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WASHINGTON, D.C. 20460

OFFICE OF
PREVENTION, PESTICIDES
AND TOXIC SUBSTANCES

MEMORANDUM

DATE: 08-JUNE-2006

SUBJECT: **Myclobutanil**. Acute and Chronic Dietary Exposure and Risk Assessments for Section 3 Use on Hops. DP# 319228. Decision# 357983. Chemical: 128857.

FROM/TO: Jennifer R. Tyler, Chemist
Registration Action Branch (RAB1)
Health Effects Division (HED) (7509C)

THROUGH: PV Shah, Ph.D., Branch Senior Scientist
RAB1/HED (7509C)

and

William Cutchin, Chemist
Sheila Piper, Chemist
Dietary Exposure Science Advisory Council (DESAC)/HED (7509C)

Executive Summary

Acute and chronic dietary exposure analyses were requested in order to determine the dietary exposure estimates associated with the proposed tolerances for residues of myclobutanil in/on hops. No cancer dietary exposure assessment was performed because myclobutanil is not carcinogenic.

An acute dietary exposure assessments was performed for females 13-49 years old (no endpoint was identified for the general U.S. population or any other population subgroup) using tolerance-level residues and 100% crop treated (CT) information for all registered and proposed uses. Drinking water was incorporated directly in the dietary assessment using the acute (peak) concentration for surface water generated by the Food Quality Protection Act (FQPA) Index Reservoir Screening Tool (FIRST) model. These assessments conclude that the acute dietary exposure estimates (95th percentile) are below HED's level of concern [<100% acute Population Adjusted Dose (aPAD)] for females 13-49 years old at 4.2% aPAD.

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A refined, chronic dietary exposure assessment was performed for the general U.S. population and various population subgroups using the United Stated Department of Agriculture (USDA) Pesticide Data Program (PDP) monitoring data for apple juice, bananas (not plantains) and milk, registered and proposed tolerance for all other commodities; average % CT information for apple (except juice), apricots, artichokes, asparagus, sugar beet, blackberry, and tomatoes; and 100% CT information for all other registered and proposed uses. Drinking water was incorporated directly into the dietary assessment using the chronic (annual average) concentration for surface water generated by the FIRST model. This assessment concludes that the chronic dietary exposure estimates are below HED's level of concern [<100% chronic Population Adjusted Dose (cPAD)] for the general U.S. population (15% cPAD) and all population subgroups. The most highly exposed population subgroup is all infants (<1 year old) at 36% cPAD.

Introduction

Dietary risk assessment incorporates both exposure and toxicity of a given pesticide. For acute and chronic assessments, the risk is expressed as a percentage of a maximum acceptable dose. This is the PAD, which HED has concluded will result in no unreasonable adverse health effects. The PAD is the reference dose (RfD) divided by the FQPA 10x Safety Factor. Dietary risk is expressed as a percentage of the PAD. HED is concerned when estimated dietary risk exceeds 100% of the PAD. References which discuss the acute and chronic risk assessment in more detail are available on the EPA/pesticides web site: "Available Information on Assessing Exposure from Pesticides, A User's Guide", 6/21/2000, web link: http://www.epa.gov/fedrgstr/EPA_PEST/2000/July/Day_12/6061.pdf; or see SOP 99.6 (8/20/99). The current acute and chronic dietary exposure assessments were conducted using the Dietary Exposure Evaluation Model software with the Food Commodity Intake Database (DEEM-FCID™ ,Version 2.03). The most recent dietary exposure assessment was performed in conjunction with a Section 18 request for the use of myclobutanil on soybeans in Minnesota (Memo, W. Cutchin, 8/1/05; DP# 318346).

Residue Information

Registered and Proposed Tolerances: Permanent tolerances are currently established for the combined residues of myclobutanil and its RH-9090 metabolite (free and bound) in/on a variety of raw agricultural commodities (RACs) at levels ranging from 0.02 to 25.0 ppm and in meat, milk, poultry, and eggs at levels ranging from 0.02 to 1.0 ppm [40 CFR §180.443(a)]. In addition, tolerances in conjunction with Section 18 registrations have been established for a number of RACs under 40 CFR §180.443(b). Tolerances for indirect or inadvertent residues of myclobutanil have been established for several crop groups under 40 CFR §180.443(d). The available residue chemistry database supports the establishment of a 10 ppm tolerance for the combined residues of myclobutanil and its alcohol metabolite RH-9090 (free and bound) in/on hop, dried cone. Also included in this assessment are the following tolerances for indirect or inadvertent residues of myclobutanil and its alcohol metabolite (free and bound) (Memo, J. Tyler, 6/29/05; D308904):

Commodity	ppm	Commodity	ppm
Vegetable, Root and Tuber, Group	0.10	Vegetable, Fruiting, Group	1.0
Vegetable, Leaves of Root and Tuber, Group	0.20	Grains, Cereal, Group	0.03
Vegetable, Leafy, Except *Brassica*, Group	1.0	Grains, Cereal, Forage, Fodder, and Straw, Group	1.0
Vegetable, *Brassica* Leafy, Group	1.0	Animal Feed, Nongrass, Group	1.0
Vegetable, Legume, Group	0.03	Vegetable, Foliage of Legume, Group	0.60

Nature of the Residue: Plant metabolism studies on wheat, grapes, and apples have previously been submitted and reviewed (PP#4G3149 and PP#7G3479), and were summarized in HED review of PP#2F4155 (DP Barcode D183273, D. Davis, 2/8/93). The requirement to conduct a tomato metabolism study, in conjunction with PP#1F4030, was waived (DP Barcode D203587, J. Stokes, 7/13/94). By translation of metabolism data from grapes and apples, the qualitative nature of the residue in hops, peppers, eggplant and okra is adequately understood. The residues of concern are the parent myclobutanil and its RH-9090 metabolite (free and bound).

Drinking Water Considerations: The Environmental Fate and Effects Division (EFED) provided drinking water estimated environmental concentrations (EECs) for myclobutanil. Models Screening Concentration in Ground Water (SCI-GROW) and FQPA Index Reservoir Screening Tool (FIRST) were used to derive the ground and surface water EECs, respectively. The acute and chronic EEC for ground water is estimated as 3.2 ppb; the acute and chronic surface water EECs were 333 and 86 ppb, respectively.

Percent Crop Treated: Updated % CT information was provided by the Biological Economic and Analysis Division (BEAD) (Memo, J. Alsadek, 2/16/06). No % CT information was used for the acute assessment. For the chronic assessment, average % CT information was used for apple (except juice), apricots, artichokes, asparagus, sugar beet, blackberry, and tomatoes. The average % CT values used in the chronic assessment can be found in Attachment 5.

Residue and PDP Data: Tolerance level residues were used for all registered and proposed commodities in the acute assessment. For the chronic assessment, PDP data on apple juice, bananas (not plantains) and milk were used. Detailed information on the PDP data can be found in the dietary exposure assessment conducted in conjunction with a previous Section 18 risk assessment (Memo, B. Tomerlin, 3/22/04; D296308).

Processing Factors: DEEM™ default processing factors were used for all registered and proposed commodities.

DEEM-FCID™ Program and Consumption Information

The myclobutanil acute and chronic dietary exposure assessments were conducted using DEEM-FCID™ (Version 2.03), which incorporates consumption data from USDA's CSFII, 1994-1996 and 1998. The 1994-96, 98 data are based on the reported consumption of more than 20,000 individuals over two non-consecutive survey days. Foods "as consumed" (e.g., apple pie) are linked to EPA-defined food commodities (e.g. apples, peeled fruit - cooked; fresh or N/S; baked; or wheat flour - cooked; fresh or N/S, baked) using publicly available recipe translation files developed jointly by USDA/ARS and EPA. Consumption data are averaged for the entire U.S. population and within population subgroups for chronic exposure assessment, but are retained as individual consumption events for acute exposure assessment.

For chronic exposure and risk assessment, an estimate of the residue level in each food or food-form (e.g., orange or orange juice) on the food commodity residue list is multiplied by the average daily consumption estimate for that food/food form. The resulting residue consumption estimate for each food/food form is summed with the residue consumption estimates for all other food/food forms on the commodity residue list to arrive at the total average estimated exposure. Exposure is expressed in mg/kg body weight/day and as a percent of the cPAD. This procedure is performed for each population subgroup.

For acute exposure assessments, individual one-day food consumption data are used on an individual-by-individual basis. The reported consumption amounts of each food item can be multiplied by a residue point estimate and summed to obtain a total daily pesticide exposure for a deterministic (Tier 1 or Tier 2) exposure assessment, or "matched" in multiple random pairings with residue values and then summed in a probabilistic (Tier 3/4) assessment. The resulting distribution of exposures is expressed as a percentage of the aPAD on both a user (i.e., those who reported eating relevant commodities/food forms) and a per-capita (i.e., those who reported eating the relevant commodities as well as those who did not) basis. In accordance with HED policy, per capita exposure and risk are reported for all tiers of analysis. However, for Tiers 1 and 2, significant differences in user vs. per capita exposure and risk are identified and noted in the risk assessment.

