1	417.5711365
XtendiMax+Wetcit+AU-243LFP13	TTI11004	63	2	426.2993164
XtendiMax+Wetcit+AU-243LFP13	TTI11004	63	3	426.6143494
XtendiMax+Woodside+AU-243LFP13	TTI11004	63	1	390.8923035
XtendiMax+Woodside+AU-243LFP13	TTI11004	63	2	385.7059021
XtendiMax+Woodside+AU-243LFP13	TTI11004	63	3	385.7078247
XtendiMax+X-Cyte+AU-243LFP13	TTI11004	63	1	444.280365
XtendiMax+X-Cyte+AU-243LFP13	TTI11004	63	2	447.153595
XtendiMax+X-Cyte+AU-243LFP13	TTI11004	63	3	451.0775452
XtendiMax+ZoleraFX+AU-243LFP13	TTI11004	63	1	406.1182861
XtendiMax+ZoleraFX+AU-243LFP13	TTI11004	63	2	400.8622742
XtendiMax+ZoleraFX+AU-243LFP13	TTI11004	63	3	407.9122009
XtendiMax+AnthemATZ+AU-243LFP13	TTI11004	63	1	394.4302063
XtendiMax+AnthemATZ+AU-243LFP13	TTI11004	63	2	395.9119568
XtendiMax+AnthemATZ+AU-243LFP13	TTI11004	63	3	396.9697266

878.6638184	1709.338623	0.871830881	1.98364E-06	4.66156E-05	6.30188E-05	5.47028E-05	4.66919E-05
864.7696533	1686.514282	0.898271382	1.90735E-06	4.53186E-05	6.30188E-05	5.63812E-05	4.98199E-05
862.3060913	1685.243286	0.925378382	2.13623E-06	4.96674E-05	6.86646E-05	6.18744E-05	5.69916E-05
897.045166	1698.546875	0.679637194	0	0	0	0	0
911.7207031	1708.069336	0.630566359	0	0	0	0	0
901.6226807	1694.703247	0.654402912	0	0	0	0	0
792.2232056	1521.669556	0.74522543	0	0	0	0	0
782.4901123	1506.516968	0.760093451	0	0	0	0	0
772.5585938	1479.301025	0.798975408	0	0	0	0	0
916.9510498	1699.229614	0.58999902	0	0	0	0	0
930.4779663	1718.291626	0.58120358	0	0	0	0	0
931.5072632	1716.116943	0.560806572	0	0	0	0	0
846.7501831	1617.823608	0.691887498	0	0	0	0	0
837.0031128	1607.144531	0.708483398	0	0	0	0	0
851.7081909	1622.20752	0.671633482	0	0	0	0	0
821.5913086	1588.393311	0.717944682	0	0	0	0	0
827.020813	1595.332031	0.692043066	0	0	0	0	0
834.5414429	1611.06665	0.682347536	0	0	0	0	0

1.07574E-05	1.32751E-05	0.000126648	0.000420609	0.000763474	0.00131775	0.00253082	0.00492889
1.21307E-05	1.06049E-05	0.000122452	0.000422058	0.000778351	0.00135635	0.00261963	0.0051091
1.79291E-05	1.15204E-05	0.000118561	0.000419617	0.000788651	0.00139183	0.00270714	0.00527199
0	0	0	0.000170059	0.000554047	0.00107178	0.00221428	0.00406578
0	0	0	0.000127945	0.000472946	0.000959091	0.00206718	0.00392662
0	0	0	0.000119095	0.000491486	0.00101212	0.00216805	0.00401352
0	0	0	0.000114517	0.000582428	0.00120987	0.00250832	0.0043853
0	0	0	0.000138245	0.000617294	0.00124733	0.0025415	0.00441315
0	0	0	0.000128326	0.000644073	0.00132362	0.00269722	0.00459152
0	0	0	4.97437E-05	0.000374603	0.000868607	0.00199821	0.00380722
0	0	0	5.35583E-05	0.000369263	0.000850449	0.00196053	0.00377037
0	0	0	3.48663E-05	0.000342178	0.000816727	0.00190742	0.00366119
0	0	0	8.98743E-05	0.000493774	0.00106544	0.00232025	0.00429909
0	0	0	0.000109711	0.000532227	0.00111298	0.00236549	0.00431381
0	0	0	8.87299E-05	0.000477982	0.00102943	0.00224701	0.0041951
0	0	0	0.000179291	0.000614471	0.00117607	0.00235268	0.00414398
0	0	0	0.000154114	0.000568237	0.00111427	0.00227554	0.00408615
0	0	0	0.000157242	0.000558243	0.00108971	0.00223442	0.00406036

0.00618874	0.00763039	0.0128953	0.0210484	0.0326461	0.0325686	0.0676586	0.0825944
0.00638504	0.00781761	0.0131274	0.0213508	0.0331264	0.033129	0.0690708	0.0845899
0.00651428	0.00787689	0.0131099	0.0212634	0.0330731	0.0331892	0.0693989	0.0850874
0.00453896	0.00511536	0.0085099	0.0148845	0.0258469	0.028306	0.0640099	0.0838225
0.00446388	0.00500671	0.0081665	0.0140168	0.0242238	0.026676	0.0610646	0.081296
0.00439758	0.00480042	0.00779259	0.013638	0.024192	0.0270769	0.0625772	0.0835353
0.00462265	0.00519699	0.00924248	0.0177349	0.0327682	0.0366309	0.0824017	0.104703
0.00468544	0.00536171	0.00968033	0.0186266	0.0341898	0.0379221	0.0845446	0.106398
0.00468864	0.00519455	0.00933479	0.0183038	0.034325	0.0385567	0.0866279	0.109321
0.00411362	0.00429276	0.00666298	0.0115886	0.0212399	0.0246395	0.0590705	0.0815302
0.00412842	0.00434669	0.00672791	0.0115239	0.020795	0.0239375	0.0572166	0.0790754
0.00396378	0.00412422	0.00636711	0.0110406	0.0202747	0.0236099	0.0569205	0.0791522
0.00472855	0.00525696	0.00880638	0.015838	0.0283168	0.0314983	0.0716172	0.093188
0.00473679	0.0053405	0.00912315	0.0165888	0.0296021	0.0327026	0.0736559	0.094837
0.00466858	0.00523682	0.00878685	0.0157224	0.0279541	0.0310271	0.0705868	0.0921392
0.00454628	0.005298	0.00944687	0.0176281	0.0315424	0.0345967	0.0770045	0.0977314
0.00455589	0.005336	0.00946747	0.0175115	0.0311403	0.0340812	0.0758797	0.0965541
0.00458961	0.00540245	0.00953285	0.0174467	0.0307654	0.033542	0.0745763	0.0949615

0.100969	0.111425	0.112928	0.116657	0.106474	0.0857148	0.058548	0.0328974
0.103434	0.113664	0.114121	0.116173	0.104106	0.0822677	0.0553793	0.0308354
0.103905	0.113847	0.113927	0.115676	0.103556	0.0818805	0.0551902	0.0307646
0.106896	0.120135	0.121562	0.123414	0.109599	0.0856726	0.0571633	0.0316532
0.105418	0.120274	0.123208	0.12619	0.112572	0.088035	0.0586277	0.0323946
0.107916	0.122153	0.123845	0.125374	0.110574	0.0856527	0.0566792	0.0312105
0.12676	0.132659	0.122734	0.111688	0.0875971	0.0604979	0.0365285	0.0189689
0.127687	0.132567	0.121738	0.109937	0.0855017	0.0585343	0.0350859	0.0181386
0.130832	0.134807	0.122311	0.108618	0.0827339	0.0553835	0.0325593	0.0166116
0.107947	0.124275	0.127278	0.129326	0.113776	0.0875101	0.057435	0.0314284
0.10523	0.122116	0.12639	0.130138	0.116252	0.0907746	0.0602839	0.0332264
0.10572	0.122925	0.127277	0.130878	0.116559	0.0906447	0.0599763	0.0329777
0.11663	0.127205	0.123617	0.119226	0.0997901	0.0735125	0.0467626	0.0251128
0.117568	0.127156	0.122662	0.117534	0.0978251	0.0717464	0.0454968	0.024385
0.115873	0.127059	0.124106	0.120209	0.100895	0.0743958	0.0472976	0.025373
0.119449	0.127447	0.121377	0.114903	0.094604	0.0687957	0.0433929	0.0231953
0.118521	0.127123	0.121735	0.115848	0.0958054	0.0698853	0.0441533	0.023618
0.11686	0.125868	0.121275	0.116422	0.0973807	0.0719395	0.0459556	0.0247662

0.000830103	0
0.000775865	0
0.000774388	0
0.00079505	0
0.000813001	0
0.000782522	0
0.00046679	0
0.000445775	0
0.000406471	0
0.000786271	0
0.0008331	0
0.000826249	0
0.000624639	0
0.000606145	0
0.00063081	0
0.000576164	0
0.000586758	0
0.000616788	0

Material	Batch	Date	Time	Material ID	Battelle_ID	Spray_solution_name	Nozzle
76980	1	2/18/2019	8:19:00 AM	11117	W1946001A	Water+6515+21.7	6515
76980	1	2/18/2019	8:19:00 AM	11117	W1946001A	Water+6515+21.7	6515
76980	1	2/18/2019	8:19:00 AM	11117	W1946001A	Water+6515+21.7	6515
76980	1	2/18/2019	8:22:00 AM	11116	W1946001B	Water+6510+29.0	6510
76980	1	2/18/2019	8:22:00 AM	11116	W1946001B	Water+6510+29.0	6510
76980	1	2/18/2019	8:22:00 AM	11116	W1946001B	Water+6510+29.0	6510
76980	1	2/18/2019	8:26:00 AM	11115	W1946001C	Water+8008+36.3	8008
76980	1	2/18/2019	8:26:00 AM	11115	W1946001C	Water+8008+36.3	8008
76980	1	2/18/2019	8:26:00 AM	11115	W1946001C	Water+8008+36.3	8008
76980	1	2/18/2019	8:30:00 AM	11114	W1946001D	Water+11006+29.0	11006
76980	1	2/18/2019	8:30:00 AM	11114	W1946001D	Water+11006+29.0	11006
76980	1	2/18/2019	8:30:00 AM	11114	W1946001D	Water+11006+29.0	11006
76980	1	2/18/2019	8:34:00 AM	11113	W1946001E	Water+11003+43.5	11003
76980	1	2/18/2019	8:34:00 AM	11113	W1946001E	Water+11003+43.5	11003
76980	1	2/18/2019	8:34:00 AM	11113	W1946001E	Water+11003+43.5	11003
76980	1	2/18/2019	8:39:00 AM	11112	W1946001F	Water+11001+65.3	11001
76980	1	2/18/2019	8:39:00 AM	11112	W1946001F	Water+11001+65.3	11001
76980	1	2/18/2019	8:39:00 AM	11112	W1946001F	Water+11001+65.3	11001
76980	1	2/18/2019	8:42:00 AM	11117	W1946002A	Water+NIS+6515+21.7	6515
76980	1	2/18/2019	8:42:00 AM	11117	W1946002A	Water+NIS+6515+21.7	6515
76980	1	2/18/2019	8:42:00 AM	11117	W1946002A	Water+NIS+6515+21.7	6515
76980	1	2/18/2019	8:46:00 AM	11116	W1946002B	Water+NIS+6510+29.0	6510
76980	1	2/18/2019	8:46:00 AM	11116	W1946002B	Water+NIS+6510+29.0	6510
76980	1	2/18/2019	8:46:00 AM	11116	W1946002B	Water+NIS+6510+29.0	6510
76980	1	2/18/2019	8:50:00 AM	11115	W1946002C	Water+NIS+8008+36.3	8008
76980	1	2/18/2019	8:50:00 AM	11115	W1946002C	Water+NIS+8008+36.3	8008
76980	1	2/18/2019	8:50:00 AM	11115	W1946002C	Water+NIS+8008+36.3	8008
76980	1	2/18/2019	8:55:00 AM	11114	W1946002D	Water+NIS+11006+29.0	11006
76980	1	2/18/2019	8:55:00 AM	11114	W1946002D	Water+NIS+11006+29.0	11006
76980	1	2/18/2019	8:55:00 AM	11114	W1946002D	Water+NIS+11006+29.0	11006
76980	1	2/18/2019	8:58:00 AM	11113	W1946002E	Water+NIS+11003+43.5	11003
76980	1	2/18/2019	8:58:00 AM	11113	W1946002E	Water+NIS+11003+43.5	11003
76980	1	2/18/2019	8:58:00 AM	11113	W1946002E	Water+NIS+11003+43.5	11003
76980	1	2/18/2019	9:01:00 AM	11112	W1946002F	Water+NIS+11001+65.3	11001
76980	1	2/18/2019	9:01:00 AM	11112	W1946002F	Water+NIS+11001+65.3	11001
76980	1	2/18/2019	9:01:00 AM	11112	W1946002F	Water+NIS+11001+65.3	11001
76980	1	2/18/2019	9:06:00 AM	76980	W1946003	XtendiMax	TTI11004
76980	1	2/18/2019	9:06:00 AM	76980	W1946003	XtendiMax	TTI11004
76980	1	2/18/2019	9:06:00 AM	76980	W1946003	XtendiMax	TTI11004
76980	1	2/18/2019	9:22:00 AM	67678	W1946012	XtendiMax+AU-243LFP13-2	TTI11004
76980	1	2/18/2019	9:22:00 AM	67678	W1946012	XtendiMax+AU-243LFP13-2	TTI11004
76980	1	2/18/2019	9:22:00 AM	67678	W1946012	XtendiMax+AU-243LFP13-2	TTI11004