Toxicological Information

A summary of the toxicological doses and endpoints selected for dietary exposure assessment is provided in Table 1.

Table 1. Summary of Toxicological Doses and Endpoints for Myclobutanil for Use in Dietary Exposure Assessment.

Exposure Scenario	Dose Used in Risk Assessment, UF	FQPA SF and Endpoint for Risk Assessment	Study and Toxicological Effects
Acute Dietary females 13-50 years of age	NOAEL = 60 mg/kg/day UF = 100 **Acute RfD** = 0.60 mg/kg/day	FQPA SF = 1x **aPAD** = acute RfD = 0.60 mg/kg/day	Developmental Toxicity - rabbit. LOAEL = 200 mg/kg/day based on increased resorptions, decreased litter size and a decrease in the viability index.
Acute Dietary general U.S. population (including infant and children)	none	not applicable	not applicable
Chronic Dietary all populations	NOAEL= 2.49 mg/kg/day UF = 100 **Chronic RfD** = 0.025 mg/kg/day	FQPA SF = 1x **cPAD** = chronic RfD = 0.025 mg/kg/day	Chronic Toxicity/ Carcinogenicity - rat. LOAEL = 9.94 mg/kg/day based on decreased testicular weights and increased testicular atrophy.
Cancer (oral, dermal, inhalation)	Group E - likely not a carcinogen.		

Results/Discussion/Conclusions

HED's level of concern is when the exposure is greater than 100% of the PAD. That is, estimated exposures above this level are of concern, while estimated exposures at or below this level are not of concern. The DEEM-FCID™ analysis estimates the dietary exposure of the U.S. population and 26 population subgroups. The results reported in Table 2 are for the U.S. Population, all infants (<1 year old), children 1-2, children 3-5, children 6-12, youth 13-19, females 13-49, males 20-49, and adults 50+ years.

An acute dietary exposure assessment (using tolerance level residues and 100% CT information for all registered and proposed uses) was conducted for females 13-49 years old. Drinking water was incorporated directly in the dietary assessment using the acute (peak) concentration for surface water generated by the FIRST model. These assessments conclude that the acute dietary exposure estimates (95th percentile) are below HED's level of concern (<100% aPAD) for females 13-49 years old at 4.2% aPAD).

The chronic dietary exposure assessment (using PDP data for apple juice, bananas and milk; registered and proposed tolerance for all other commodities; % CT information when available; and 100% CT information for other all registered and proposed uses) was conducted for the general U.S. population and various population subgroups. Drinking water was incorporated directly into the dietary assessment using the chronic (annual average) concentration for surface water generated by the FIRST model. This assessment concludes that the chronic dietary exposure estimates are below HED's level of concern (<100% cPAD) for the general U.S.

population (15% cPAD) and all population subgroups. The most highly exposed population subgroup is infants (<1 year old) at 36% cPAD.

Table 2. Summary of Dietary Exposure and Risk for Myclobutanil.

Population Subgroup	Acute Dietary[1]		Chronic Dietary[2]	
	Dietary Exposure (mg/kg/day)	% aPAD	Dietary Exposure (mg/kg/day)	% cPAD
U.S. Population (total)	NA		0.003842	15
All Infants (< 1 year old)			**0.009005**	**36**
Children 1-2 years old			0.007697	31
Children 3-5 years old			0.006435	26
Children 6-12 years old			0.004189	17
Youth 13-19 years old			0.002840	11
Adults 20-49 years old			0.003418	14
Adults 50+ years old			0.003595	14
Females 13-49 years old	**0.025154**	**4.2**	0.003320	13

[1] Acute dietary endpoints of 0.6 mg/kg/day for females 13-49 years old. No acute dietary endpoint was chosen for the general U.S. population, including infants and children.
[2] Chronic dietary endpoint of 0.025mg/kg/day applies to the general U.S. population and all population subgroups.

List of Attachments

Attachment 1. Residue File for Acute DEEM-FCID™ Analysis.
Attachment 2. Acute DEEM-FCID™ Analysis.
Attachment 3. Residue File for Chronic DEEM-FCID™ Analysis.
Attachment 4. Chronic DEEM-FCID™ Analysis.
Attachment 5. Percent Crop Treated Data (Memo, J. Alsadek, 2/16/06).

cc (w/ Attachments): J. Tyler (RD, 7505C)
RDI: DE SAC [S. Piper (5/17/06), W. Cutchin (5/17/06)]; PV Shah (6/08/06)
J.Tyler:S-10943:(703)305-5564: 7509C:RAB1

Attachment 1. Residue File for Acute DEEM-FCID™ Analysis.

Filename: C:\Documents and Settings\jtyler\My Documents\JenWork\Myclobutanil\Home and Garden Uses\128857a.R98
Chemical: Myclobutanil
RfD(Chronic): .015 mg/kg bw/day NOEL(Chronic): 0 mg/kg bw/day
RfD(Acute): .6 mg/kg bw/day NOEL(Acute): 0 mg/kg bw/day
Date created/last modified: 03_15_2006/13:34:42/8 Program ver. 2.03
Comment: Tolerance file include hops

EPA Code	Crop Grp	Commodity Name	Def Res (ppm)	Adj.Factors #1	#2	Comment
14000030	14	Almond	0.100000	1.000	1.000	40 CFR 180.443(a)
14000031	14	Almond_babyfood	0.100000	1.000	1.000	40 CFR 180.443(a)
14000040	14	Almond, oil	0.100000	1.000	1.000	40 CFR 180.443(a)
14000041	14	Almond, oil_babyfood	0.100000	1.000	1.000	40 CFR 180.443(a)
04010050	4A	Amaranth, leafy	1.000000	1.000	1.000	40 CFR 180.443(d)
11000070	11	Apple, fruit with peel	0.500000	1.000	1.000	40 CFR 180.443(a)
11000080	11	Apple, peeled fruit	0.500000	1.000	1.000	40 CFR 180.443(a)
11000081	11	Apple, peeled fruit_babyfood	0.500000	1.000	1.000	40 CFR 180.443(a)
11000090	11	Apple, dried	0.500000	8.000	1.000	40 CFR 180.443(a)
11000091	11	Apple, dried_babyfood	0.500000	8.000	1.000	40 CFR 180.443(a)
11000100	11	Apple, juice	0.500000	1.000	1.000	40 CFR 180.443(a)
11000101	11	Apple, juice_babyfood	0.500000	1.000	1.000	40 CFR 180.443(a)
11000110	11	Apple, sauce	0.500000	1.000	1.000	40 CFR 180.443(a)
11000111	11	Apple, sauce_babyfood	0.500000	1.000	1.000	40 CFR 180.443(a)
12000120	12	Apricot	2.000000	1.000	1.000	40 CFR 180.443(a)
12000121	12	Apricot_babyfood	2.000000	1.000	1.000	40 CFR 180.443(a)
12000130	12	Apricot, dried	2.000000	6.000	1.000	40 CFR 180.443(a)
12000140	12	Apricot, juice	2.000000	1.000	1.000	40 CFR 180.443(a)
12000141	12	Apricot, juice_babyfood	2.000000	1.000	1.000	40 CFR 180.443(a)
01030150	1CD	Arrowroot, flour	0.100000	1.000	1.000	40 CFR 180.443(d)
01030151	1CD	Arrowroot, flour_babyfood	0.100000	1.000	1.000	40 CFR 180.443(d)
95000160	O	Artichoke, globe	1.000000	1.000	1.000	40 CFR 180.443(b)
01030170	1CD	Artichoke, Jerusalem	0.100000	1.000	1.000	40 CFR 180.443(d)
04010180	4A	Arugula	1.000000	1.000	1.000	40 CFR 180.443(d)
95000190	O	Asparagus	0.020000	1.000	1.000	40 CFR 180.443(a)
09020210	9B	Balsam pear	0.200000	1.000	1.000	40 CFR 180.443(a)
95000230	O	Banana	4.000000	1.000	1.000	40 CFR 180.443(a)
95000231	O	Banana_babyfood	4.000000	1.000	1.000	40 CFR 180.443(a)
95000240	O	Banana, dried	4.000000	3.900	1.000	40 CFR 180.443(a)
95000241	O	Banana, dried_babyfood	4.000000	3.900	1.000	40 CFR 180.443(a)
15000250	15	Barley, pearled barley	0.030000	1.000	1.000	40 CFR 180.443(d)
15000251	15	Barley, pearled barley_babyfood	0.030000	1.000	1.000	40 CFR 180.443(d)
15000260	15	Barley, flour	0.030000	1.000	1.000	40 CFR 180.443(d)
15000261	15	Barley, flour_babyfood	0.030000	1.000	1.000	40 CFR 180.443(d)
15000270	15	Barley, bran	0.030000	1.000	1.000	40 CFR 180.443(d)
06030300	6C	Bean, black, seed	1.000000	1.000	1.000	40 CFR 180.443(d)
06020310	6B	Bean, broad, succulent	1.000000	1.000	1.000	40 CFR 180.443(d)
06030320	6C	Bean, broad, seed	1.000000	1.000	1.000	40 CFR 180.443(d)
06020330	6B	Bean, cowpea, succulent	1.000000	1.000	1.000	40 CFR 180.443(d)
06030340	6C	Bean, cowpea, seed	1.000000	1.000	1.000	40 CFR 180.443(d)
06030350	6C	Bean, great northern, seed	1.000000	1.000	1.000	40 CFR 180.443(d)
06030360	6C	Bean, kidney, seed	1.000000	1.000	1.000	40 CFR 180.443(d)
06020370	6B	Bean, lima, succulent	1.000000	1.000	1.000	40 CFR 180.443(d)
06030380	6C	Bean, lima, seed	1.000000	1.000	1.000	40 CFR 180.443(d)
06030390	6C	Bean, mung, seed	1.000000	1.000	1.000	40 CFR 180.443(d)
06030400	6C	Bean, navy, seed	1.000000	1.000	1.000	40 CFR 180.443(d)
06030410	6C	Bean, pink, seed	1.000000	1.000	1.000	40 CFR 180.443(d)