Pressure	Rep	DV10	VMD	DV90	%_141	18	22	26
21.7	1	334.9487	726.7574463	1452.682983	1.636272311	5.56946E-06	0.000125656	0.000166092
21.7	2	339.8467407	739.3536377	1476.081055	1.587972641	5.18799E-06	0.000118103	0.000160217
21.7	3	336.6260986	735.6447144	1469.517822	1.645007849	5.34058E-06	0.000122375	0.00016655
29	1	257.386261	561.5714722	1120.293823	2.968222857	9.99451E-06	0.000212784	0.000247269
29	2	260.4880371	566.8197021	1131.035278	2.867190838	9.76563E-06	0.000208054	0.000239182
29	3	256.0166016	561.5528564	1119.839966	3.033232212	1.02997E-05	0.000220337	0.000259628
36.3	1	200.0892639	442.7827759	854.1306152	4.885680199	0.00001297	0.000267792	0.000300217
36.3	2	198.2033081	437.9509277	835.8366699	5.000723839	1.28174E-05	0.000263443	0.000290833
36.3	3	198.6705322	439.4655762	834.8374023	4.955405712	1.27411E-05	0.000263214	0.000294876
29	1	159.2451477	354.661377	651.2993164	7.721119404	1.52588E-05	0.000320892	0.000404663
29	2	158.200882	353.9998169	651.4640503	7.833095074	1.54114E-05	0.000327911	0.000426559
29	3	158.7795563	354.6242676	651.9805298	7.763409615	1.48773E-05	0.000317383	0.000411758
43.5	1	103.8873825	237.2622681	439.871582	19.39205933	3.09753E-05	0.000730667	0.00119926
43.5	2	104.1931305	238.1253357	440.6582031	19.22945976	3.13568E-05	0.000735245	0.00119499
43.5	3	104.1445084	237.1309204	438.6238403	19.32817841	0.000030899	0.000758209	0.0012085
65.3	1	52.92468262	110.2086945	216.5017242	67.58681488	0.000155945	0.00556839	0.00705917
65.3	2	53.49431992	110.3696594	213.5591278	67.76068878	0.000153961	0.00548592	0.00689667
65.3	3	52.62842941	109.4904709	213.7876892	68.07858276	0.000156403	0.00558876	0.00710121
21.7	1	322.156311	701.1939087	1420.150513	0.869406998	0	0	0
21.7	2	321.1362915	692.6873779	1390.94397	0.866110682	0	0	0
21.7	3	320.9372864	694.920105	1403.776123	0.860133827	0	0	0
29	1	232.5574036	514.3338013	1006.280884	2.777386427	4.57764E-06	9.60541E-05	0.000104523
29	2	233.4987946	514.1077271	1020.493774	2.768246174	4.95911E-06	0.000102463	0.000106964
29	3	235.7849274	515.1641235	1003.755554	2.696052551	5.11169E-06	0.000105667	0.000111542
36.3	1	180.8628845	399.4832764	760.093689	5.517830849	6.48499E-06	0.000127792	0.000128784
36.3	2	181.229126	399.6643066	755.3035889	5.4845891	6.2561E-06	0.000122604	0.00012352
36.3	3	180.4687347	399.8515625	758.0108032	5.544831753	6.3324E-06	0.000125732	0.000131836
29	1	149.9763947	331.3718872	615.3721313	8.606583595	6.02722E-06	0.000121918	0.000145874
29	2	150.3936768	331.6610413	617.5421753	8.537281036	5.49316E-06	0.000110855	0.000133743
29	3	150.3500519	330.9467468	614.0028687	8.53544426	5.87463E-06	0.000121078	0.000150986
43.5	1	99.4352417	224.0454254	416.6620483	21.78199005	2.30408E-05	0.00055748	0.000984497
43.5	2	99.30067444	223.5332947	415.8881226	21.84458542	2.27356E-05	0.000557022	0.00101448
43.5	3	99.11592865	223.6079102	416.8060303	21.9014225	2.51007E-05	0.000609055	0.00107544
65.3	1	52.13729858	108.1150436	212.0553589	69.10790253	0.00016098	0.00579582	0.00747047
65.3	2	52.14244843	108.140152	215.2748413	68.90831757	0.000155258	0.00558716	0.00722633
65.3	3	52.73733902	109.8744583	226.1698914	67.59050751	0.000157013	0.00564735	0.00725525
63	1	378.4523926	838.3370361	1636.65271	0.718462229	0	4.42505E-06	2.76184E-05
63	2	378.3015747	839.4113159	1636.810791	0.710056365	0	2.5177E-06	0.00002388
63	3	378.987854	840.0431519	1643.984253	0.703541934	7.62939E-08	5.34058E-06	2.92969E-05
63	1	472.3258667	1000.859802	1789.223999	0.420029789	0	0	0
63	2	472.2174072	1000.88916	1790.485229	0.416564733	0	0	0
63	3	471.1066589	993.786377	1782.279785	0.442675591	0	0	0

30	36	44	52	62	74	86	100
0.000149841	0.000162277	0.000150986	0.000205994	0.000541992	0.00115685	0.00175697	0.00261856
0.00015007	0.000173264	0.000172806	0.000219269	0.000529861	0.00110519	0.00167442	0.00250923
0.000157852	0.000187073	0.000194626	0.000243683	0.000562439	0.00114861	0.00172432	0.0025795
0.000199509	0.000234299	0.00040123	0.00074379	0.00162186	0.00284935	0.0035894	0.00469597
0.000187759	0.000208282	0.00035141	0.000680389	0.00153175	0.00273537	0.00347527	0.00456497
0.000214157	0.000256882	0.000427933	0.000765076	0.00164406	0.00288155	0.0036377	0.00477791
0.000264359	0.000453491	0.00102715	0.00178299	0.003265	0.00502449	0.00573685	0.00712944
0.000254669	0.000452652	0.00106323	0.00186523	0.00340858	0.00521301	0.00590965	0.00729576
0.000263062	0.000467377	0.00107384	0.00185303	0.0033606	0.00512398	0.00581032	0.00719307
0.000455627	0.000941849	0.00211105	0.00316902	0.00518158	0.00738121	0.00818939	0.0103876
0.000493622	0.00101898	0.00222305	0.00326355	0.00526299	0.00744186	0.00824257	0.0104751
0.00047493	0.000980682	0.00215164	0.00317947	0.00515961	0.00734024	0.00817078	0.0104192
0.00159843	0.00321022	0.00582626	0.00738831	0.0111063	0.0158699	0.0188712	0.0260845
0.00158371	0.00317848	0.00578819	0.00736511	0.0110832	0.0158097	0.0187398	0.0258328
0.00161461	0.00322044	0.00580948	0.00734093	0.0110123	0.0157282	0.0187254	0.0259399
0.00749481	0.0132575	0.0253437	0.0362451	0.0589584	0.0836913	0.0894843	0.102609
0.00723358	0.0126911	0.0244125	0.0353723	0.0582465	0.0835459	0.0900131	0.103748
0.00757683	0.0134838	0.0258362	0.0368808	0.0598067	0.0846121	0.0901982	0.103162
0	0	0	4.19617E-06	6.81305E-05	0.000356674	0.00070816	0.00124352
0	0	0	2.97546E-06	6.24847E-05	0.000351028	0.000703964	0.00123947
0	0	0	8.39233E-07	8.72803E-05	0.000377045	0.000710831	0.00125908
7.12585E-05	5.87463E-05	0.000119324	0.000346451	0.000883026	0.00187111	0.00270325	0.00409492
6.52313E-05	3.66211E-05	0.00008255	0.00031044	0.000922775	0.00188576	0.00275772	0.00414169
6.92749E-05	3.87573E-05	7.53784E-05	0.000292511	0.000888596	0.0018322	0.00269043	0.00404297
0.000111389	0.000244446	0.000771942	0.00146942	0.00282791	0.00463257	0.0057328	0.00787033
0.000109253	0.00024826	0.000785828	0.00148438	0.00283577	0.004617	0.00569038	0.007798
0.000121841	0.000269623	0.000807343	0.00149338	0.00283661	0.0046225	0.0057209	0.00787575
0.000178757	0.000489731	0.0013028	0.00226669	0.0041642	0.00674065	0.00851089	0.012086
0.000170822	0.000485764	0.00129929	0.00224922	0.00411034	0.00663429	0.0083815	0.0119405
0.000187454	0.000492401	0.00126511	0.00217003	0.00398827	0.00651192	0.00832237	0.0119556
0.00139854	0.00297241	0.00569077	0.00757698	0.011955	0.0178632	0.0218386	0.0304386
0.00146332	0.00310951	0.00587265	0.00769295	0.0119868	0.01779	0.021733	0.0303655
0.00150955	0.00314041	0.00586281	0.00766685	0.0119785	0.0178404	0.0218345	0.0305001
0.00800407	0.0140595	0.0263972	0.0373618	0.0605942	0.0859902	0.0918764	0.105041
0.00782944	0.0140003	0.0266383	0.0377772	0.0610821	0.0862888	0.0917992	0.104582
0.00774086	0.0135596	0.0255038	0.036243	0.0590044	0.0840051	0.0899646	0.103011
4.37927E-05	6.75201E-05	7.36237E-05	8.15582E-05	0.000183487	0.000414963	0.000659409	0.00106575
4.28772E-05	0.00007164	8.40759E-05	8.88062E-05	0.000179672	0.000391388	0.000624466	0.00102737
4.39453E-05	0.000063324	0.000059967	6.10352E-05	0.000154037	0.000381699	0.000633698	0.00104836
0	0	0	0	0	3.89099E-06	0.00017334	0.00053833
0	0	0	0	0	2.05994E-06	0.000173721	0.000538788
0	0	0	0	0	7.09534E-06	0.00019165	0.000578384

120	150	180	210	250	300	360	410
0.00438232	0.00710922	0.0076017	0.00877174	0.0150694	0.0262413	0.0433794	0.0446673
0.0042392	0.00695007	0.00745407	0.00854385	0.0145355	0.0251672	0.0416424	0.0430639
0.00436714	0.00719818	0.00774582	0.00884705	0.0149173	0.0255747	0.0420293	0.0433241
0.00711166	0.0112611	0.0131985	0.0168831	0.0301549	0.0503017	0.075212	0.0697602
0.0069239	0.010955	0.0128312	0.0164384	0.0294537	0.0493318	0.0740799	0.0689623
0.00727249	0.0115472	0.0134601	0.0170619	0.0302352	0.0501904	0.0749107	0.069483
0.0108464	0.0188731	0.0245383	0.0319033	0.0539855	0.0814431	0.107705	0.0894896
0.0110361	0.0191663	0.02497	0.0325169	0.0550287	0.0829023	0.109357	0.0906042
0.0109395	0.0191164	0.0249508	0.0324447	0.0547916	0.0824165	0.108693	0.0901586
0.0169859	0.0324239	0.0429587	0.0531778	0.0827685	0.112289	0.132132	0.0989897
0.0171869	0.0328414	0.043372	0.053466	0.0828905	0.112086	0.131613	0.0985219
0.0171284	0.0327391	0.0432298	0.0533065	0.0827046	0.11196	0.131642	0.0986575
0.045351	0.0832061	0.0948813	0.0981929	0.124943	0.134378	0.12244	0.0722559
0.0448582	0.0824239	0.0943125	0.097937	0.125011	0.134829	0.123107	0.0727352
0.0452329	0.0832536	0.0951463	0.0985713	0.125464	0.134873	0.122701	0.0722359
0.13217	0.154626	0.105127	0.0673809	0.0509486	0.0282053	0.00982356	0.000780358
0.134124	0.157136	0.106672	0.0681154	0.0511715	0.0279582	0.00938252	0.00054086
0.132526	0.154604	0.104871	0.0671294	0.0507288	0.0280977	0.0098437	0.00084708
0.00260559	0.00562424	0.00803223	0.0109229	0.0197094	0.0331384	0.0511074	0.0497236
0.00259995	0.00561554	0.00803719	0.0109667	0.0198717	0.0335636	0.0519695	0.050686
0.00254028	0.00550568	0.00795212	0.0109547	0.0199661	0.0337591	0.0521235	0.0506445
0.00750122	0.0148486	0.0197336	0.0251066	0.0418027	0.0635317	0.0871881	0.0762609
0.00748207	0.0146254	0.0193878	0.02479	0.0415842	0.0636364	0.087662	0.0766917
0.0072921	0.0142235	0.0188712	0.0242244	0.0408799	0.0630217	0.0874831	0.0770075
0.0135918	0.0264323	0.0349406	0.0434061	0.0686747	0.0961684	0.118525	0.0933035
0.0134737	0.0262807	0.0348455	0.0433563	0.068648	0.0961752	0.118611	0.0934678
0.0136541	0.0266108	0.0351166	0.043487	0.0685844	0.0958128	0.117997	0.0929687
0.0216283	0.0423972	0.0539047	0.0630327	0.0925942	0.118804	0.133093	0.0961137
0.0214813	0.0423472	0.0539928	0.0631499	0.0926723	0.118712	0.132787	0.0958232
0.0216152	0.0426326	0.0542577	0.0633791	0.0929751	0.119144	0.133343	0.0962218
0.0524401	0.0935828	0.103	0.103225	0.127102	0.131737	0.115198	0.0653263
0.0525066	0.0939722	0.10347	0.103566	0.127267	0.131586	0.114795	0.0649885
0.0526382	0.0939328	0.103204	0.103217	0.126844	0.131246	0.114656	0.0650208
0.134267	0.15442	0.102099	0.0632195	0.0455111	0.0230135	0.00603269	6.22511E-06
0.133239	0.152757	0.100737	0.0622546	0.044731	0.0225597	0.00587071	6.00576E-06
0.131804	0.151639	0.100238	0.0620629	0.0447134	0.0226741	0.00598968	6.23226E-06
0.00197861	0.00385117	0.00507004	0.00668922	0.0121436	0.0211161	0.0342664	0.0350466
0.00195457	0.00390137	0.00518791	0.00681496	0.0122553	0.0211277	0.0341277	0.0348645
0.00197029	0.00385132	0.00505707	0.00665428	0.0120773	0.0210415	0.0342274	0.0350501
0.00136726	0.0031749	0.00399933	0.00453354	0.00693764	0.0108449	0.0178056	0.0196788
0.00136002	0.00313133	0.00392235	0.00444527	0.00684166	0.0108035	0.0178819	0.0198143
0.00144669	0.00329071	0.00405342	0.00450981	0.00682297	0.0106886	0.0177801	0.0198663