06030420	6C	Bean, pinto, seed	1.000000	1.000	1.000	40 CFR 180.443(d)
06010430	6A	Bean, snap, succulent	1.000000	1.000	1.000	40 CFR 180.443(a)
06010431	6A	Bean, snap, succulent_babyfood	1.000000	1.000	1.000	40 CFR 180.443(a)
21000440	M	Beef, meat	0.100000	1.000	1.000	40 CFR 180.443(a)
21000441	M	Beef, meat_babyfood	0.100000	1.000	1.000	40 CFR 180.443(a)
21000450	M	Beef, meat, dried	0.100000	1.920	1.000	40 CFR 180.443(a)
21000460	M	Beef, meat byproducts	0.200000	1.000	1.000	40 CFR 180.443(a)
21000461	M	Beef, meat byproducts_babyfood	0.200000	1.000	1.000	40 CFR 180.443(a)
21000470	M	Beef, fat	0.050000	1.000	1.000	40 CFR 180.443(a)
21000471	M	Beef,fat_babyfood	0.050000	1.000	1.000	40 CFR 180.443(a)
21000480	M	Beef, kidney	0.200000	1.000	1.000	40 CFR 180.443(a)
21000490	M	Beef, liver	1.000000	1.000	1.000	40 CFR 180.443(a)
21000491	M	Beef, liver_babyfood	1.000000	1.000	1.000	40 CFR 180.443(a)
01010500	1AB	Beet, garden, roots	0.100000	1.000	1.000	40 CFR 180.443(d)
01010501	1AB	Beet, garden, roots_babyfood	0.100000	1.000	1.000	40 CFR 180.443(d)
02000510	2	Beet, garden, tops	0.200000	1.000	1.000	40 CFR 180.443(d)
01010520	1A	Beet, sugar	0.700000	1.000	1.000	40 CFR 180.443(b)
01010521	1A	Beet, sugar_babyfood	0.700000	1.000	1.000	40 CFR 180.443(b)
01010530	1A	Beet, sugar, molasses	1.000000	1.000	1.000	40 CFR 180.443(b)
01010531	1A	Beet, sugar, molasses_babyfood	1.000000	1.000	1.000	40 CFR 180.443(b)
13010550	13A	Blackberry	2.000000	1.000	1.000	40 CFR 180.443(a)
13010560	13A	Blackberry, juice	2.000000	1.000	1.000	40 CFR 180.443(a)
13010561	13A	Blackberry, juice_babyfood	2.000000	1.000	1.000	40 CFR 180.443(a)
13010580	13A	Boysenberry	2.000000	1.000	1.000	40 CFR 180.443(a)
05010610	5A	Broccoli	1.000000	1.000	1.000	40 CFR 180.443(d)
05010611	5A	Broccoli_babyfood	1.000000	1.000	1.000	40 CFR 180.443(d)
05010620	5A	Broccoli, Chinese	1.000000	1.000	1.000	40 CFR 180.443(d)
05020630	5B	Broccoli raab	1.000000	1.000	1.000	40 CFR 180.443(d)
05010640	5A	Brussels sprouts	1.000000	1.000	1.000	40 CFR 180.443(d)
15000650	15	Buckwheat	0.030000	1.000	1.000	40 CFR 180.443(d)
15000660	15	Buckwheat, flour	0.030000	1.000	1.000	40 CFR 180.443(d)
01010670	1AB	Burdock	0.100000	1.000	1.000	40 CFR 180.443(d)
05010690	5A	Cabbage	1.000000	1.000	1.000	40 CFR 180.443(d)
05020700	5B	Cabbage, Chinese, bok choy	1.000000	1.000	1.000	40 CFR 180.443(d)
05010710	5A	Cabbage, Chinese, napa	1.000000	1.000	1.000	40 CFR 180.443(d)
05010720	5A	Cabbage, Chinese, mustard	1.000000	1.000	1.000	40 CFR 180.443(d)
09010750	9A	Cantaloupe	0.200000	1.000	1.000	40 CFR 180.443(a)
04020760	4B	Cardoon	1.000000	1.000	1.000	40 CFR 180.443(d)
01010780	1AB	Carrot	0.100000	1.000	1.000	40 CFR 180.443(d)
01010781	1AB	Carrot_babyfood	0.100000	1.000	1.000	40 CFR 180.443(d)
01010790	1AB	Carrot, juice	0.100000	1.000	1.000	40 CFR 180.443(d)
09010800	9A	Casaba	0.200000	1.000	1.000	40 CFR 180.443(a)
01030820	1CD	Cassava	0.100000	1.000	1.000	40 CFR 180.443(d)
01030821	1CD	Cassava_babyfood	0.100000	1.000	1.000	40 CFR 180.443(d)
05010830	5A	Cauliflower	1.000000	1.000	1.000	40 CFR 180.443(d)
01010840	1AB	Celeriac	0.100000	1.000	1.000	40 CFR 180.443(d)
04020850	4B	Celery	1.000000	1.000	1.000	40 CFR 180.443(d)
04020851	4B	Celery_babyfood	1.000000	1.000	1.000	40 CFR 180.443(d)
04020860	4B	Celery, juice	1.000000	1.000	1.000	40 CFR 180.443(d)
04020870	4B	Celtuce	1.000000	1.000	1.000	40 CFR 180.443(d)
09020880	9B	Chayote, fruit	0.200000	1.000	1.000	40 CFR 180.443(a)
12000900	12	Cherry	5.000000	1.000	1.000	40 CFR 180.443(a)
12000901	12	Cherry_babyfood	5.000000	1.000	1.000	40 CFR 180.443(a)
12000910	12	Cherry, juice	5.000000	1.500	1.000	40 CFR 180.443(a)
12000911	12	Cherry, juice_babyfood	5.000000	1.500	1.000	40 CFR 180.443(a)
40000930	P	Chicken, meat	0.020000	1.000	1.000	40 CFR 180.443(a)
40000931	P	Chicken, meat_babyfood	0.020000	1.000	1.000	40 CFR 180.443(a)
40000940	P	Chicken, liver	0.020000	1.000	1.000	40 CFR 180.443(a)
40000950	P	Chicken, meat byproducts	0.020000	1.000	1.000	40 CFR 180.443(a)
40000951	P	Chicken, meat byproducts_babyfoo	0.020000	1.000	1.000	40 CFR 180.443(a)
40000960	P	Chicken, fat	0.020000	1.000	1.000	40 CFR 180.443(a)
40000961	P	Chicken, fat_babyfood	0.020000	1.000	1.000	40 CFR 180.443(a)
40000970	P	Chicken, skin	0.020000	1.000	1.000	40 CFR 180.443(a)
40000971	P	Chicken, skin_babyfood	0.020000	1.000	1.000	40 CFR 180.443(a)
06030980	6C	Chickpea, seed	1.000000	1.000	1.000	40 CFR 180.443(d)