500	600	720	860	1020	1220	1460	1740
0.0931496	0.110203	0.125755	0.125176	0.111015	0.0975754	0.0746615	0.0509644
0.0904312	0.107971	0.124433	0.125161	0.112246	0.0998913	0.0774876	0.0536163
0.0908081	0.108277	0.124622	0.125116	0.111897	0.0992003	0.0766116	0.0528214
0.128425	0.130946	0.128151	0.108607	0.0811196	0.0590156	0.0369438	0.021037
0.127479	0.13063	0.128545	0.109639	0.0825087	0.0605228	0.0381479	0.0217701
0.128035	0.130738	0.12812	0.108683	0.0812081	0.0590617	0.0369275	0.0209849
0.145655	0.128174	0.10753	0.0770765	0.047526	0.027331	0.0128246	0.00555203
0.146907	0.12856	0.107076	0.0759736	0.0460931	0.0256894	0.011227	0.00418511
0.146615	0.129031	0.108345	0.077646	0.0475526	0.0264909	0.0110222	0.00320012
0.143263	0.10825	0.0756354	0.0422625	0.0172198	0.00308609	0	0
0.142622	0.107934	0.0756234	0.0423887	0.0172603	0.00300219	0	0
0.142972	0.108292	0.0758849	0.0425131	0.0173115	0.00303761	0	0
0.0786935	0.038921	0.0138266	0.000994311	0	0	0	0
0.0792738	0.0392349	0.0139378	0.000996194	0	0	0	0
0.0783557	0.038445	0.0134149	0.000917433	0	0	0	0
0	0	5.26285E-05	0.000562351	0.00137695	0.00254599	0.00374461	0.00462064
0	1.54376E-06	6.21462E-05	0.000562131	0.00125561	0.00219129	0.00302138	0.00351852
0	4.48823E-06	8.22067E-05	0.000706578	0.00151324	0.00248255	0.00319479	0.0034495
0.0986594	0.112031	0.124453	0.121688	0.106529	0.0925831	0.0700614	0.0473222
0.100701	0.1143	0.126596	0.123042	0.106665	0.0913189	0.0676456	0.044501
0.100201	0.113329	0.125342	0.121964	0.106162	0.0915744	0.0685882	0.0457189
0.133599	0.13021	0.122772	0.10031	0.071639	0.0486268	0.0269404	0.0124535
0.133971	0.129775	0.121393	0.0984165	0.0700106	0.0479311	0.0276699	0.0142344
0.135334	0.131855	0.123806	0.10044	0.0711057	0.0478781	0.0264795	0.0124293
0.144078	0.119673	0.0947754	0.0635515	0.035663	0.01726	0.0054518	0.000580078
0.144609	0.120517	0.0958466	0.0644657	0.0359563	0.0167161	0.00314649	6.34961E-05
0.143948	0.12018	0.0958214	0.064666	0.0362675	0.0171149	0.00366424	9.48318E-05
0.134239	0.0972881	0.064824	0.0336398	0.0114508	0.0009771	0	0
0.133868	0.0972162	0.0650891	0.034128	0.0119604	0.00125046	0	0
0.134251	0.0971112	0.0645067	0.0333104	0.0112125	0.000868231	0	0
0.0677244	0.0307064	0.0082983	0.000360295	0	0	0	0
0.0672882	0.0304619	0.00816532	0.000325346	0	0	0	0
0.067507	0.0307658	0.00849538	0.000430656	0	0	0	0
0	0	0	0	0	0	0.00106447	0.0276154
0	0	0	0	1.82152E-06	9.31764E-05	0.00377418	0.0226212
0	0	0	0	1.51157E-06	0.000160222	0.00607121	0.0287339
0.0739735	0.0909018	0.110431	0.119446	0.116965	0.115049	0.0989774	0.0751044
0.0736239	0.0905962	0.110239	0.119435	0.117129	0.115336	0.0992482	0.0752491
0.0739813	0.0907859	0.110051	0.118817	0.116314	0.114678	0.099208	0.0758714
0.04689	0.0666156	0.0928689	0.113897	0.124986	0.136598	0.129096	0.105681
0.0471776	0.0668448	0.0929191	0.113722	0.124679	0.136295	0.128969	0.105777
0.0476739	0.0678623	0.0943475	0.115095	0.125485	0.136203	0.127882	0.104115

2060	2460	2740	3000
0.0307757	0.0160647	0.000396401	0
0.0327265	0.0171962	0.000425176	0
0.0322004	0.0169303	0.00041884	0
0.0113077	0.00562066	0.000137431	0
0.0116694	0.00577944	0.000141127	0
0.0112582	0.00558977	0.00013663	0
0.00279576	0.00141389	7.23642E-05	0
0.00174194	0.000900327	3.63149E-05	0
0.000732668	0.000130913	6.05839E-06	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0.00458886	0.00347937	9.82966E-05	0
0.00355371	0.00277558	0.000158136	0
0.00320011	0.00219526	0.000119986	0
0.0283431	0.0147229	0.000362744	0
0.025984	0.0132515	0.00032448	0
0.0270131	0.0138859	0.000340872	0
0.00515695	0.00187837	8.71021E-05	0
0.00707628	0.00309433	0.000151091	0
0.00536364	0.00205646	9.68977E-05	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0.0083175	7.13204E-05	0	0
0.0132356	0.000577468	0	0
0.0489707	0.0267295	0.000668352	0
0.0489959	0.0267094	0.000667539	0
0.049846	0.0273519	0.000685112	0
0.0725348	0.0407471	0.00102753	0
0.0727432	0.0409266	0.00103263	0
0.0711897	0.0399054	0.00100567	0

Material	Batch	Date	Time	Material ID	Battelle_ID
76980	1	03/14/19	7:09	11117	W19073001A
76980	1	03/14/19	7:09	11117	W19073001A
76980	1	03/14/19	7:09	11117	W19073001A
76980	1	03/14/19	7:12	11116	W19073001B
76980	1	03/14/19	7:12	11116	W19073001B
76980	1	03/14/19	7:12	11116	W19073001B
76980	1	03/14/19	7:15	11115	W19073001C
76980	1	03/14/19	7:15	11115	W19073001C
76980	1	03/14/19	7:15	11115	W19073001C
76980	1	03/14/19	7:19	11114	W19073001D
76980	1	03/14/19	7:19	11114	W19073001D
76980	1	03/14/19	7:19	11114	W19073001D
76980	1	03/14/19	7:22	11113	W19073001E
76980	1	03/14/19	7:22	11113	W19073001E
76980	1	03/14/19	7:22	11113	W19073001E
76980	1	03/14/19	7:25	11112	W19073001F
76980	1	03/14/19	7:25	11112	W19073001F
76980	1	03/14/19	7:25	11112	W19073001F
76980	1	03/14/19	7:30	11117	W19073002A
76980	1	03/14/19	7:30	11117	W19073002A
76980	1	03/14/19	7:30	11117	W19073002A
76980	1	03/14/19	7:33	11116	W19073002B
76980	1	03/14/19	7:33	11116	W19073002B
76980	1	03/14/19	7:33	11116	W19073002B
76980	1	03/14/19	7:36	11115	W19073002C
76980	1	03/14/19	7:36	11115	W19073002C
76980	1	03/14/19	7:36	11115	W19073002C
76980	1	03/14/19	7:40	11114	W19073002D
76980	1	03/14/19	7:40	11114	W19073002D
76980	1	03/14/19	7:40	11114	W19073002D
76980	1	03/14/19	7:44	11113	W19073002E
76980	1	03/14/19	7:44	11113	W19073002E
76980	1	03/14/19	7:44	11113	W19073002E
76980	1	03/14/19	7:47	11112	W19073002F
76980	1	03/14/19	7:47	11112	W19073002F
76980	1	03/14/19	7:47	11112	W19073002F
76980	1	03/14/19	7:53	76980	W19073003
76980	1	03/14/19	7:53	76980	W19073003
76980	1	03/14/19	7:53	76980	W19073003
76980	1	03/14/19	7:57	89870	W19073004
76980	1	03/14/19	7:57	89870	W19073004
76980	1	03/14/19	7:57	89870	W19073004
76980	1	03/14/19	8:40	16903	W19073005
76980	1	03/14/19	8:40	16903	W19073005
76980	1	03/14/19	8:40	16903	W19073005
76980	1	03/14/19	8:44	17051	W19073006

Spray_solution_name	Nozzle	Pressure	Rep	DV10
Water100+6515-21-7psi	6515	21.7	1	381.0271912
Water100+6515-21-7psi	6515	21.7	2	374.2157593
Water100+6515-21-7psi	6515	21.7	3	380.0691834
Water100+6510-29-0psi	6510	29.0	1	269.2452393
Water100+6510-29-0psi	6510	29.0	2	268.7722473
Water100+6510-29-0psi	6510	29.0	3	266.2477112
Water100+8008-36-3psi	8008	36.3	1	203.940979
Water100+8008-36-3psi	8008	36.3	2	203.6873322
Water100+8008-36-3psi	8008	36.3	3	203.2789001
Water100+11006-29-0psi	11006	29.0	1	161.6857147
Water100+11006-29-0psi	11006	29.0	2	162.0143433
Water100+11006-29-0psi	11006	29.0	3	161.8697662
Water100+11003-43-5psi	11003	43.5	1	105.3003235
Water100+11003-43-5psi	11003	43.5	2	104.2117081
Water100+11003-43-5psi	11003	43.5	3	105.0202255
Water100+11001-65-3psi	11001	65.3	1	52.97835922
Water100+11001-65-3psi	11001	65.3	2	52.72549438
Water100+11001-65-3psi	11001	65.3	3	53.38943863
Water+NIS+6515-21-7psi	6515	21.7	1	326.0716858
Water+NIS+6515-21-7psi	6515	21.7	2	348.418396
Water+NIS+6515-21-7psi	6515	21.7	3	326.8182068
Water+NIS+6510-29-0psi	6510	29.0	1	223.9730682
Water+NIS+6510-29-0psi	6510	29.0	2	234.7330017
Water+NIS+6510-29-0psi	6510	29.0	3	232.414032
Water+NIS+8008-36-3psi	8008	36.3	1	181.9621582
Water+NIS+8008-36-3psi	8008	36.3	2	181.7391357
Water+NIS+8008-36-3psi	8008	36.3	3	183.536911
Water+NIS+11006-29-0psi	11006	29.0	1	150.6269073
Water+NIS+11006-29-0psi	11006	29.0	2	150.2632751
Water+NIS+11006-29-0psi	11006	29.0	3	151.0671234
Water+NIS+11003-43-5psi	11003	43.5	1	99.27188873
Water+NIS+11003-43-5psi	11003	43.5	2	99.1386795
Water+NIS+11003-43-5psi	11003	43.5	3	99.07993317
Water+NIS+11001-65-3psi	11001	65.3	1	52.33662033
Water+NIS+11001-65-3psi	11001	65.3	2	52.93831635
Water+NIS+11001-65-3psi	11001	65.3	3	52.55941772
XtendiMax	TTI 11004	63	1	375.3649597
XtendiMax	TTI 11004	63	2	377.4153137
XtendiMax	TTI 11004	63	3	376.9197388
XtendiMax+Induce	TTI 11004	63	1	287.556366
XtendiMax+Induce	TTI 11004	63	2	289.7425537
XtendiMax+Induce	TTI 11004	63	3	287.7402344
XtendiMax+24DLV4+AU-243LFP13-2	TTI 11004	63	1	424.4054565
XtendiMax+24DLV4+AU-243LFP13-2	TTI 11004	63	2	428.2973328
XtendiMax+24DLV4+AU-243LFP13-2	TTI 11004	63	3	427.7424316
XtendiMax+ABSIL+AU-243LFP13-2	TTI 11004	63	1	419.0160522