06030981	6C	Chickpea, seed_babyfood	1.000000	1.000	1.000	40 CFR 180.443(d)
06030990	6C	Chickpea, flour	1.000000	1.000	1.000	40 CFR 180.443(d)
01011000	1AB	Chicory, roots	0.100000	1.000	1.000	40 CFR 180.443(d)
02001010	2	Chicory, tops	0.200000	1.000	1.000	40 CFR 180.443(d)
09021020	9B	Chinese waxgourd	0.200000	1.000	1.000	40 CFR 180.443(a)
04011040	4A	Chrysanthemum, garland	1.000000	1.000	1.000	40 CFR 180.443(d)
05021170	5B	Collards	1.000000	1.000	1.000	40 CFR 180.443(d)
15001200	15	Corn, field, flour	0.030000	1.000	1.000	40 CFR 180.443(d)
15001201	15	Corn, field, flour_babyfood	0.030000	1.000	1.000	40 CFR 180.443(d)
15001210	15	Corn, field, meal	0.030000	1.000	1.000	40 CFR 180.443(d)
15001211	15	Corn, field, meal_babyfood	0.030000	1.000	1.000	40 CFR 180.443(d)
15001220	15	Corn, field, bran	0.030000	1.000	1.000	40 CFR 180.443(d)
15001230	15	Corn, field, starch	0.030000	1.000	1.000	40 CFR 180.443(d)
15001231	15	Corn, field, starch_babyfood	0.030000	1.000	1.000	40 CFR 180.443(d)
15001240	15	Corn, field, syrup	0.030000	1.500	1.000	40 CFR 180.443(d)
15001241	15	Corn, field, syrup_babyfood	0.030000	1.500	1.000	40 CFR 180.443(d)
15001250	15	Corn, field, oil	0.030000	1.000	1.000	40 CFR 180.443(d)
15001251	15	Corn, field, oil_babyfood	0.030000	1.000	1.000	40 CFR 180.443(d)
15001260	15	Corn, pop	0.030000	1.000	1.000	40 CFR 180.443(d)
15001270	15	Corn, sweet	0.030000	1.000	1.000	40 CFR 180.443(d)
15001271	15	Corn, sweet_babyfood	0.030000	1.000	1.000	40 CFR 180.443(d)
95001280	O	Cottonseed, oil	0.020000	1.000	1.000	40 CFR 180.443(a)
95001281	O	Cottonseed, oil_babyfood	0.020000	1.000	1.000	40 CFR 180.443(a)
04011330	4A	Cress, garden	1.000000	1.000	1.000	40 CFR 180.443(d)
04011340	4A	Cress, upland	1.000000	1.000	1.000	40 CFR 180.443(d)
09021350	9B	Cucumber	0.200000	1.000	1.000	40 CFR 180.443(a)
13021360	13B	Currant	3.000000	1.000	1.000	40 CFR 180.443(a)
13021370	13B	Currant, dried	3.000000	1.000	1.000	40 CFR 180.443(a)
04011380	4A	Dandelion, leaves	1.000000	1.000	1.000	40 CFR 180.443(d)
01031390	1CD	Dasheen, corm	0.100000	1.000	1.000	40 CFR 180.443(d)
02001400	2	Dasheen, leaves	0.200000	1.000	1.000	40 CFR 180.443(d)
13011420	13A	Dewberry	2.000000	1.000	1.000	40 CFR 180.443(a)
70001450	P	Egg, whole	0.020000	1.000	1.000	40 CFR 180.443(a)
70001451	P	Egg, whole_babyfood	0.020000	1.000	1.000	40 CFR 180.443(a)
70001460	P	Egg, white	0.020000	1.000	1.000	40 CFR 180.443(a)
70001461	P	Egg, white (solids)_babyfood	0.020000	1.000	1.000	40 CFR 180.443(a)
70001470	P	Egg, yolk	0.020000	1.000	1.000	40 CFR 180.443(a)
70001471	P	Egg, yolk_babyfood	0.020000	1.000	1.000	40 CFR 180.443(a)
08001480	8	Eggplant	1.000000	1.000	1.000	40 CFR 180.443(d)
04011500	4A	Endive	1.000000	1.000	1.000	40 CFR 180.443(d)
04021520	4B	Fennel, Florence	1.000000	1.000	1.000	40 CFR 180.443(d)
01031660	1CD	Ginger	0.100000	1.000	1.000	40 CFR 180.443(d)
01031661	1CD	Ginger_babyfood	0.100000	1.000	1.000	40 CFR 180.443(d)
01031670	1CD	Ginger, dried	0.100000	1.000	1.000	40 CFR 180.443(d)
01011680	1AB	Ginseng, dried	0.100000	1.000	1.000	40 CFR 180.443(d)
23001690	M	Goat, meat	0.100000	1.000	1.000	40 CFR 180.443(a)
23001700	M	Goat, meat byproducts	0.200000	1.000	1.000	40 CFR 180.443(a)
23001710	M	Goat, fat	0.050000	1.000	1.000	40 CFR 180.443(a)
23001720	M	Goat, kidney	0.200000	1.000	1.000	40 CFR 180.443(a)
23001730	M	Goat, liver	1.000000	1.000	1.000	40 CFR 180.443(a)
13021740	13B	Gooseberry	2.000000	1.000	1.000	40 CFR 180.443(a)
95001750	O	Grape	1.000000	1.000	1.000	40 CFR 180.443(a)
95001760	O	Grape, juice	1.000000	1.000	1.000	40 CFR 180.443(a)
95001761	O	Grape, juice_babyfood	1.000000	1.000	1.000	40 CFR 180.443(a)
95001770	O	Grape, leaves	1.000000	1.000	1.000	40 CFR 180.443(a)
95001780	O	Grape, raisin	10.000000	1.000	1.000	40 CFR 180.443(a)
95001790	O	Grape, wine and sherry	1.000000	1.000	1.000	40 CFR 180.443(a)
06031820	6C	Guar, seed	1.000000	1.000	1.000	40 CFR 180.443(d)
06031821	6C	Guar, seed_babyfood	1.000000	1.000	1.000	40 CFR 180.443(d)
09011870	9A	Honeydew melon	0.200000	1.000	1.000	40 CFR 180.443(a)
95001880	O	Hop	10.000000	1.000	1.000	New
24001890	M	Horse, meat	0.100000	1.000	1.000	40 CFR 180.443(a)
01011900	1AB	Horseradish	0.100000	1.000	1.000	40 CFR 180.443(d)
05021940	5B	Kale	1.000000	1.000	1.000	40 CFR 180.443(d)
05011960	5A	Kohlrabi	1.000000	1.000	1.000	40 CFR 180.443(d)

06032030	6C	Lentil, seed	1.000000	1.000	1.000	40 CFR 180.443(d)
04012040	4A	Lettuce, head	1.000000	1.000	1.000	40 CFR 180.443(d)
04012050	4A	Lettuce, leaf	1.000000	1.000	1.000	40 CFR 180.443(d)
13012080	13A	Loganberry	2.000000	1.000	1.000	40 CFR 180.443(a)
27002220	D	Milk, fat	0.200000	1.000	1.000	40 CFR 180.443(a)
27002221	D	Milk, fat _ baby food/infant for	0.200000	1.000	1.000	40 CFR 180.443(a)
27012230	D	Milk, nonfat solids	0.200000	1.000	1.000	40 CFR 180.443(a)
27012231	D	Milk, nonfat solids_baby food/in	0.200000	1.000	1.000	40 CFR 180.443(a)
27022240	D	Milk, water	0.200000	1.000	1.000	40 CFR 180.443(a)
27022241	D	Milk, water_babyfood/infant form	0.200000	1.000	1.000	40 CFR 180.443(a)
27032251	D	Milk, sugar (lactose)_baby food/	0.200000	1.000	1.000	40 CFR 180.443(a)
15002260	15	Millet, grain	0.030000	1.000	1.000	40 CFR 180.443(d)
05022290	5B	Mustard greens	1.000000	1.000	1.000	40 CFR 180.443(d)
12002300	12	Nectarine	2.000000	1.000	1.000	40 CFR 180.443(a)
15002310	15	Oat, bran	0.030000	1.000	1.000	40 CFR 180.443(d)
15002320	15	Oat, flour	0.030000	1.000	1.000	40 CFR 180.443(d)
15002321	15	Oat, flour_babyfood	0.030000	1.000	1.000	40 CFR 180.443(d)
15002330	15	Oat, groats/rolled oats	0.030000	1.000	1.000	40 CFR 180.443(d)
15002331	15	Oat, groats/rolled oats_babyfood	0.030000	1.000	1.000	40 CFR 180.443(d)
08002340	8	Okra	1.000000	1.000	1.000	40 CFR 180.443(d)
04012480	4A	Parsley, leaves	1.000000	1.000	1.000	40 CFR 180.443(d)
01012500	1AB	Parsley, turnip rooted	0.100000	1.000	1.000	40 CFR 180.443(d)
01012510	1AB	Parsnip	0.100000	1.000	1.000	40 CFR 180.443(d)
01012511	1AB	Parsnip_babyfood	0.100000	1.000	1.000	40 CFR 180.443(d)
06022550	6B	Pea, succulent	1.000000	1.000	1.000	40 CFR 180.443(d)
06022551	6B	Pea, succulent_babyfood	1.000000	1.000	1.000	40 CFR 180.443(d)
06032560	6C	Pea, dry	1.000000	1.000	1.000	40 CFR 180.443(d)
06032561	6C	Pea, dry_babyfood	1.000000	1.000	1.000	40 CFR 180.443(d)
06012570	6A	Pea, edible podded, succulent	1.000000	1.000	1.000	40 CFR 180.443(d)
06032580	6C	Pea, pigeon, seed	1.000000	1.000	1.000	40 CFR 180.443(d)
06022590	6B	Pea, pigeon, succulent	1.000000	1.000	1.000	40 CFR 180.443(d)
12002600	12	Peach	2.000000	1.000	1.000	40 CFR 180.443(a)
12002601	12	Peach_babyfood	2.000000	1.000	1.000	40 CFR 180.443(a)
12002610	12	Peach, dried	2.000000	7.000	1.000	40 CFR 180.443(a)
12002611	12	Peach, dried_babyfood	2.000000	7.000	1.000	40 CFR 180.443(a)
12002620	12	Peach, juice	2.000000	1.000	1.000	40 CFR 180.443(a)
12002621	12	Peach, juice_babyfood	2.000000	1.000	1.000	40 CFR 180.443(a)
08002700	8	Pepper, bell	1.000000	1.000	1.000	40 CFR 180.443(d)
08002701	8	Pepper, bell_babyfood	1.000000	1.000	1.000	40 CFR 180.443(d)
08002710	8	Pepper, bell, dried	1.000000	1.000	1.000	40 CFR 180.443(d)
08002711	8	Pepper, bell, dried_babyfood	1.000000	1.000	1.000	40 CFR 180.443(d)
08002720	8	Pepper, nonbell	1.000000	1.000	1.000	40 CFR 180.443(d)
08002721	8	Pepper, nonbell_babyfood	1.000000	1.000	1.000	40 CFR 180.443(d)
08002730	8	Pepper, nonbell, dried	1.000000	1.000	1.000	40 CFR 180.443(d)
95002750	O	Peppermint	3.000000	1.000	1.000	40 CFR 180.443(a)
95002760	O	Peppermint, oil	3.000000	1.000	1.000	40 CFR 180.443(a)
95002830	O	Plantain	4.000000	1.000	1.000	40 CFR 180.443(a)
95002840	O	Plantain, dried	4.000000	3.900	1.000	40 CFR 180.443(a)
12002850	12	Plum	2.000000	1.000	1.000	40 CFR 180.443(a)
12002851	12	Plum_babyfood	2.000000	1.000	1.000	40 CFR 180.443(a)
12002860	12	Plum, prune, fresh	2.000000	1.000	1.000	40 CFR 180.443(a)
12002861	12	Plum, prune, fresh_babyfood	2.000000	1.000	1.000	40 CFR 180.443(a)
12002870	12	Plum, prune, dried	8.000000	1.000	1.000	40 CFR 180.443(a)
12002871	12	Plum, prune, dried_babyfood	8.000000	1.000	1.000	40 CFR 180.443(a)
12002880	12	Plum, prune, juice	8.000000	1.000	1.000	40 CFR 180.443(a)
12002881	12	Plum, prune, juice_babyfood	8.000000	1.000	1.000	40 CFR 180.443(a)
25002900	M	Pork, meat	0.100000	1.000	1.000	40 CFR 180.443(a)
25002901	M	Pork, meat_babyfood	0.100000	1.000	1.000	40 CFR 180.443(a)
25002910	M	Pork, skin	0.050000	1.000	1.000	40 CFR 180.443(a)
25002920	M	Pork, meat byproducts	0.200000	1.000	1.000	40 CFR 180.443(a)
25002921	M	Pork, meat byproducts_babyfood	0.200000	1.000	1.000	40 CFR 180.443(a)
25002930	M	Pork, fat	0.050000	1.000	1.000	40 CFR 180.443(a)
25002931	M	Pork, fat_babyfood	0.050000	1.000	1.000	40 CFR 180.443(a)
25002940	M	Pork, kidney	0.200000	1.000	1.000	40 CFR 180.443(a)
25002950	M	Pork, liver	1.000000	1.000	1.000	40 CFR 180.443(a)

01032960	1C	Potato, chips	0.100000	1.000	1.000	40 CFR 180.443(d)
01032970	1C	Potato, dry (granules/ flakes)	0.100000	6.500	1.000	40 CFR 180.443(d)
01032971	1C	Potato, dry (granules/ flakes)_b	0.100000	6.500	1.000	40 CFR 180.443(d)
01032980	1C	Potato, flour	0.100000	1.000	1.000	40 CFR 180.443(d)
01032981	1C	Potato, flour_babyfood	0.100000	1.000	1.000	40 CFR 180.443(d)
01032990	1C	Potato, tuber, w/peel	0.100000	1.000	1.000	40 CFR 180.443(d)
01032991	1C	Potato, tuber, w/peel_babyfood	0.100000	1.000	1.000	40 CFR 180.443(d)
01033000	1C	Potato, tuber, w/o peel	0.100000	1.000	1.000	40 CFR 180.443(d)
01033001	1C	Potato, tuber, w/o peel_babyfood	0.100000	1.000	1.000	40 CFR 180.443(d)
60003010	P	Poultry, other, meat	0.020000	1.000	1.000	40 CFR 180.443(a)
60003020	P	Poultry, other, liver	0.020000	1.000	1.000	40 CFR 180.443(a)
60003030	P	Poultry, other, meat byproducts	0.020000	1.000	1.000	40 CFR 180.443(a)
60003040	P	Poultry, other, fat	0.020000	1.000	1.000	40 CFR 180.443(a)
60003050	P	Poultry, other, skin	0.020000	1.000	1.000	40 CFR 180.443(a)
09023080	9B	Pumpkin	0.200000	1.000	1.000	40 CFR 180.443(a)
09023090	9B	Pumpkin, seed	0.200000	1.000	1.000	40 CFR 180.443(a)
04013130	4A	Radicchio	1.000000	1.000	1.000	40 CFR 180.443(d)
01013140	1AB	Radish, roots	0.100000	1.000	1.000	40 CFR 180.443(d)
02003150	2	Radish, tops	0.200000	1.000	1.000	40 CFR 180.443(d)
01013160	1AB	Radish, Oriental, roots	0.100000	1.000	1.000	40 CFR 180.443(d)
02003170	2	Radish, Oriental, tops	0.200000	1.000	1.000	40 CFR 180.443(d)
05023180	5B	Rape greens	1.000000	1.000	1.000	40 CFR 180.443(d)
13013200	13A	Raspberry	2.000000	1.000	1.000	40 CFR 180.443(a)
13013201	13A	Raspberry_babyfood	2.000000	1.000	1.000	40 CFR 180.443(a)
13013210	13A	Raspberry, juice	2.000000	1.000	1.000	40 CFR 180.443(a)
13013211	13A	Raspberry, juice_babyfood	2.000000	1.000	1.000	40 CFR 180.443(a)
04023220	4B	Rhubarb	1.000000	1.000	1.000	40 CFR 180.443(d)
15003230	15	Rice, white	0.030000	1.000	1.000	40 CFR 180.443(d)
15003231	15	Rice, white_babyfood	0.030000	1.000	1.000	40 CFR 180.443(d)
15003240	15	Rice, brown	0.030000	1.000	1.000	40 CFR 180.443(d)
15003241	15	Rice, brown_babyfood	0.030000	1.000	1.000	40 CFR 180.443(d)
15003250	15	Rice, flour	0.030000	1.000	1.000	40 CFR 180.443(d)
15003251	15	Rice, flour_babyfood	0.030000	1.000	1.000	40 CFR 180.443(d)
15003260	15	Rice, bran	0.030000	1.000	1.000	40 CFR 180.443(d)
15003261	15	Rice, bran_babyfood	0.030000	1.000	1.000	40 CFR 180.443(d)
01013270	1AB	Rutabaga	0.100000	1.000	1.000	40 CFR 180.443(d)
15003280	15	Rye, grain	0.030000	1.000	1.000	40 CFR 180.443(d)
15003290	15	Rye, flour	0.030000	1.000	1.000	40 CFR 180.443(d)
01013310	1AB	Salsify, roots	0.100000	1.000	1.000	40 CFR 180.443(d)
02003320	2	Salsify, tops	0.200000	1.000	1.000	40 CFR 180.443(d)
26003390	M	Sheep, meat	0.100000	1.000	1.000	40 CFR 180.443(a)
26003391	M	Sheep, meat_babyfood	0.100000	1.000	1.000	40 CFR 180.443(a)
26003400	M	Sheep, meat byproducts	0.200000	1.000	1.000	40 CFR 180.443(a)
26003410	M	Sheep, fat	0.050000	1.000	1.000	40 CFR 180.443(a)
26003411	M	Sheep, fat_babyfood	0.050000	1.000	1.000	40 CFR 180.443(a)
26003420	M	Sheep, kidney	0.200000	1.000	1.000	40 CFR 180.443(a)
26003430	M	Sheep, liver	1.000000	1.000	1.000	40 CFR 180.443(a)
15003440	15	Sorghum, grain	0.030000	1.000	1.000	40 CFR 180.443(d)
15003450	15	Sorghum, syrup	0.030000	1.000	1.000	40 CFR 180.443(d)
06003470	6	Soybean, seed	0.050000	1.000	1.000	40 CFR 180.443(d)
06003480	6	Soybean, flour	0.050000	1.000	1.000	40 CFR 180.443(d)
06003481	6	Soybean, flour_babyfood	0.050000	1.000	1.000	40 CFR 180.443(d)
06003490	6	Soybean, soy milk	0.050000	1.000	1.000	40 CFR 180.443(d)
06003491	6	Soybean, soy milk_babyfood or in	0.050000	1.000	1.000	40 CFR 180.443(d)
06003500	6	Soybean, oil	0.050000	1.000	1.000	40 CFR 180.443(d)
06003501	6	Soybean, oil_babyfood	0.050000	1.000	1.000	40 CFR 180.443(d)
95003520	O	Spearmint	3.000000	1.000	1.000	40 CFR 180.443(a)
95003530	O	Spearmint, oil	3.000000	1.000	1.000	40 CFR 180.443(a)
04013550	4A	Spinach	1.000000	1.000	1.000	40 CFR 180.443(d)
04013551	4A	Spinach_babyfood	1.000000	1.000	1.000	40 CFR 180.443(d)
09023560	9B	Squash, summer	0.200000	1.000	1.000	40 CFR 180.443(a)
09023561	9B	Squash, summer_babyfood	0.200000	1.000	1.000	40 CFR 180.443(a)
09023570	9B	Squash, winter	0.200000	1.000	1.000	40 CFR 180.443(a)
09023571	9B	Squash, winter_babyfood	0.200000	1.000	1.000	40 CFR 180.443(a)
95003590	O	Strawberry	0.500000	1.000	1.000	40 CFR 180.443(a)