VMD	DV90	%_141	18	22	26	30	36
788.1717529	1510.737061	1.149454594	3.66211E-06	8.67462E-05	0.000125275	0.000120392	0.000126648
776.1549683	1501.470947	1.199431658	4.11987E-06	9.59015E-05	0.000132751	0.000121384	0.000118484
787.7237549	1518.109863	1.151618361	3.7384E-06	8.84247E-05	0.000126419	0.00012001	0.000123672
576.1434937	1109.337036	2.764601231	9.69E-06	0.000208206	0.000244522	0.00019455	0.000207062
574.7348633	1101.571777	2.776539087	9.54E-06	0.000205383	0.000241165	0.000191803	0.000204391
571.4130249	1087.221313	2.829506397	9.61E-06	0.000206909	0.000244904	0.000199051	0.000222473
444.9009705	826.8028564	4.711611748	1.27E-05	0.000258484	0.000274353	0.000219193	0.000344162
445.1806335	828.2069702	4.756046295	1.30E-05	0.000264969	0.000283813	0.00022934	0.00037323
446.0378113	830.4664307	4.776945114	1.28E-05	0.000262527	0.000284195	0.000234604	0.000387955
361.5865479	660.2824097	7.505626202	1.52E-05	0.000318451	0.000391159	0.000423203	0.000857697
361.7430115	662.7128296	7.454596043	1.50E-05	0.00031517	0.000387497	0.000419617	0.000849838
362.5907593	665.4378052	7.481533527	1.50E-05	0.000315704	0.000391388	0.000427933	0.000869904
240.8693695	446.7206116	18.82892036	2.98E-05	0.000697556	0.00113785	0.00151527	0.00305717
239.5377197	444.7191772	19.12891769	3.20E-05	0.000746613	0.00120094	0.00158218	0.00317261
239.9505768	445.5481873	18.96480942	3.17E-05	0.000744324	0.00120323	0.00157883	0.00312935
110.4592743	216.8358765	67.42700958	1.55E-04	0.00553535	0.00703987	0.00749519	0.0132628
110.6672745	218.9942017	67.13897705	1.53E-04	5.51E-03	0.00707413	0.0076255	0.0135917
111.1533966	218.8148804	67.00019073	1.54E-04	0.00550613	0.00696884	0.00735947	0.0129213
709.0454102	1429.707397	0.872044444	0	0	0	0	0
739.8927002	1464.206543	0.776344454	0	0	0	0	0
709.0732422	1418.938599	0.860088527	0	0	0	0	0
503.3306885	976.885376	3.280111074	5.49E-06	0.000116577	0.000131149	9.76563E-05	0.000100784
518.6149292	1023.586914	2.76214838	4.96E-06	0.000103607	0.000110474	0.00007164	5.08118E-05
515.5081177	997.1243896	2.858467579	4.96E-06	0.000104141	0.000113678	7.72095E-05	5.95093E-05
402.6191711	763.8743896	5.478865623	6.71E-06	0.000133286	0.000136032	0.0001194	0.000258636
401.0202332	758.7270508	5.509892464	6.87E-06	0.000134277	0.000130539	0.00010643	0.000233688
405.2203369	766.9370728	5.357314587	7.10E-06	0.000139694	0.000137253	0.000107956	0.000216522
333.6716003	619.0272827	8.530152321	6.48E-06	0.000130692	0.000153732	0.000183029	0.000494995
332.5491638	617.1896362	8.576189041	6.79E-06	0.000137711	0.000158539	0.00018074	0.000477371
333.686554	619.0021362	8.460573196	6.56E-06	0.000133286	0.000154572	0.000177994	0.000471573
222.3963928	413.1536255	21.98704529	2.72E-05	0.000659485	0.0011451	0.00157249	0.00319099
223.4243164	415.8570251	21.90895462	2.63E-05	0.000639954	0.00112389	0.00156212	0.00320633
223.4137421	416.0691834	21.92969513	2.71E-05	0.000653534	0.00112907	0.00155243	0.00317253
107.8978958	208.4739532	69.42793274	1.58E-04	5.66E-03	7.27E-03	7.78E-03	1.38E-02
108.3751221	208.4928436	69.26251221	1.60E-04	5.70E-03	7.19E-03	7.52E-03	1.31E-02
108.62397	209.6698456	69.00618744	1.60E-04	5.77E-03	7.39E-03	7.85E-03	1.37E-02
821.265625	1603.118408	0.72786814	1.53E-07	1.19E-05	3.62E-05	4.79E-05	6.24E-05
825.131897	1609.557617	0.721058309	1.52588E-07	1.22E-05	3.47E-05	4.41E-05	5.39E-05
818.5467529	1593.828491	0.734233618	7.62939E-08	1.13E-05	3.66E-05	4.92E-05	6.45E-05
563.2331543	1036.962524	1.312108278	0	0	0	0	0
562.7949829	1023.455383	1.282876968	0	0	0	0	0
560.6326904	1022.895813	1.312116385	0	0	0	0	0
881.6431274	1658.037354	0.56002605	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
876.3133545	1649.392822	0.592054069	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
880.052124	1654.093506	0.57069236	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
856.774353	1622.860596	0.572309494	0	0	0	0	0

44	52	62	74	86	100	120	150
6.67572E-05	3.66211E-05	0.000171661	0.000604477	0.00111191	0.00184769	0.00333618	0.00553238
5.49316E-05	4.30298E-05	0.000215912	0.000700607	0.00122688	0.00196877	0.00343933	0.00553551
6.21796E-05	3.62396E-05	0.00017952	0.000623474	0.00113319	0.00186508	0.0033342	0.00547272
0.000310516	0.000598221	0.00140015	0.00258774	0.00336601	0.00447739	0.00678696	0.0104463
0.000309219	0.000598984	0.00140388	0.00259628	0.00337921	0.00449821	0.00682533	0.0105145
0.000343781	0.000638733	0.00145096	0.00264397	0.00341949	0.00454613	0.00691849	0.0107442
0.000888824	0.00165398	0.00314461	0.00494728	0.00567955	0.00702171	0.0105195	0.0179568
0.000901489	0.0016774	0.00318962	0.00500465	0.00574303	0.00709335	0.0105983	0.017993
0.000923386	0.00169136	0.00319267	0.00499634	0.005737	0.00710373	0.0106557	0.0181389
0.00195473	0.00301147	0.00503136	0.00728104	0.00813057	0.0102764	0.0165703	0.0310432
0.00193298	0.00297302	0.00496231	0.00718124	0.00803062	0.0101802	0.0164964	0.0310757
0.00196999	0.00301521	0.00501495	0.00723679	0.00807304	0.0102114	0.0165057	0.0310143
0.00559486	0.00714752	0.010797	0.0154596	0.0183736	0.0253587	0.0440447	0.0809355
0.00579613	0.00739868	0.0111425	0.0158611	0.0187263	0.025707	0.0444626	0.0814738
0.00563942	0.00714851	0.0107768	0.0154594	0.0184374	0.025525	0.0444206	0.0816205
0.0252898	0.0360914	0.0586635	0.0832961	0.0891444	0.102344	0.132038	0.154793
0.0257815	0.0364348	0.0587463	0.0829285	0.0884463	0.101378	0.130761	0.153568
0.0246275	0.0353271	0.0577605	0.0824625	0.0886292	0.102073	0.132048	0.155181
0	0	4.73022E-05	0.00033699	0.000706253	0.00126045	0.00264687	0.00562553
0	0	7.32422E-06	0.000203857	0.000531235	0.000992966	0.00210472	0.00440559
0	0	4.76074E-05	0.000333557	0.000694885	0.00123932	0.00260712	0.00556305
0.000203323	0.000491943	0.00116623	0.00236458	0.00332336	0.00491249	0.00872726	0.0165903
0.00010643	0.000346451	0.000906296	0.00192612	0.00275879	0.00412521	0.00742935	0.0144627
0.000112762	0.000346756	0.000908279	0.00195213	0.00282814	0.00426788	0.00773376	0.0150337
0.000798187	0.00150345	0.00287384	0.00467606	0.00574478	0.00782684	0.0134024	0.0258852
0.000777969	0.00151321	0.00292641	0.00477264	0.00584267	0.00791161	0.0134495	0.0258553
0.000710144	0.00140381	0.00275955	0.00456573	0.00565208	0.00771339	0.0131815	0.0253846
0.00131981	0.00230179	0.00422287	0.00679962	0.00851952	0.012	0.0213026	0.041553
0.0012812	0.00226173	0.00418976	0.00679741	0.00855957	0.0120908	0.021496	0.0419332
0.00126335	0.00222656	0.00412216	0.00668808	0.0084259	0.0119125	0.0212122	0.0414861
0.00582993	0.00754311	0.01177	0.0176243	0.0217414	0.0305857	0.0530929	0.0950561
0.00590355	0.00765221	0.0119106	0.0177412	0.0217594	0.0304634	0.0526703	0.0940811
0.00585594	0.00763023	0.0119276	0.0178044	0.0218365	0.0305403	0.0527309	0.0940772
2.62E-02	3.73E-02	0.0608173	0.0864849	0.0925019	0.105828	0.135375	0.155878
2.50E-02	3.63E-02	0.0599343	0.0860841	0.0926519	0.106393	0.136427	0.157256
2.57E-02	3.65E-02	0.0596305	0.0852114	0.0916261	0.105351	0.135481	0.156847
5.03E-05	5.00E-05	0.000148315	0.000392761	0.000663223	0.00109894	0.00205193	0.0039624
3.83E-05	4.14E-05	0.000144196	0.000395966	0.000670166	0.00110466	0.00204353	0.00389977
4.94E-05	4.40E-05	0.000137253	0.000382614	0.000663223	0.00111435	0.00208969	0.00400536
0.00E+00	2.49481E-05	0.000428925	0.00120895	0.00172928	0.00231682	0.00348427	0.00583748
0.00E+00	1.96075E-05	0.000394821	0.00118546	0.00171837	0.00230347	0.00342545	0.00559982
0.00E+00	2.22778E-05	0.000411682	0.00119904	0.00173248	0.00233086	0.00350311	0.00581787
0	0	0	6.05011E-05	0.000367661	0.000825577	0.00187531	0.00362701
0	0	0	0.000059967	0.000408478	0.000911407	0.00200882	0.00367378
0	0	0	7.61414E-05	0.00040451	0.000874786	0.00191444	0.00355026
0.00E+00	0	0	0.000108261	0.000440826	0.000900269	0.0018998	0.00345184

180	210	250	300	360	410	500	600
0.00561684	0.00601974	0.0100314	0.0182042	0.0326814	0.0362051	0.0813362	0.103642
0.00556938	0.00609077	0.0104861	0.0194005	0.0347708	0.0381302	0.0844009	0.105714
0.00553192	0.00596436	0.0100603	0.0184206	0.0331145	0.0365917	0.0818301	0.103692
0.0117294	0.0147626	0.0266758	0.045807	0.0708923	0.0676237	0.127984	0.134143
0.0117997	0.0148293	0.0267624	0.0459326	0.0711017	0.0678537	0.128477	0.134679
0.0121393	0.0152433	0.0273553	0.0466268	0.0717634	0.0682485	0.128916	0.134949
0.023283	0.0305953	0.0525584	0.0805835	0.108205	0.0909696	0.149753	0.133247
0.0232193	0.0304631	0.0523422	0.0803419	0.108024	0.0909033	0.149731	0.133231
0.0233572	0.0305223	0.0522507	0.0799834	0.107402	0.0903824	0.149062	0.133027
0.0408208	0.0507073	0.0796452	0.109457	0.130751	0.0992892	0.145816	0.112063
0.0409635	0.0508717	0.0797904	0.109443	0.130482	0.0989607	0.145247	0.111699
0.0408127	0.0506383	0.0793826	0.108871	0.129868	0.0986052	0.145033	0.111973
0.0927347	0.0965668	0.123814	0.134448	0.123938	0.0740245	0.0818808	0.0415599
0.0931815	0.0968752	0.123951	0.134204	0.123234	0.0733063	0.0806982	0.0407183
0.0933471	0.096982	0.124024	0.13427	0.123356	0.0734517	0.0810048	0.0410271
0.105521	0.0678712	0.0516326	0.0289565	0.0104522	0.00104872	0	0
0.105114	0.0679923	0.0521642	0.0297156	0.0111502	0.00135564	0	0
0.106007	0.0683266	0.0521485	0.0294468	0.0108231	0.00118474	0	0
0.00786324	0.0105456	0.0189219	0.0318756	0.04951	4.85E-02	0.0971039	0.111228
0.00611748	0.00833183	0.0154485	0.0271701	0.0440764	4.47E-02	0.0922092	1.09E-01
0.00780571	0.0104874	0.0188271	0.0317186	0.0492936	4.84E-02	0.0970169	1.12E-01
0.0212511	0.0264154	0.0433128	0.0651563	0.0888115	0.0773226	0.134774	0.130448
0.0190968	0.0243563	0.0408096	0.0624792	0.0862692	0.0757275	0.132967	0.129776
0.0196584	0.0248105	0.0412101	0.0627367	0.0864672	0.0759737	0.133791	0.131161
0.0341646	0.0425254	0.0675188	0.0949797	0.117663	0.0930628	0.144497	0.120858
0.0341507	0.0426298	0.0678788	0.0956758	0.118575	0.093693	0.145113	0.120812
0.0335155	0.0418365	0.0666879	0.0942323	0.117258	0.0930801	0.14507	0.121855
0.0528596	0.0620213	0.0915292	0.11805	0.132922	0.0963809	0.135163	0.0984399
0.0532935	0.0624529	0.0920245	0.118461	0.133087	0.0963015	0.134735	0.0978295
0.0528745	0.0621069	0.0917111	0.1183	0.133149	0.0964783	0.135167	0.098327
0.10446	0.104315	0.12784	0.131683	0.114266	0.0642896	0.0660031	0.0294454
0.103393	0.103413	0.127086	0.131459	0.114735	0.0649675	0.0672705	0.0304552
0.103332	0.103341	0.127003	0.13138	0.11466	0.0649208	0.0672327	0.0304927
0.103271	0.0641554	0.0464746	0.0238278	0.00655432	7.16448E-06	0	1.28746E-07
0.104126	0.0645748	0.0466396	0.0237806	0.00644003	6.91891E-06	0	2.00272E-07
0.104364	0.0650151	0.0472057	0.0242694	0.00671685	7.38621E-06	0	0
0.00515068	0.00675865	0.0122945	0.0215284	0.0352122	0.0361983	0.0766177	0.094097
0.00503098	0.00659874	0.0120485	0.0212076	0.0348418	0.0359105	0.0761415	0.093624
0.00512215	0.00664192	0.0120376	0.0211625	0.0348949	0.036126	0.0769542	0.0949657
0.00843369	0.0132312	0.0273174	0.0499175	0.078549	0.0746871	0.139635	0.143615
0.00802612	0.0127386	0.0266952	0.0494189	0.0785229	0.0751073	0.141057	0.145539
0.00835075	0.0131291	0.0272466	0.0500533	0.0790965	0.0753976	0.141178	0.145218
0.00413643	0.00467224	0.0078167	0.0139807	0.025096	0.0282369	0.0654295	0.0873132
0.00389557	0.00418404	0.00698563	0.0130369	0.024521	0.0283139	0.0665659	0.0892816
0.00388145	0.00429268	0.00724457	0.0133578	0.0246754	0.0281894	0.0658828	0.0882296
0.00377892	0.00429802	0.00755913	0.0143517	0.0266939	0.0303547	0.07021	0.0926787

720	860	1020	1220	1460	1740	2060	2460
0.126008	0.132354	0.122684	0.111531	0.0870065	0.0594574	0.0354236	0.0181832
0.12651	0.131102	0.120264	0.108594	0.0845173	0.0578743	0.034632	0.0178487
0.125448	0.131315	0.121591	0.11079	0.0869898	0.0600675	0.0362038	0.0187585
0.134213	0.115557	0.0869224	0.0626915	0.0376762	0.0194773	0.00902915	0.00388778
0.134682	0.115801	0.086874	0.0623334	0.0370701	0.0187721	0.00856383	0.0033339
0.1349	0.115967	0.0868633	0.0619184	0.0361089	0.0174429	0.00729528	0.00255674
0.112548	0.0805186	0.0485579	0.0257591	0.00931421	0.00118745	0	0
0.112459	0.0803756	0.048476	0.0258696	0.00964772	0.00155079	0	0
0.112796	0.0810957	0.0492331	0.0263696	0.00966711	0.00122945	0	0
0.0795339	0.0450139	0.0184171	0.00318062	0	0	0	0
0.0795281	0.0454101	0.0190983	0.00368678	0	0	0	0
0.0801907	0.0461651	0.0196091	0.00378998	0	0	0	0
0.0155881	0.00129667	0	0	0	0	0	0
0.0152441	0.00128554	0	0	0	0	0	0
0.0154906	0.00133199	0	0	0	0	0	0
2.72036E-05	0.000324689	0.000865148	0.00176506	0.00293943	0.00417398	0.00477164	0.00436627
8.51393E-06	0.000224109	0.000826291	0.00195758	0.0034957	0.00497031	0.00527365	0.00366316
1.39952E-06	0.000120442	0.000608866	0.00175748	0.00357607	0.00544931	0.00597161	0.0033958
0.124496	0.122546	0.107934	0.0943242	0.0716724	0.0484679	0.0289759	0.0150099
1.25E-01	0.12631	0.113526	0.100902	0.077613	0.0527974	0.0315651	0.0163074
1.25E-01	0.123612	0.108942	0.0949051	0.0714844	0.0476369	0.0280044	0.01431
0.1219	0.0984008	0.0690912	0.0456848	0.0241882	0.0102557	0.00363161	0.00107777
0.122496	0.100329	0.0721122	0.0497085	0.0284679	0.0140027	0.00635381	0.00252643
0.124291	0.101881	0.0727332	0.0489565	0.0263767	0.0113037	0.00395005	0.00110993
0.0964263	0.0651593	0.0368106	0.0177472	0.00515538	6.70199E-05	0	0
0.0957623	0.0641615	0.0358593	0.0170594	0.00490442	6.39007E-05	0	0
0.0976061	0.0661746	0.0374558	0.0180332	0.00515105	6.48485E-05	0	0
0.0659715	0.034536	0.0119897	0.00114851	0	0.00E+00	0	0
0.0653206	0.0340267	0.011746	0.00115051	0	0.00E+00	0	0
0.0658454	0.0344882	0.0120439	0.00122686	0	0.00E+00	0	0
0.00762709	0.000231382	0	0	0	0	0	0
0.0081598	0.000320784	0	0	0	0	0	0
0.00831081	0.00038856	0	0	0	0	0	0
8.10599E-05	0.000514562	0.0011297	0.00207631	0.00321056	0.00433571	0.00482023	0.0043611
4.34518E-05	0.000375745	0.000926619	0.0018616	0.00311548	0.0044776	0.00515465	0.00458507
3.54862E-05	0.00034919	0.000883495	0.00182343	0.00314414	0.00463377	0.00540905	0.00483388
0.11376	0.121935	0.117824	0.113803	0.0956691	0.0707327	0.0450519	0.0241885
0.1133	0.121624	0.117813	0.114215	0.0964611	0.0716512	0.045798	0.0246382
0.115025	0.12318	0.118622	0.113907	0.0950047	0.0696235	0.0440021	0.0234996
0.140464	0.117571	0.0850497	0.0576061	0.0309055	0.0128798	0.00412477	0.000947335
0.142457	0.118973	0.085488	0.0570427	0.0296285	0.0114567	0.00281588	0.000385837
0.141715	0.117983	0.0845144	0.0562861	0.0293419	0.0116205	0.00317361	0.000674698
0.112298	0.125947	0.125829	0.124703	0.106998	0.0803786	0.0517544	0.0279565
0.114546	0.127643	0.126478	0.124242	0.10573	0.0789231	0.0506203	0.0272918
0.113431	0.126913	0.12637	0.124754	0.106609	0.0797908	0.0512363	0.0276335
0.117229	0.128835	0.125807	0.121593	0.101711	0.0747248	0.0473723	0.0253708

2740	3000
0.000445528	0
0.00043799	0
0.000461198	0
8.99305E-05	0
0.000157017	0
0.000116334	0
0	0
0	0
0	0
0.00E+00	0
0	0
0	0
0	0
0	0
0.00E+00	0
0.000136086	0
0.000093488	0
0.00016408	0
0.000369391	0
0.000400754	0
0.000350436	0
4.64802E-05	0
0.000120118	0
4.65575E-05	0
0	0
0.00E+00	0
0	0
0	0
0	0
0	0
0.00E+00	0
0	0
0.00E+00	0
0.000135683	0
0.000139613	0
0.000147266	0
0.000601499	0
0.000613026	0
0.000583342	0
3.55712E-05	0
0	0
3.31132E-06	0
0.0006964	0
0.000679498	0
0.000688047	0
0.000630442	0

76980	1	03/14/19	8:44	17051	W19073006
76980	1	03/14/19	8:44	17051	W19073006
76980	1	03/14/19	8:47	74231	W19073007
76980	1	03/14/19	8:47	74231	W19073007
76980	1	03/14/19	8:47	74231	W19073007
76980	1	03/14/19	8:51	61715	W19073008
76980	1	03/14/19	8:51	61715	W19073008
76980	1	03/14/19	8:51	61715	W19073008
76980	1	03/14/19	8:55	14338	W19073009
76980	1	03/14/19	8:55	14338	W19073009
76980	1	03/14/19	8:55	14338	W19073009
76980	1	03/14/19	8:59	35108	W19073010
76980	1	03/14/19	8:59	35108	W19073010
76980	1	03/14/19	8:59	35108	W19073010
76980	1	03/14/19	9:05	87713	W19073011
76980	1	03/14/19	9:05	87713	W19073011
76980	1	03/14/19	9:05	87713	W19073011
76980	1	03/14/19	9:09	64559	W19073012
76980	1	03/14/19	9:09	64559	W19073012
76980	1	03/14/19	9:09	64559	W19073012
76980	1	03/14/19	9:13	53467	W19073013
76980	1	03/14/19	9:13	53467	W19073013
76980	1	03/14/19	9:13	53467	W19073013
76980	1	03/14/19	9:23	15606	W19073014
76980	1	03/14/19	9:23	15606	W19073014
76980	1	03/14/19	9:23	15606	W19073014
76980	1	03/14/19	9:28	85701	W19073015
76980	1	03/14/19	9:28	85701	W19073015
76980	1	03/14/19	9:28	85701	W19073015
76980	1	03/14/19	9:39	22067	W19073016
76980	1	03/14/19	9:39	22067	W19073016
76980	1	03/14/19	9:39	22067	W19073016
76980	1	03/14/19	9:43	55534	W19073017
76980	1	03/14/19	9:43	55534	W19073017
76980	1	03/14/19	9:43	55534	W19073017
76980	1	03/14/19	9:47	87450	W19073018
76980	1	03/14/19	9:47	87450	W19073018
76980	1	03/14/19	9:47	87450	W19073018
76980	1	03/14/19	9:51	39469	W19073019
76980	1	03/14/19	9:51	39469	W19073019
76980	1	03/14/19	9:51	39469	W19073019
76980	1	03/14/19	9:57	94789	W19073020
76980	1	03/14/19	9:57	94789	W19073020
76980	1	03/14/19	9:57	94789	W19073020
76980	1	03/14/19	10:04	83288	W19073021
76980	1	03/14/19	10:04	83288	W19073021
76980	1	03/14/19	10:04	83288	W19073021

XtendiMax+ABSIL+AU-243LFP13-2	TTI 11004	63	2	418.9768677
XtendiMax+ABSIL+AU-243LFP13-2	TTI 11004	63	3	426.2465515
XtendiMax+Absorb100+AU-243LFP13-2	TTI 11004	63	1	430.4706421
XtendiMax+Absorb100+AU-243LFP13-2	TTI 11004	63	2	429.8334961
XtendiMax+Absorb100+AU-243LFP13-2	TTI 11004	63	3	432.4270935
XtendiMax+AP910+AU-243LFP13-2	TTI 11004	63	1	414.4471741
XtendiMax+AP910+AU-243LFP13-2	TTI 11004	63	2	415.3063354
XtendiMax+AP910+AU-243LFP13-2	TTI 11004	63	3	412.9755554
XtendiMax+AvatarS2+AU-243LFP13-2	TTI 11004	63	1	421.5943909
XtendiMax+AvatarS2+AU-243LFP13-2	TTI 11004	63	2	421.2603149
XtendiMax+AvatarS2+AU-243LFP13-2	TTI 11004	63	3	417.2101746
XtendiMax+BeanOil+AU-243LFP13-2	TTI 11004	63	1	404.3082886
XtendiMax+BeanOil+AU-243LFP13-2	TTI 11004	63	2	405.3951111
XtendiMax+BeanOil+AU-243LFP13-2	TTI 11004	63	3	402.0485535
XtendiMax+Boundary6.5EC+AU-243LFP13-2	TTI 11004	63	1	419.2088318
XtendiMax+Boundary6.5EC+AU-243LFP13-2	TTI 11004	63	2	422.7220154
XtendiMax+Boundary6.5EC+AU-243LFP13-2	TTI 11004	63	3	418.7582703
XtendiMax+BrandtTorpedo+AU-243LFP13-2	TTI 11004	63	1	402.9282227
XtendiMax+BrandtTorpedo+AU-243LFP13-2	TTI 11004	63	2	408.196228
XtendiMax+BrandtTorpedo+AU-243LFP13-2	TTI 11004	63	3	403.8054199
XtendiMax+CadoMax+AU-243LFP13-2	TTI 11004	63	1	418.7292175
XtendiMax+CadoMax+AU-243LFP13-2	TTI 11004	63	2	419.2966614
XtendiMax+CadoMax+AU-243LFP13-2	TTI 11004	63	3	416.5531006
XtendiMax+CeriumElite+AU-243LFP13-2	TTI 11004	63	1	413.3184204
XtendiMax+CeriumElite+AU-243LFP13-2	TTI 11004	63	2	415.9989014
XtendiMax+CeriumElite+AU-243LFP13-2	TTI 11004	63	3	415.6429138
XtendiMax+CideWinder+AU-243LFP13-2	TTI 11004	63	1	410.8654175
XtendiMax+CideWinder+AU-243LFP13-2	TTI 11004	63	2	416.8410034
XtendiMax+CideWinder+AU-243LFP13-2	TTI 11004	63	3	412.8934326
XtendiMax+Cinch+AU-243LFP13-2	TTI 11004	63	1	424.5973816
XtendiMax+Cinch+AU-243LFP13-2	TTI 11004	63	2	423.1758423
XtendiMax+Cinch+AU-243LFP13-2	TTI 11004	63	3	422.0854187
XtendiMax+Drift-Fiant+AU-243LFP13-2	TTI 11004	63	1	431.4678955
XtendiMax+Drift-Fiant+AU-243LFP13-2	TTI 11004	63	2	430.9858398
XtendiMax+Drift-Fiant+AU-243LFP13-2	TTI 11004	63	3	431.1138611
XtendiMax+DualMagnum+AU-243LFP13-2	TTI 11004	63	1	419.7200317
XtendiMax+DualMagnum+AU-243LFP13-2	TTI 11004	63	2	420.0792236
XtendiMax+DualMagnum+AU-243LFP13-2	TTI 11004	63	3	417.8138123
XtendiMax+Pummel+AU-243LFP13-2	TTI 11004	63	1	397.2810974
XtendiMax+Pummel+AU-243LFP13-2	TTI 11004	63	2	391.6421509
XtendiMax+Pummel+AU-243LFP13-2	TTI 11004	63	3	397.9447021
XtendiMax+Reflex+AU-243LFP13-2	TTI 11004	63	1	408.5294495
XtendiMax+Reflex+AU-243LFP13-2	TTI 11004	63	2	408.7228699
XtendiMax+Reflex+AU-243LFP13-2	TTI 11004	63	3	404.4513245
XtendiMax+SelectMax+AU-243LFP13-2	TTI 11004	63	1	428.3317566
XtendiMax+SelectMax+AU-243LFP13-2	TTI 11004	63	2	431.1113586
XtendiMax+SelectMax+AU-243LFP13-2	TTI 11004	63	3	428.0941467