95003591	O	Strawberry_babyfood	0.500000	1.000	1.000	40 CFR 180.443(a)
95003600	O	Strawberry, juice	0.500000	1.000	1.000	40 CFR 180.443(a)
95003601	O	Strawberry, juice_babyfood	0.500000	1.000	1.000	40 CFR 180.443(a)
01033660	1CD	Sweet potato	0.100000	1.000	1.000	40 CFR 180.443(d)
01033661	1CD	Sweet potato_babyfood	0.100000	1.000	1.000	40 CFR 180.443(d)
04023670	4B	Swiss chard	1.000000	1.000	1.000	40 CFR 180.443(d)
01033710	1CD	Tanier, corm	0.100000	1.000	1.000	40 CFR 180.443(d)
08003740	8	Tomatillo	1.000000	1.000	1.000	40 CFR 180.443(d)
08003750	8	Tomato	0.300000	1.000	1.000	40 CFR 180.443(d)
08003751	8	Tomato_babyfood	0.300000	1.000	1.000	40 CFR 180.443(d)
08003760	8	Tomato, paste	1.000000	1.000	1.000	40 CFR 180.443(d)
08003761	8	Tomato, paste_babyfood	1.000000	1.000	1.000	40 CFR 180.443(d)
08003770	8	Tomato, puree	0.500000	1.000	1.000	40 CFR 180.443(d)
08003771	8	Tomato, puree_babyfood	0.500000	1.000	1.000	40 CFR 180.443(d)
08003780	8	Tomato, dried	0.300000	14.300	1.000	40 CFR 180.443(d)
08003781	8	Tomato, dried_babyfood	0.300000	14.300	1.000	40 CFR 180.443(d)
08003790	8	Tomato, juice	0.300000	1.500	1.000	40 CFR 180.443(d)
15003810	15	Triticale, flour	0.030000	1.000	1.000	40 CFR 180.443(d)
15003811	15	Triticale, flour_babyfood	0.030000	1.000	1.000	40 CFR 180.443(d)
50003820	P	Turkey, meat	0.020000	1.000	1.000	40 CFR 180.443(a)
50003821	P	Turkey, meat_babyfood	0.020000	1.000	1.000	40 CFR 180.443(a)
50003830	P	Turkey, liver	0.020000	1.000	1.000	40 CFR 180.443(a)
50003831	P	Turkey, liver_babyfood	0.020000	1.000	1.000	40 CFR 180.443(a)
50003840	P	Turkey, meat byproducts	0.020000	1.000	1.000	40 CFR 180.443(a)
50003841	P	Turkey, meat byproducts_babyfood	0.020000	1.000	1.000	40 CFR 180.443(a)
50003850	P	Turkey, fat	0.020000	1.000	1.000	40 CFR 180.443(a)
50003851	P	Turkey, fat_babyfood	0.020000	1.000	1.000	40 CFR 180.443(a)
50003860	P	Turkey, skin	0.020000	1.000	1.000	40 CFR 180.443(a)
50003861	P	Turkey, skin_babyfood	0.020000	1.000	1.000	40 CFR 180.443(a)
01033870	1CD	Turmeric	0.100000	1.000	1.000	40 CFR 180.443(d)
05023890	5B	Turnip, greens	1.000000	1.000	1.000	40 CFR 180.443(d)
01013880	1AB	Turnip, roots	0.100000	1.000	1.000	40 CFR 180.443(d)
86010000	O	Water, direct, all sources	0.333000	1.000	1.000	
86020000	O	Water, indirect, all sources	0.333000	1.000	1.000	
09013990	9A	Watermelon	0.200000	1.000	1.000	40 CFR 180.443(a)
09014000	9A	Watermelon, juice	0.200000	1.000	1.000	40 CFR 180.443(a)
15004010	15	Wheat, grain	0.030000	1.000	1.000	40 CFR 180.443(d)
15004011	15	Wheat, grain_babyfood	0.030000	1.000	1.000	40 CFR 180.443(d)
15004020	15	Wheat, flour	0.030000	1.000	1.000	40 CFR 180.443(d)
15004021	15	Wheat, flour_babyfood	0.030000	1.000	1.000	40 CFR 180.443(d)
15004030	15	Wheat, germ	0.030000	1.000	1.000	40 CFR 180.443(d)
15004040	15	Wheat, bran	0.030000	1.000	1.000	40 CFR 180.443(d)
15004050	15	Wild rice	0.030000	1.000	1.000	40 CFR 180.443(d)
01034060	1CD	Yam, true	0.100000	1.000	1.000	40 CFR 180.443(d)
01034070	1CD	Yam bean	0.100000	1.000	1.000	40 CFR 180.443(d)

Attachment 2. Acute DEEM-FCID™ Analysis.

U.S. Environmental Protection Agency Ver. 2.02
DEEM_FCID ACUTE Analysis for MYCLOBUTANIL (1994_98 data)
Residue file: 128857a.R98 Adjustment factor #2 NOT used.
Analysis Date: 03_15_2006/13:39:04 Residue file dated: 03_15_2006/13:37:36/8
Daily totals for food and foodform consumption used.
Run Comment: "Tolerance file include hops"

Summary calculations (per capita):

	95th Percentile Exposure	95th Percentile % aRfD	99th Percentile Exposure	99th Percentile % aRfD	99.9th Percentile Exposure	99.9th Percentile % aRfD
Females 13+ (preg/not nursing):	0.025796	4.30	0.038030	6.34	0.038156	6.36
Females 13+ (nursing):	0.029425	4.90	0.037909	6.32	0.042375	7.06
Females 13_19 (not preg or nursing):	0.022338	3.72	0.030471	5.08	0.041519	6.92
Females 20+ (not preg or nursing):	0.025826	4.30	0.037150	6.19	0.059970	9.99
Females 13_49 yrs:	0.025154	4.19	0.037049	6.17	0.055961	9.33

Attachment 3. Residue File for Chronic DEEM-FCID™ Analysis.