859.5303955	1627.467896	0.568061829	0	0	0	0	0
874.9146729	1651.672607	0.552084982	0	0	0	0	0
869.8580322	1635.803223	0.568960428	0	0	0	0	0
872.7313843	1639.820557	0.56396842	0	0.00E+00	0.00E+00	0.00E+00	0.00E+00
875.7225952	1643.111816	0.553993344	0	0	0	0.00E+00	0
868.1607056	1653.552856	0.602969706	0	0	0	0	0
873.3925171	1660.916992	0.596821427	0	0	0	0	0
867.2055664	1655.535522	0.597268522	0	0	0	0	0
857.8989868	1623.93811	0.575994432	0	0	0	0	0
860.9434204	1631.074951	0.56347537	0	0.00E+00	0.00E+00	0.00E+00	0.00E+00
850.1188965	1613.476318	0.59658581	0	0.00E+00	0.00E+00	0.00E+00	0.00E+00
831.1903076	1590.998047	0.646893799	0	0	0	0	0
838.7796021	1610.531006	0.633686244	0	0	0	0	0
834.5305176	1607.435059	0.630163789	0	0	0	0	0
891.2845459	1683.511475	0.608954728	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
902.0905151	1699.201538	0.580025613	0	0.00E+00	0.00E+00	0.00E+00	0.00E+00
889.7858887	1680.474487	0.621556163	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
832.2716675	1597.639404	0.624892294	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
836.3356934	1601.416382	0.620020032	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
833.0639038	1601.875732	0.634397447	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
865.8014526	1643.459717	0.583635867	0	0	0	0	0
861.8247681	1635.146973	0.591923535	0	0	0	0	0
850.4580078	1616.95459	0.612140059	0	0	0	0	0
858.8651123	1633.540039	0.648262322	0	0	0	0	0
858.8931885	1626.072266	0.648621678	0	0	0	0	0
862.4682617	1635.836304	0.651804149	0	0	0	0	0
844.647644	1611.566528	0.594612658	0	0	0	0	0
868.1563721	1655.492798	0.565945148	0	0	0	0	0
853.2576294	1626.22937	0.590187967	0	0	0	0	0
906.7042847	1703.632813	0.569546044	0	0	0	0	0
900.8276367	1695.71521	0.596531689	0	0	0	0	0
896.5969849	1690.812622	0.583201647	0	0	0	0	0
870.0752563	1629.152466	0.585267425	0	0	0	0	0
878.8779297	1650.202515	0.54168576	0	0	0	0	0
868.8818359	1624.318726	0.574394226	0	0	0	0	0
887.5335083	1678.487183	0.599937141	0	0	0	0	0
886.6009521	1677.02417	0.607555807	0	0	0	0	0
890.5922241	1685.841064	0.595264733	0	0	0	0	0
875.5771484	1677.719238	0.699045956	4.57764E-07	1.78528E-05	4.22668E-05	5.34058E-05	6.80542E-05
863.9904175	1665.322388	0.668783784	0	0	0	0	0
873.9502563	1676.686523	0.689939201	0	0	0	0	0
926.2424316	1740.993774	0.730582893	1.83105E-06	4.48608E-05	6.69861E-05	6.85883E-05	8.14819E-05
926.8106689	1741.408813	0.723823607	2.21252E-06	5.08118E-05	7.20215E-05	7.02667E-05	7.94983E-05
928.5614014	1748.491821	0.769781053	2.13623E-06	4.94385E-05	7.13348E-05	7.04193E-05	8.05664E-05
868.1598511	1635.90564	0.572623789	0	0	0	0	0
877.793457	1651.756836	0.563123763	0	0	0	0	0
873.6433105	1644.050659	0.565031946	0	0	0	0	0

0.00E+00	0	0	0.000106354	0.000433426	0.000887985	0.00188377	0.00345024
0.00E+00	0	0	9.63593E-05	0.000419617	0.000868149	0.00184067	0.00333511
0	0	0	5.58E-05	0.000398178	0.000887299	0.00193794	0.00348633
0.00E+00	0.00E+00	0.00E+00	6.26E-05	0.000394592	0.000870895	0.00190933	0.00348557
0.00E+00	0	0.00E+00	5.22E-05	0.000378799	0.000851746	0.00188362	0.00344284
0	0	0	1.11E-04	0.000472794	0.000958939	0.0019989	0.00362167
0	0	0	9.21E-05	0.000437241	0.000918961	0.00198265	0.00371162
0	0	0	1.09E-04	0.000465851	0.000946121	0.001978	0.00360588
0.00E+00	0.00E+00	0	5.09644E-05	0.000397415	0.000892563	0.00195999	0.00356743
0.00E+00	0.00E+00	0	6.30188E-05	0.000405502	0.000884552	0.00190712	0.00344437
0.00E+00	0.00E+00	0	6.94275E-05	0.000433578	0.000941162	0.00201988	0.00362396
0.00E+00	0	0	0.000141296	0.00053894	0.00105759	0.00213852	0.00375465
0.00E+00	0	0	0.000119858	0.000503922	0.00101784	0.00210487	0.0037606
0.00E+00	0	0	0.000157623	0.00054306	0.00103653	0.00206375	0.00362892
0.00E+00	0.00E+00	7.24792E-06	0.000168533	0.00047287	0.000922012	0.00196259	0.00375801
0.00E+00	0.00E+00	8.16345E-06	0.000171814	0.000466537	0.000892334	0.00186325	0.00352104
0.00E+00	0.00E+00	2.74658E-06	0.000168076	0.000489807	0.000953674	0.00201111	0.00379875
0.00E+00	0	0	0.000138168	0.000516968	0.00101295	0.00205795	0.00366623
0.00E+00	0	0	0.000114822	0.000498505	0.00100731	0.00206741	0.00363525
0	0	0	0.000140305	0.000532913	0.00104156	0.00209549	0.00366974
0	0	0.00E+00	6.99615E-05	0.000415649	0.000902863	0.00196304	0.00361946
0	0	0.00E+00	6.14166E-05	0.000416412	0.000918427	0.00200272	0.0036631
0	0	0.00E+00	5.67627E-05	0.000428619	0.000954437	0.00208099	0.00377113
0	0	0.00E+00	8.73566E-05	0.000473633	0.00101135	0.00217514	0.00397896
0	0	0.00E+00	3.37982E-05	0.00040947	0.000967484	0.0022113	0.00417938
0	0	0.00E+00	6.27136E-05	0.000447464	0.00099823	0.00220421	0.00408539
0	0	0.00E+00	0.000110016	0.000472107	0.000956039	0.00197731	0.00352776
0	0	0.00E+00	0.000105972	0.000444565	0.000900726	0.0018763	0.00339355
0	0	0.00E+00	0.000102997	0.000454636	0.00093338	0.00196266	0.00356255
0	0.00E+00	1.17E-05	0.000170212	0.000449677	0.00086319	0.00182327	0.0034996
0	0	1.08E-05	0.00017952	0.000479279	0.000916977	0.00191666	0.00361069
0	0.00E+00	9.92E-06	0.000171051	0.00046196	0.00088974	0.00187408	0.0035627
0.00E+00	0	0	1.51062E-05	0.000357056	0.000874863	0.00201881	0.00375603
0.00E+00	0.00E+00	0	2.60162E-05	0.000334091	0.000839157	0.00182365	0.00348251
0.00E+00	0.00E+00	0	2.82288E-06	0.000321808	0.000837402	0.0019899	0.0037738
0.00E+00	0.00E+00	7.47681E-06	0.000179596	0.000490494	0.00093483	0.00193291	0.00359131
0	0.00E+00	1.44958E-06	0.000166016	0.000491104	0.000949936	0.00197273	0.0036438
0.00E+00	0.00E+00	1.00708E-05	0.000179672	0.000479813	0.000915146	0.00190941	0.00361053
3.77E-05	1.75476E-06	3.12805E-05	0.00022583	0.000529404	0.000996552	0.00212631	0.00424454
0.00E+00	7.62939E-07	4.89044E-05	0.000253372	0.000548172	0.000996017	0.00207123	0.00411659
0.00E+00	0	2.18201E-05	0.000226746	0.000552368	0.00103661	0.00217964	0.00426361
5.66E-05	2.58E-05	7.01904E-05	0.000261993	0.000551834	0.00101295	0.00215126	0.00432678
5.09E-05	2.14E-05	0.000069046	0.000264816	0.000553665	0.00100876	0.00212654	0.00426208
5.46E-05	3.00E-05	9.15527E-05	0.000306244	0.00060112	0.00110878	0.00223473	0.00444374
0	0.00E+00	0	2.36511E-05	0.000368652	0.000874786	0.00197067	0.00360764
0	0.00E+00	0	3.05176E-05	0.000368958	0.000862961	0.00193283	0.00353096
0	0.00E+00	0	3.99017E-05	0.000373306	0.000860367	0.00192657	0.00356201

0.00381409	0.00436134	0.00765518	0.0144311	0.0266643	0.0302131	0.0697422	0.0920068
0.00361816	0.00407295	0.00712196	0.0135413	0.0253233	0.0289439	0.0673442	0.089549
0.00362808	0.00387428	0.00657852	0.0126543	0.024387	0.0285166	0.067576	0.0910144
0.00370506	0.00401405	0.00679901	0.0128712	0.0244421	0.0283727	0.0669901	0.0901584
0.00364128	0.00391479	0.00660263	0.0125387	0.023976	0.0279873	0.0664164	0.0897771
0.00402191	0.00465454	0.00818954	0.0151993	0.0273894	0.0304144	0.0689545	0.0897289
0.00421127	0.00486023	0.00836868	0.0151598	0.0269547	0.0298331	0.0677377	0.0885241
0.00404343	0.00471863	0.00833206	0.015437	0.0277039	0.0306577	0.0692738	0.0898514
0.00380859	0.00419205	0.00723946	0.0138184	0.0261014	0.0300165	0.0700005	0.0928591
0.00370255	0.00415359	0.00730515	0.0140141	0.0263254	0.0300821	0.0697502	0.0921655
0.00385765	0.00428833	0.00750313	0.0143851	0.0270389	0.0308874	0.0714874	0.0941164
0.00407005	0.00471756	0.00850494	0.0162477	0.0297899	0.0332426	0.0751694	0.0968403
0.00412025	0.00477158	0.00853058	0.0161535	0.029463	0.0328036	0.0740745	0.0953529
0.00402206	0.0047979	0.00880051	0.0167915	0.0304337	0.0335954	0.0751642	0.0959237
0.0043734	0.00505417	0.0084877	0.0148463	0.0257897	0.0283342	0.0644316	0.0848926
0.00409691	0.00479767	0.00821327	0.0145799	0.0254467	0.0279288	0.0633363	0.0832897
0.00436562	0.00501785	0.00843987	0.014841	0.025885	0.0284742	0.0647267	0.0851742
0.0040731	0.00481956	0.00875107	0.0166188	0.0301662	0.0334221	0.0751466	0.096409
0.00390678	0.00449081	0.00810928	0.0156641	0.0290852	0.0327296	0.0744823	0.0963699
0.00399895	0.0046907	0.00855331	0.0164137	0.0300439	0.0334142	0.0752402	0.0965015
0.0039856	0.00450272	0.00777901	0.0144692	0.0265165	0.0299197	0.0688578	0.0906671
0.00396881	0.00442001	0.00760551	0.0142524	0.0263998	0.0300013	0.0693966	0.0916306
0.00401955	0.00442154	0.00760841	0.0144114	0.0269782	0.0308094	0.0713478	0.09397
0.00434059	0.0048381	0.00820953	0.0150095	0.0271805	0.0304656	0.0697443	0.0914116
0.004571	0.00496002	0.00810883	0.014512	0.026321	0.0297811	0.0689919	0.0914522
0.00444931	0.00488113	0.00811409	0.014655	0.0265289	0.02986	0.0687726	0.0907333
0.00386154	0.00448349	0.00807579	0.0154547	0.0284889	0.0319808	0.0728413	0.0946245
0.00377312	0.0044088	0.00789467	0.0149257	0.0272466	0.0304504	0.0692812	0.0902493
0.0039415	0.00455551	0.00808113	0.0152414	0.0278989	0.0312709	0.071292	0.0928688
0.00412117	0.0048336	0.00821487	0.0144364	0.0250442	0.027459	0.0623997	0.082402
0.00415817	0.00480759	0.00814926	0.014425	0.0252475	0.0278116	0.0633028	0.0834973
0.00414391	0.00482758	0.00822006	0.014573	0.0255089	0.0280965	0.0639341	0.0842585
0.0039476	0.00411705	0.00667992	0.0124254	0.0237839	0.0279443	0.0667727	0.0907159
0.00377167	0.0041114	0.00690582	0.0128769	0.0241991	0.0279786	0.0659887	0.0888955
0.00401993	0.00420853	0.00678741	0.0125038	0.0238033	0.0279307	0.0667654	0.0908102
0.00410049	0.00475929	0.00818329	0.014727	0.0260449	0.028784	0.065463	0.0859652
0.00410797	0.00471703	0.0080809	0.0145961	0.0259624	0.0287948	0.0656219	0.0862375
0.00420937	0.00494507	0.00849411	0.0151043	0.0263361	0.0288342	0.0651244	0.085144
0.00524513	0.00630569	0.0106037	0.0178293	0.0292444	0.0307255	0.0671629	0.0856326
0.00518364	0.00641159	0.0110621	0.0188384	0.0308207	0.0321021	0.0693618	0.0873618
0.00518127	0.0061924	0.0104461	0.0177102	0.0292694	0.0308687	0.0675816	0.0861465
0.00535072	0.00632866	0.0102909	0.0165909	0.0263258	0.027261	0.0595218	0.0768647
0.00528008	0.00627647	0.0102646	0.0166149	0.0263869	0.0273003	0.0595234	0.0767823
0.00546021	0.00647545	0.0105812	0.0170782	0.0269387	0.0276514	0.0597198	0.0763069
0.00379448	0.0040519	0.00680519	0.0129072	0.0246513	0.0287123	0.0678651	0.0911939
0.00371384	0.00397293	0.00668755	0.0126908	0.0242071	0.0281562	0.0664935	0.0894056
0.00382599	0.00416367	0.00701973	0.0131382	0.0246848	0.0284751	0.0669241	0.089781

0.116479	0.128276	0.125645	0.121901	0.102369	0.0754449	0.0479162	0.0256815
0.114268	0.126961	0.125674	0.123536	0.105383	0.0789808	0.0508919	0.0275444
0.116775	0.129662	0.127575	0.124027	0.104244	0.0768986	0.0489126	0.0262585
0.115864	0.129039	0.127446	0.12441	0.104951	0.0776107	0.0494141	0.0265293
0.115734	0.129183	0.127797	0.124917	0.105507	0.0781269	0.0498193	0.0267858
0.112917	0.124545	0.123058	0.121306	0.104145	0.0787007	0.0511047	0.0278127
0.111965	0.124084	0.123127	0.121885	0.105126	0.0798337	0.052062	0.0284141
0.112764	0.124114	0.122487	0.120768	0.103892	0.0787853	0.0513479	0.0280186
0.117647	0.12927	0.126117	0.121786	0.101839	0.0748494	0.0474945	0.0254596
0.116645	0.12834	0.125617	0.12189	0.102525	0.0758055	0.0483357	0.0259919
0.118483	0.129464	0.125644	0.12066	0.10029	0.0732558	0.0462383	0.0246982
0.119827	0.129093	0.123747	0.11745	0.0965006	0.0697391	0.0436562	0.0231986
0.118021	0.12743	0.122788	0.117646	0.0980518	0.0721145	0.0458885	0.0246685
0.117983	0.126865	0.121966	0.116755	0.0973001	0.0715659	0.0455308	0.0244671
0.108676	0.122164	0.123127	0.123948	0.108703	0.0837368	0.0551383	0.0302494
0.106742	0.120566	0.122527	0.124735	0.110774	0.0863206	0.0573223	0.0316085
0.108892	0.122293	0.123187	0.12392	0.108516	0.0833823	0.0547467	0.0299646
0.119035	0.128175	0.123008	0.117111	0.0967391	0.0704168	0.0444019	0.0237249
0.119501	0.128909	0.123778	0.117864	0.0974019	0.0709752	0.044825	0.0239882
0.118988	0.127933	0.122675	0.116873	0.0968187	0.0708172	0.0448855	0.0240742
0.114766	0.126638	0.124609	0.121866	0.103551	0.0774197	0.0498379	0.0269712
0.115992	0.127709	0.125149	0.121683	0.10268	0.0762425	0.0488185	0.0263329
0.118271	0.129151	0.125274	0.120352	0.100256	0.0735441	0.046653	0.0250192
0.115275	0.126765	0.124289	0.12102	0.10226	0.0759709	0.048628	0.026214
0.116205	0.128249	0.125704	0.121893	0.102234	0.0752458	0.0477494	0.0255841
0.115053	0.127051	0.124918	0.12182	0.10298	0.0764734	0.0489102	0.0263469
0.118074	0.128339	0.124238	0.11927	0.0992743	0.0726987	0.0460112	0.0246278
0.113431	0.124796	0.122977	0.121031	0.103968	0.0787878	0.0513413	0.0280161
0.116377	0.12722	0.124055	0.12018	0.101085	0.0748126	0.0477586	0.0257049
0.106108	0.120381	0.122797	0.125396	0.111644	0.0871777	0.0579735	0.0319918
0.107182	0.121099	0.122952	0.124902	0.110583	0.085871	0.0568426	0.031272
0.107963	0.121628	0.123025	0.124434	0.109707	0.0849268	0.0561351	0.0308753
0.117153	0.130607	0.12869	0.124909	0.104437	0.0763846	0.0481287	2.56E-02
0.114525	0.128032	0.12711	0.124932	0.10624	0.0791875	0.0507258	0.0273334
0.117418	0.131012	0.129091	0.125127	0.104281	0.0758902	0.0475616	0.0252385
0.109553	0.122622	0.123139	0.123552	0.108	0.0829257	0.0544636	0.0298344
0.109865	0.12286	0.123228	0.123478	0.107804	0.0826938	0.0542711	0.0297131
0.108357	0.121416	0.122326	0.123388	0.108586	0.0839538	0.0554408	0.030473
0.107283	0.11909	0.11939	0.120227	0.105885	0.0820432	0.0543066	0.0299009
0.108349	0.119273	0.118691	0.118657	0.103753	0.0798724	0.0526174	0.0288877
0.10776	0.11935	0.119347	0.11991	0.105471	0.0817315	0.0541556	0.0298492
0.0987079	0.113294	0.118173	0.124464	0.114885	0.0929635	0.0636043	0.0357505
0.098582	0.113203	0.118165	0.124543	0.115008	0.0930738	0.0636753	0.0357863
0.097352	0.111545	0.116671	0.123683	0.115161	0.0940067	0.0647544	3.65E-02
0.116744	0.129355	0.127077	0.123481	0.103874	0.0767682	0.0489228	0.0262962
0.114794	0.127905	0.126676	0.124392	0.105896	0.0791693	0.0509082	0.0275192
0.1152	0.128283	0.126853	0.124154	0.10514	0.0781032	0.0499341	0.0268885

0.000638268	0
0.00068677	0
0.000653057	0
0.000659729	0
0.000666502	0
0.000694764	0
0.000710428	0
0.000700506	0
0.000632888	0
0.000646767	0
0.000613251	0
0.000575083	0
0.000613892	0
0.000608769	0
0.000757414	0
0.00079271	0
0.000749651	0
0.000589261	0
0.000596172	0
0.00059869	0
0.00067253	0
0.000655949	0
0.000622098	0
0.000652811	0
0.000635825	0
0.000655944	0
0.000611939	0
0.00070047	0
0.000639823	0
0.000802469	0
0.000783632	0
0.00077376	0
0.000636122	0
0.00068047	0
0.000625109	0
7.47E-04	0
0.000743524	0
0.000763493	0
0.000749597	0
0.000723559	0
0.000748594	0
9.02E-04	0
0.000902975	0
0.000923402	0
0.000654243	0
0.000685912	0
0.000669365	0

76980	1	03/14/19	10:08	42209	W19073022
76980	1	03/14/19	10:08	42209	W19073022
76980	1	03/14/19	10:08	42209	W19073022
76980	1	03/14/19	10:12	50788	W19073023
76980	1	03/14/19	10:12	50788	W19073023
76980	1	03/14/19	10:12	50788	W19073023
76980	1	03/14/19	10:16	61680	W19073024
76980	1	03/14/19	10:16	61680	W19073024
76980	1	03/14/19	10:16	61680	W19073024
76980	1	03/14/19	10:20	92307	W19073025
76980	1	03/14/19	10:20	92307	W19073025
76980	1	03/14/19	10:20	92307	W19073025
76980	1	03/14/19	10:23	85089	W19073026
76980	1	03/14/19	10:23	85089	W19073026
76980	1	03/14/19	10:23	85089	W19073026
76980	1	03/14/19	10:27	35080	W19073027
76980	1	03/14/19	10:27	35080	W19073027
76980	1	03/14/19	10:27	35080	W19073027
76980	1	03/14/19	10:32	48000	W19073028
76980	1	03/14/19	10:32	48000	W19073028
76980	1	03/14/19	10:32	48000	W19073028
76980	1	03/14/19	10:37	13061	W19073029
76980	1	03/14/19	10:37	13061	W19073029
76980	1	03/14/19	10:37	13061	W19073029
76980	1	03/14/19	10:42	21212	W19073030
76980	1	03/14/19	10:42	21212	W19073030
76980	1	03/14/19	10:42	21212	W19073030
76980	1	03/14/19	10:46	26865	W19073031
76980	1	03/14/19	10:46	26865	W19073031
76980	1	03/14/19	10:46	26865	W19073031
76980	1	03/14/19	10:50	17901	W19073032
76980	1	03/14/19	10:50	17901	W19073032
76980	1	03/14/19	10:50	17901	W19073032

XtendiMax+StrikeLock+AU-243LFP13-2	TTI 11004	63	1	412.7492676
XtendiMax+StrikeLock+AU-243LFP13-2	TTI 11004	63	2	419.058075
XtendiMax+StrikeLock+AU-243LFP13-2	TTI 11004	63	3	412.4308472
XtendiMax+SucceedUltra+AU-243LFP13-2	TTI 11004	63	1	407.767334
XtendiMax+SucceedUltra+AU-243LFP13-2	TTI 11004	63	2	409.3843689
XtendiMax+SucceedUltra+AU-243LFP13-2	TTI 11004	63	3	405.7824097
XtendiMax+Sultrus+AU-243LFP13-2	TTI 11004	63	1	425.5593872
XtendiMax+Sultrus+AU-243LFP13-2	TTI 11004	63	2	428.0771484
XtendiMax+Sultrus+AU-243LFP13-2	TTI 11004	63	3	423.3562622
XtendiMax+SundanceII+AU-243LFP13-2	TTI 11004	63	1	403.6114807
XtendiMax+SundanceII+AU-243LFP13-2	TTI 11004	63	2	407.7774048
XtendiMax+SundanceII+AU-243LFP13-2	TTI 11004	63	3	400.867157
XtendiMax+Tapout+AU-243LFP13-2	TTI 11004	63	1	422.5967712
XtendiMax+Tapout+AU-243LFP13-2	TTI 11004	63	2	421.2368774
XtendiMax+Tapout+AU-243LFP13-2	TTI 11004	63	3	421.5562439
XtendiMax+TraplinePro+AU-243LFP13-2	TTI 11004	63	1	399.7631226
XtendiMax+TraplinePro+AU-243LFP13-2	TTI 11004	63	2	403.4024963
XtendiMax+TraplinePro+AU-243LFP13-2	TTI 11004	63	3	397.9873657
XtendiMax+VeracityElite+AU-243LFP13-2	TTI 11004	63	1	432.2047119
XtendiMax+VeracityElite+AU-243LFP13-2	TTI 11004	63	2	432.3560181
XtendiMax+VeracityElite+AU-243LFP13-2	TTI 11004	63	3	426.3336182
XtendiMax+VisorS-MOCII+AU-243LFP13-2	TTI 11004	63	1	420.1538696
XtendiMax+VisorS-MOCII+AU-243LFP13-2	TTI 11004	63	2	415.7447205
XtendiMax+VisorS-MOCII+AU-243LFP13-2	TTI 11004	63	3	414.5102234
XtendiMax+Volunteer+AU-243LFP13-2	TTI 11004	63	1	429.9829712
XtendiMax+Volunteer+AU-243LFP13-2	TTI 11004	63	2	434.9000854
XtendiMax+Volunteer+AU-243LFP13-2	TTI 11004	63	3	436.4606018
XtendiMax+WaterMark+AU-243LFP13-2	TTI 11004	63	1	422.9110413
XtendiMax+WaterMark+AU-243LFP13-2	TTI 11004	63	2	422.5428162
XtendiMax+WaterMark+AU-243LFP13-2	TTI 11004	63	3	424.5729675
XtendiMax+WeatherMax+AU-243LFP13-2	TTI 11004	63	1	421.5839844
XtendiMax+WeatherMax+AU-243LFP13-2	TTI 11004	63	2	420.5823364
XtendiMax+WeatherMax+AU-243LFP13-2	TTI 11004	63	3	418.7142029

844.0027466	1609.553589	0.602161586	0	0	0	0	0
856.5045776	1624.844849	0.588572085	0	0	0	0	0
848.6064453	1617.219604	0.594707906	0	0	0	0	0
848.56073	1625.743408	0.585591257	0	0	0	0	0
842.144104	1610.736206	0.603455186	0	0	0	0	0
839.4180908	1606.198608	0.603322446	0	0	0	0	0
864.2543335	1624.993042	0.608746588	0	0	0	0	0
879.3616943	1652.205811	0.566093445	0	0	0	0	0
863.7741699	1632.008423	0.603181541	0	0	0	0	0
822.44104	1572.189575	0.64958185	0	0.00E+00	0.00E+00	0.00E+00	0.00E+00
831.0979614	1589.424072	0.653024852	0	0.00E+00	0.00E+00	0.00E+00	0.00E+00
819.7885742	1570.792725	0.662076116	0	0.00E+00	0.00E+00	0.00E+00	0.00E+00
848.6810303	1599.935791	0.592888713	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
848.2863159	1600.749268	0.601067066	0	0.00E+00	0.00E+00	0.00E+00	0.00E+00
848.2213745	1605.315674	0.600486398	0	0.00E+00	0.00E+00	0.00E+00	0.00E+00
820.7637329	1574.460815	0.722855389	0	0	0	0	0
825.5023193	1577.357544	0.713156044	0	0	0	0	0
810.0512085	1549.938721	0.755825281	0	0	0	0	0
883.6052246	1652.729614	0.601908565	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
887.8064575	1664.238037	0.574811399	0	0.00E+00	0.00E+00	0.00E+00	0.00E+00
876.3880005	1645.887695	0.622918904	0	0.00E+00	0.00E+00	0.00E+00	0.00E+00
880.9932251	1662.9729	0.603055	0	0	0	0	0
875.5568237	1658.392456	0.630877018	0	0	0	0	0
866.74646	1644.390015	0.642308533	0	0	0	0	0
868.0975342	1629.442505	0.580399454	0	0.00E+00	0.00E+00	0.00E+00	0.00E+00
878.824707	1643.86853	0.560474873	0	0.00E+00	0.00E+00	0.00E+00	0.00E+00
885.6259766	1654.846802	0.571685672	0	0.00E+00	0.00E+00	0.00E+00	0.00E+00
871.7623901	1641.7948	0.617119372	0	0.00E+00	0.00E+00	0.00E+00	0.00E+00
878.3591919	1654.750366	0.605081677	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
881.2856445	1658.042969	0.594206452	0	0.00E+00	0.00E+00	0.00E+00	0.00E+00
915.4804077	1716.019165	0.574210167	0	0.00E+00	0.00E+00	0.00E+00	0.00E+00
918.1112671	1715.608765	0.573235571	0	0.00E+00	0.00E+00	0.00E+00	0.00E+00
913.47052	1713.393799	0.583292127	0	0.00E+00	0.00E+00	0.00E+00	0.00E+00