Filename: C:\Documents and Settings\jtyler\My Documents\JenWork\Myclobutanil\Home and Garden Uses\128857c.R98
Chemical: Myclobutanil
RfD(Chronic): .025 mg/kg bw/day NOEL(Chronic): 0 mg/kg bw/day
RfD(Acute): .6 mg/kg bw/day NOEL(Acute): 0 mg/kg bw/day
Date created/last modified: 02_15_2006/11:26:19/8 Program ver. 2.03
Comment: Tolerance file to included hops

EPA Code	Crop Grp	Commodity Name	Def Res (ppm)	Adj.Factors #1	#2	Comment	
14000030	14	Almond	0.100000	1.000	0.100	40 CFR 180.443(a)	
14000031	14	Almond_babyfood	0.100000	1.000	0.100	40 CFR 180.443(a)	
14000040	14	Almond, oil	0.100000	1.000	0.100	40 CFR 180.443(a)	
14000041	14	Almond, oil_babyfood	0.100000	1.000	0.100	40 CFR 180.443(a)	
04010050	4A	Amaranth, leafy	1.000000	1.000	1.000	40 CFR 180.443(d)	
11000070	11	Apple, fruit with peel	0.500000	1.000	0.400	40 CFR 180.443(a)	
11000080	11	Apple, peeled fruit	0.500000	1.000	0.400	40 CFR 180.443(a)	
11000081	11	Apple, peeled fruit_babyfood	0.500000	1.000	0.400	40 CFR 180.443(a)	
11000090	11	Apple, dried	0.500000	8.000	0.400	40 CFR 180.443(a)	
11000091	11	Apple, dried_babyfood	0.500000	8.000	0.400	40 CFR 180.443(a)	
11000100	11	Apple, juice	0.017000	1.000	1.000	40 CFR 180.443(a)	_ PDP
11000101	11	Apple, juice_babyfood	0.017000	1.000	1.000	40 CFR 180.443(a)	_ PDP
11000110	11	Apple, sauce	0.500000	1.000	0.400	40 CFR 180.443(a)	
11000111	11	Apple, sauce_babyfood	0.500000	1.000	0.400	40 CFR 180.443(a)	
12000120	12	Apricot	2.000000	1.000	0.250	40 CFR 180.443(a)	
12000121	12	Apricot_babyfood	2.000000	1.000	0.250	40 CFR 180.443(a)	
12000130	12	Apricot, dried	2.000000	6.000	0.250	40 CFR 180.443(a)	
12000140	12	Apricot, juice	2.000000	1.000	0.250	40 CFR 180.443(a)	
12000141	12	Apricot, juice_babyfood	2.000000	1.000	0.250	40 CFR 180.443(a)	
01030150	1CD	Arrowroot, flour	0.100000	1.000	1.000	40 CFR 180.443(d)	
01030151	1CD	Arrowroot, flour_babyfood	0.100000	1.000	1.000	40 CFR 180.443(d)	
95000160	O	Artichoke, globe	1.000000	1.000	0.450	40 CFR 180.443(b)	
01030170	1CD	Artichoke, Jerusalem	0.100000	1.000	1.000	40 CFR 180.443(d)	
04010180	4A	Arugula	1.000000	1.000	1.000	40 CFR 180.443(d)	
95000190	O	Asparagus	0.020000	1.000	0.500	40 CFR 180.443(a)	
09020210	9B	Balsam pear	0.200000	1.000	1.000	40 CFR 180.443(a)	
95000230	O	Banana	0.023000	1.000	1.000	40 CFR 180.443(a)	_ PDP
95000231	O	Banana_babyfood	0.023000	1.000	1.000	40 CFR 180.443(a)	_ PDP
95000240	O	Banana, dried	0.023000	3.900	1.000	40 CFR 180.443(a)	_ PDP
95000241	O	Banana, dried_babyfood	0.023000	3.900	1.000	40 CFR 180.443(a)	_ PDP
15000250	15	Barley, pearled barley	0.030000	1.000	1.000	40 CFR 180.443(d)	
15000251	15	Barley, pearled barley_babyfood	0.030000	1.000	1.000	40 CFR 180.443(d)	
15000260	15	Barley, flour	0.030000	1.000	1.000	40 CFR 180.443(d)	
15000261	15	Barley, flour_babyfood	0.030000	1.000	1.000	40 CFR 180.443(d)	
15000270	15	Barley, bran	0.030000	1.000	1.000	40 CFR 180.443(d)	
06030300	6C	Bean, black, seed	1.000000	1.000	1.000	40 CFR 180.443(d)	
06020310	6B	Bean, broad, succulent	1.000000	1.000	1.000	40 CFR 180.443(d)	
06030320	6C	Bean, broad, seed	1.000000	1.000	1.000	40 CFR 180.443(d)	
06020330	6B	Bean, cowpea, succulent	1.000000	1.000	1.000	40 CFR 180.443(d)	
06030340	6C	Bean, cowpea, seed	1.000000	1.000	1.000	40 CFR 180.443(d)	
06030350	6C	Bean, great northern, seed	1.000000	1.000	1.000	40 CFR 180.443(d)	
06030360	6C	Bean, kidney, seed	1.000000	1.000	1.000	40 CFR 180.443(d)	
06020370	6B	Bean, lima, succulent	1.000000	1.000	1.000	40 CFR 180.443(d)	
06030380	6C	Bean, lima, seed	1.000000	1.000	1.000	40 CFR 180.443(d)	
06030390	6C	Bean, mung, seed	1.000000	1.000	1.000	40 CFR 180.443(d)	
06030400	6C	Bean, navy, seed	1.000000	1.000	1.000	40 CFR 180.443(d)	
06030410	6C	Bean, pink, seed	1.000000	1.000	1.000	40 CFR 180.443(d)	
06030420	6C	Bean, pinto, seed	1.000000	1.000	1.000	40 CFR 180.443(d)	
06010430	6A	Bean snap, succulent	1.000000	1.000	1.000	40 CFR 180.443(a)	