0.00E+00	0	0	0.000100632	0.000471725	0.000970612	0.00201599	0.00356476
0.00E+00	0	0	8.06427E-05	0.000440216	0.000935059	0.00198341	0.00354294
0.00E+00	0	0	0.000102234	0.000464478	0.00095253	0.00198402	0.00354622
0.00E+00	0	0	0.000118942	0.000475769	0.000944901	0.00193352	0.00346771
0.00E+00	0	0	0.000101547	0.000476151	0.000975647	0.00201759	0.00356918
0.00E+00	0	0	9.09424E-05	0.000450439	0.000944443	0.00201149	0.0037001
0.00E+00	0	0	5.79834E-06	0.000366058	0.000911789	0.00210579	0.00391968
0.00E+00	0.00E+00	0	2.51007E-05	0.000355759	0.000846558	0.00193451	0.00364479
0.00E+00	0	0	3.01361E-05	0.000395737	0.000926361	0.00207092	0.00378227
0.00E+00	0.00E+00	0	0.000141602	0.00054451	0.00106873	0.00215225	0.00374123
0.00E+00	0.00E+00	0	0.000153351	0.000567474	0.00109596	0.00216461	0.00366516
0.00E+00	0	0	0.000165405	0.000576172	0.00110062	0.00217796	0.00375694
0.00E+00	0.00E+00	0	5.79071E-05	0.000425339	0.000940781	0.00202499	0.00357597
0.00E+00	0	0	5.24902E-05	0.000418167	0.000939331	0.00205246	0.00368492
0.00E+00	0.00E+00	0	6.58417E-05	0.000447159	0.00097084	0.00205093	0.00355049
0.00E+00	0.00E+00	0	0.000125351	0.00057785	0.0011776	0.00241989	0.0042289
0	0.00E+00	0	0.000109329	0.000554733	0.0011528	0.00239838	0.00421272
0.00E+00	0.00E+00	0	0.000120239	0.000597	0.00123222	0.00254333	0.00441879
0.00E+00	0	0	3.13568E-05	0.000379333	0.0008992	0.0020575	0.00385994
0.00E+00	0	0	2.98309E-05	0.000365448	0.000862961	0.00196434	0.00367714
0	0	0	3.76892E-05	0.000400314	0.000936127	0.00212418	0.00397644
0	0.00E+00	0	0.000133209	0.000467682	0.000932693	0.00197594	0.00368614
0.00E+00	0.00E+00	0	0.000139923	0.000488205	0.000973129	0.00206505	0.00386627
0	0.00E+00	0	0.000146408	0.000511322	0.00100952	0.00210724	0.0038607
0.00E+00	0.00E+00	0	2.69318E-05	0.000378494	0.000892105	0.00199905	0.00362793
0.00E+00	0	0	2.00653E-05	0.000360947	0.000860443	0.00193512	0.00351265
0.00E+00	0	0	1.07574E-05	0.000346756	0.000856018	0.00197586	0.00366829
0.00E+00	0	0	4.95148E-05	0.00040947	0.00093399	0.00209358	0.00391182
0	0	0	6.37054E-05	0.00041275	0.00091629	0.00203613	0.00382919
0	0	0	6.44684E-05	0.000408707	0.000903702	0.00199982	0.00374359
0.00E+00	0.00E+00	5.79834E-06	0.000164719	0.000451126	0.000865479	0.00183388	0.00357811
0.00E+00	0.00E+00	1.06812E-06	0.000130692	0.000405807	0.00082283	0.00184212	0.00376259
0.00E+00	0.00E+00	6.40869E-06	0.000156174	0.000436096	0.000855331	0.00186325	0.00373215

0.00382133	0.00435219	0.00779518	0.0150487	0.0281004	0.0318242	0.0729532	0.0951255
0.00377693	0.00421944	0.00741287	0.0142208	0.0266969	0.0304703	0.0705122	0.0929191
0.00386681	0.00445686	0.00797737	0.0152332	0.0281107	0.0316098	0.0721375	0.0939114
0.00389465	0.004655	0.00849442	0.0161215	0.0291897	0.0322948	0.0726214	0.0934078
0.00386681	0.00447601	0.00810158	0.0156093	0.0288622	0.0323849	0.0735604	0.0951517
0.00416809	0.00488449	0.00868469	0.0162279	0.0293235	0.0325568	0.0735835	0.095042
0.00414787	0.00437164	0.00712631	0.0131408	0.0247711	0.0287605	0.0679803	0.0914604
0.00398468	0.00435814	0.00725388	0.0132726	0.0245179	0.028077	0.0658117	0.0883531
0.00399071	0.004282	0.00718704	0.0135025	0.0254568	0.0293571	0.0687491	0.0916267
0.00400414	0.00461784	0.00838188	0.0162286	0.03011	0.0338231	0.0767664	0.0989405
0.00380501	0.00432228	0.0078968	0.0155592	0.0292802	0.0331251	0.0755073	0.0976164
0.00403465	0.00470428	0.00861107	0.0166701	0.0307412	0.0343193	0.0774023	0.0991917
0.00367043	0.00393738	0.00683128	0.0134068	0.0259982	0.0303302	0.0713691	0.0951037
0.0038385	0.00412514	0.0070578	0.0136009	0.0260927	0.0303255	0.0712669	0.0949494
0.00358658	0.00384903	0.00678329	0.0135182	0.0263456	0.0306969	0.0719357	0.0953354
0.00446205	0.00498451	0.00873497	0.0165292	0.0303635	0.0339711	0.0768612	0.0987537
0.00442482	0.00488228	0.00845871	0.0159705	0.029501	0.0332275	0.0757445	0.098056
0.00458038	0.00501465	0.00870049	0.0165369	0.0306853	0.0345783	0.0786124	0.101165
0.00412857	0.00434959	0.00697189	0.0125737	0.0234309	0.0271747	0.0645365	0.0876416
0.00396088	0.0042482	0.00696198	0.0127111	0.0236587	0.0272955	0.0644267	0.0870252
0.00428001	0.00456253	0.00737808	0.0132642	0.0244267	0.0280311	0.0658949	0.0886583
0.00415894	0.00474403	0.0080616	0.0145132	0.025889	0.0288449	0.0660741	0.0872106
0.00437645	0.00498863	0.00842621	0.0150243	0.026553	0.0293964	0.0669465	0.0878698
0.00428513	0.00485741	0.00828514	0.015034	0.0269332	0.0299957	0.0684441	0.0897166
0.00376015	0.00395676	0.00660713	0.0126131	0.0243309	0.0285201	0.0677201	0.0913022
0.00363274	0.0038102	0.00634834	0.0121292	0.0234715	0.0276083	0.065864	0.0893573
0.00384377	0.00399506	0.0064576	0.0119804	0.0229176	0.0269421	0.0644868	0.0879053
0.00425415	0.00462341	0.00761566	0.0137666	0.0251865	0.0286749	0.0668784	0.0893608
0.00424225	0.00470032	0.00781075	0.0140202	0.0252975	0.0285167	0.0660341	0.0878973
0.00413124	0.00457611	0.00763596	0.0137949	0.0250193	0.0282814	0.0656233	0.0875122
0.00432343	0.00515755	0.00875076	0.0150572	0.0254106	0.0273297	0.0612444	0.0802755
0.00465958	0.00553543	0.00916344	0.0152745	0.0252034	0.0268744	0.0601643	0.0791977
0.00458069	0.00545883	0.00913658	0.0154292	0.0256641	0.027414	0.061236	0.0801889

0.118786	0.128954	0.124552	0.119262	0.0990364	0.0723987	0.0457725	2.45E-02
0.117236	0.128569	0.12542	0.121274	0.101634	0.0748745	0.047599	0.0255476
0.117452	0.128005	0.124317	0.119808	0.100134	0.0735936	0.0466913	0.0250238
0.115995	0.126088	0.122647	0.118862	0.100246	0.0744729	0.0477007	0.0257273
0.118215	0.12803	0.123651	0.118607	0.0987784	0.0724397	0.0459151	0.0246001
0.118121	0.127981	0.123557	0.118329	0.098273	0.0718202	0.0453819	0.0242658
0.117236	0.129987	0.127612	0.12361	0.103279	0.0755512	0.0476312	0.0253955
0.11374	0.127282	0.126635	0.124809	0.106435	0.0795063	0.050989	0.027484
0.116623	0.128764	0.126276	0.122624	0.103109	0.0761328	0.0484532	0.0260143
0.122038	0.130673	0.124195	0.116585	0.0945319	0.0673471	0.0416324	0.0219341
0.120754	0.129816	0.124109	0.117506	0.09637	0.0695483	0.0434835	0.0230827
0.121861	0.130159	0.123548	0.115942	0.0940577	0.0670734	0.0414969	0.0218696
0.120489	0.131878	0.127654	0.12171	0.0999475	0.0718554	0.044644	0.0235674
0.120303	0.131667	0.127431	0.121502	0.0998384	0.0718774	0.0447379	0.0236541
0.120177	0.131061	0.126675	0.120946	0.0997993	0.0722961	0.0452745	0.0240398
0.121484	0.129839	0.123326	0.115892	0.094252	0.0674488	0.0418829	0.0221369
0.121377	0.130359	0.124263	0.117031	0.095235	0.0680752	0.0421759	2.22E-02
0.124143	0.131847	0.123977	0.114857	0.0917405	0.0643623	0.0392736	0.0205095
0.113734	0.127957	0.127713	0.126026	0.10737	0.0799621	0.0510793	0.0274423
0.112594	0.126616	0.126667	0.125697	0.108067	0.0814114	0.052578	0.0284722
0.114216	0.12775	0.126902	0.124731	0.105928	0.0787001	0.0501935	0.0269396
0.11133	0.124426	0.124374	0.123786	0.106945	0.0809362	0.0524065	0.0283966
0.111636	0.124254	0.123765	0.122813	0.105863	0.0800093	0.0517836	0.0280615
0.113526	0.125595	0.124131	0.122019	0.10408	0.0778596	0.0499843	0.0269479
0.117155	0.130048	0.127904	0.124223	0.104112	0.0763452	0.0481703	0.0256711
0.115502	0.129268	0.128259	0.125726	0.106349	0.0786448	0.0499471	0.0267297
0.114168	0.128392	0.128068	0.126345	0.107692	0.0802915	0.051355	0.0276154
0.114538	0.127617	0.126371	0.123868	0.104962	0.0778835	0.0496666	0.026672
0.112686	0.125993	0.125549	0.124161	0.106344	0.0797736	0.0513171	0.0277087
0.112394	0.125908	0.125718	0.124589	0.10693	0.0803544	0.0517533	0.0279623
0.103399	0.118029	0.121627	0.125785	0.113434	0.0894804	0.059857	0.0331094
0.102687	0.117969	0.122143	0.126607	0.114113	0.0897645	0.0598401	0.0330109
0.103315	0.117979	0.121576	0.125643	0.113132	0.0890593	0.0594632	0.0328505

6.08E-04	0
0.000635367	0
0.000622019	0
0.0006408	0
0.000611447	0
0.000602771	0
0.000630095	0
0.000684248	0
0.000646982	0
0.00054223	0
0.00057199	0
0.000540645	0
0.000582809	0
0.0005853	0
0.000595656	0
0.00054782	0
0.000549884	0
0.000505534	0
0.000682389	0
0.000709913	0
0.000669664	0
0.000707968	0
0.000699689	0
0.000670846	0
0.000636675	0
0.000663818	0
0.000686893	0
0.000663239	0
0.000690177	0
0.00069662	0
0.000830886	0
0.000827638	0
0.000824064	0

Message

From: ORR, THOMAS B [AG/1005] [thomas.orr@bayer.com]
Sent: 3/1/2019 9:43:10 PM
To: Schmid, Emily [Schmid.Emily@epa.gov]
CC: Meadows, Sarah [Meadows.Sarah@epa.gov]; Kenny, Daniel [Kenny.Dan@epa.gov]; BHAKTA, TINA [AG/1005] [tina.bhakta@monsanto.com]; james.m.nyangulu@monsanto.com; MARVIN, THOMAS [AG/1920] [thomas.marvin@monsanto.com]
Subject: Monsanto Company March 2019 Monthly Report - Inquiries of Potential Damage to Non-Target Vegetation
Attachments: OTM_MonthlyReport_EPA_Draft_ver5_March.pdf

Emily,

Please see attached report, which fulfills, in part, the condition of registration for M1768 Herbicide (EPA Reg. No. 524-617) that requires monthly reporting of inquiries of potential damage to non-target vegetation to EPA as outlined in Decision No. 544831, Term #12 issued November 1, 2018. In order to allow sufficient time for compilation, this report and future monthly reports will include inquiries received up to 10 days prior to the submission of the report.

An electronic copy of this report was also submitted to EPA today via the E-Portal.

Please let me know if you have any questions regarding this submission.

Best regards,

Tom Orr
Global Regulatory Affairs Manager

///////////////////

Bayer Crop Science
Monsanto Company
Regulatory Science
Building FF
Chesterfield, 63017, USA
Tel: +1 636-737-9347
Cell: +1 314-422-1748
E-mail: thomas.orr@bayer.com
Web: http://www.bayer.com

/// Follow Bayer on:
/// Twitter /// Facebook /// Instagram /// LinkedIn /// YouTube

The information contained in this e-mail is for the exclusive use of the intended recipient(s) and may be confidential, proprietary, and/or legally privileged. Inadvertent disclosure of this message does not constitute a waiver of any privilege. If you receive this message in error, please do not directly or indirectly use, print, copy, forward, or disclose any part of this message. Please also delete this e-mail and all copies and notify the sender. Thank you.