06010431	6A	Bean, snap, succulent_babyfood	1.000000	1.000	1.000	40 CFR 180.443(a)
21000440	M	Beef, meat	0.100000	1.000	1.000	40 CFR 180.443(a)
21000441	M	Beef, meat_babyfood	0.100000	1.000	1.000	40 CFR 180.443(a)
21000450	M	Beef, meat, dried	0.100000	1.920	1.000	40 CFR 180.443(a)
21000460	M	Beef, meat byproducts	0.200000	1.000	1.000	40 CFR 180.443(a)
21000461	M	Beef, meat byproducts_babyfood	0.200000	1.000	1.000	40 CFR 180.443(a)
21000470	M	Beef, fat	0.050000	1.000	1.000	40 CFR 180.443(a)
21000471	M	Beef,fat_babyfood	0.050000	1.000	1.000	40 CFR 180.443(a)
21000480	M	Beef, kidney	0.200000	1.000	1.000	40 CFR 180.443(a)
21000490	M	Beef, liver	1.000000	1.000	1.000	40 CFR 180.443(a)
21000491	M	Beef, liver_babyfood	1.000000	1.000	1.000	40 CFR 180.443(a)
01010500	1AB	Beet, garden, roots	0.100000	1.000	1.000	40 CFR 180.443(d)
01010501	1AB	Beet, garden, roots_babyfood	0.100000	1.000	1.000	40 CFR 180.443(d)
02000510	2	Beet, garden, tops	0.200000	1.000	1.000	40 CFR 180.443(d)
01010520	1A	Beet, sugar	0.700000	1.000	0.010	40 CFR 180.443(b)
01010521	1A	Beet, sugar_babyfood	0.700000	1.000	0.010	40 CFR 180.443(b)
01010530	1A	Beet, sugar, molasses	1.000000	1.000	0.010	40 CFR 180.443(b)
01010531	1A	Beet, sugar, molasses_babyfood	1.000000	1.000	0.010	40 CFR 180.443(b)
13010550	13A	Blackberry	2.000000	1.000	0.150	40 CFR 180.443(a)
13010560	13A	Blackberry, juice	2.000000	1.000	0.150	40 CFR 180.443(a)
13010561	13A	Blackberry, juice_babyfood	2.000000	1.000	0.150	40 CFR 180.443(a)
13010580	13A	Boysenberry	2.000000	1.000	1.000	40 CFR 180.443(a)
05010610	5A	Broccoli	1.000000	1.000	1.000	40 CFR 180.443(d)
05010611	5A	Broccoli_babyfood	1.000000	1.000	1.000	40 CFR 180.443(d)
05010620	5A	Broccoli, Chinese	1.000000	1.000	1.000	40 CFR 180.443(d)
05020630	5B	Broccoli raab	1.000000	1.000	1.000	40 CFR 180.443(d)
05010640	5A	Brussels sprouts	1.000000	1.000	1.000	40 CFR 180.443(d)
15000650	15	Buckwheat	0.030000	1.000	1.000	40 CFR 180.443(d)
15000660	15	Buckwheat, flour	0.030000	1.000	1.000	40 CFR 180.443(d)
01010670	1AB	Burdock	0.100000	1.000	1.000	40 CFR 180.443(d)
05010690	5A	Cabbage	1.000000	1.000	1.000	40 CFR 180.443(d)
05020700	5B	Cabbage, Chinese, bok choy	1.000000	1.000	1.000	40 CFR 180.443(d)
05010710	5A	Cabbage, Chinese, napa	1.000000	1.000	1.000	40 CFR 180.443(d)
05010720	5A	Cabbage, Chinese, mustard	1.000000	1.000	1.000	40 CFR 180.443(d)
09010750	9A	Cantaloupe	0.200000	1.000	0.100	40 CFR 180.443(a)
04020760	4B	Cardoon	1.000000	1.000	1.000	40 CFR 180.443(d)
01010780	1AB	Carrot	0.100000	1.000	1.000	40 CFR 180.443(d)
01010781	1AB	Carrot_babyfood	0.100000	1.000	1.000	40 CFR 180.443(d)
01010790	1AB	Carrot, juice	0.100000	1.000	1.000	40 CFR 180.443(d)
09010800	9A	Casaba	0.200000	1.000	1.000	40 CFR 180.443(a)
01030820	1CD	Cassava	0.100000	1.000	1.000	40 CFR 180.443(d)
01030821	1CD	Cassava_babyfood	0.100000	1.000	1.000	40 CFR 180.443(d)
05010830	5A	Cauliflower	1.000000	1.000	1.000	40 CFR 180.443(d)
01010840	1AB	Celeriac	0.100000	1.000	1.000	40 CFR 180.443(d)
04020850	4B	Celery	1.000000	1.000	1.000	40 CFR 180.443(d)
04020851	4B	Celery_babyfood	1.000000	1.000	1.000	40 CFR 180.443(d)
04020860	4B	Celery, juice	1.000000	1.000	1.000	40 CFR 180.443(d)
04020870	4B	Celtuce	1.000000	1.000	1.000	40 CFR 180.443(d)
09020880	9B	Chayote, fruit	0.200000	1.000	1.000	40 CFR 180.443(a)
12000900	12	Cherry	5.000000	1.000	0.350	40 CFR 180.443(a)
12000901	12	Cherry_babyfood	5.000000	1.000	0.350	40 CFR 180.443(a)
12000910	12	Cherry, juice	5.000000	1.500	0.350	40 CFR 180.443(a)
12000911	12	Cherry, juice_babyfood	5.000000	1.500	0.350	40 CFR 180.443(a)
40000930	P	Chicken, meat	0.020000	1.000	1.000	40 CFR 180.443(a)
40000931	P	Chicken, meat_babyfood	0.020000	1.000	1.000	40 CFR 180.443(a)
40000940	P	Chicken, liver	0.020000	1.000	1.000	40 CFR 180.443(a)
40000950	P	Chicken, meat byproducts	0.020000	1.000	1.000	40 CFR 180.443(a)
40000951	P	Chicken, meat byproducts_babyfoo	0.020000	1.000	1.000	40 CFR 180.443(a)
40000960	P	Chicken, fat	0.020000	1.000	1.000	40 CFR 180.443(a)
40000961	P	Chicken, fat_babyfood	0.020000	1.000	1.000	40 CFR 180.443(a)
40000970	P	Chicken, skin	0.020000	1.000	1.000	40 CFR 180.443(a)
40000971	P	Chicken, skin_babyfood	0.020000	1.000	1.000	40 CFR 180.443(a)
06030980	6C	Chickpea, seed	1.000000	1.000	1.000	40 CFR 180.443(d)
06030981	6C	Chickpea, seed_babyfood	1.000000	1.000	1.000	40 CFR 180.443(d)

06030990	6C	Chickpea, flour	1.000000	1.000	1.000	40 CFR 180.443(d)
01011000	1AB	Chicory, roots	0.100000	1.000	1.000	40 CFR 180.443(d)
02001010	2	Chicory, tops	0.200000	1.000	1.000	40 CFR 180.443(d)
09021020	9B	Chinese waxgourd	0.200000	1.000	1.000	40 CFR 180.443(a)
04011040	4A	Chrysanthemum, garland	1.000000	1.000	1.000	40 CFR 180.443(d)
05021170	5B	Collards	1.000000	1.000	1.000	40 CFR 180.443(d)
15001200	15	Corn, field, flour	0.030000	1.000	1.000	40 CFR 180.443(d)
15001201	15	Corn, field, flour_babyfood	0.030000	1.000	1.000	40 CFR 180.443(d)
15001210	15	Corn, field, meal	0.030000	1.000	1.000	40 CFR 180.443(d)
15001211	15	Corn, field, meal_babyfood	0.030000	1.000	1.000	40 CFR 180.443(d)
15001220	15	Corn, field, bran	0.030000	1.000	1.000	40 CFR 180.443(d)
15001230	15	Corn, field, starch	0.030000	1.000	1.000	40 CFR 180.443(d)
15001231	15	Corn, field, starch_babyfood	0.030000	1.000	1.000	40 CFR 180.443(d)
15001240	15	Corn, field, syrup	0.030000	1.500	1.000	40 CFR 180.443(d)
15001241	15	Corn, field, syrup_babyfood	0.030000	1.500	1.000	40 CFR 180.443(d)
15001250	15	Corn, field, oil	0.030000	1.000	1.000	40 CFR 180.443(d)
15001251	15	Corn, field, oil_babyfood	0.030000	1.000	1.000	40 CFR 180.443(d)
15001260	15	Corn, pop	0.030000	1.000	1.000	40 CFR 180.443(d)
15001270	15	Corn, sweet	0.030000	1.000	1.000	40 CFR 180.443(d)
15001271	15	Corn, sweet_babyfood	0.030000	1.000	1.000	40 CFR 180.443(d)
95001280	O	Cottonseed, oil	0.020000	1.000	0.010	40 CFR 180.443(a)
95001281	O	Cottonseed, oil_babyfood	0.020000	1.000	0.010	40 CFR 180.443(a)
04011330	4A	Cress, garden	1.000000	1.000	1.000	40 CFR 180.443(d)
04011340	4A	Cress, upland	1.000000	1.000	1.000	40 CFR 180.443(d)
09021350	9B	Cucumber	0.200000	1.000	0.010	40 CFR 180.443(a)
13021360	13B	Currant	3.000000	1.000	1.000	40 CFR 180.443(a)
13021370	13B	Currant, dried	3.000000	1.000	1.000	40 CFR 180.443(a)
04011380	4A	Dandelion, leaves	1.000000	1.000	1.000	40 CFR 180.443(d)
01031390	1CD	Dasheen, corm	0.100000	1.000	1.000	40 CFR 180.443(d)
02001400	2	Dasheen, leaves	0.200000	1.000	1.000	40 CFR 180.443(d)
13011420	13A	Dewberry	2.000000	1.000	1.000	40 CFR 180.443(a)
70001450	P	Egg, whole	0.020000	1.000	1.000	40 CFR 180.443(a)
70001451	P	Egg, whole_babyfood	0.020000	1.000	1.000	40 CFR 180.443(a)
70001460	P	Egg, white	0.020000	1.000	1.000	40 CFR 180.443(a)
70001461	P	Egg, white (solids)_babyfood	0.020000	1.000	1.000	40 CFR 180.443(a)
70001470	P	Egg, yolk	0.020000	1.000	1.000	40 CFR 180.443(a)
70001471	P	Egg, yolk_babyfood	0.020000	1.000	1.000	40 CFR 180.443(a)
08001480	8	Eggplant	1.000000	1.000	1.000	40 CFR 180.443(d)
04011500	4A	Endive	1.000000	1.000	1.000	40 CFR 180.443(d)
04021520	4B	Fennel, Florence	1.000000	1.000	1.000	40 CFR 180.443(d)
01031660	1CD	Ginger	0.100000	1.000	1.000	40 CFR 180.443(d)
01031661	1CD	Ginger_babyfood	0.100000	1.000	1.000	40 CFR 180.443(d)
01031670	1CD	Ginger, dried	0.100000	1.000	1.000	40 CFR 180.443(d)
01011680	1AB	Ginseng, dried	0.100000	1.000	1.000	40 CFR 180.443(d)
23001690	M	Goat, meat	0.100000	1.000	1.000	40 CFR 180.443(a)
23001700	M	Goat, meat byproducts	0.200000	1.000	1.000	40 CFR 180.443(a)
23001710	M	Goat, fat	0.050000	1.000	1.000	40 CFR 180.443(a)
23001720	M	Goat, kidney	0.200000	1.000	1.000	40 CFR 180.443(a)
23001730	M	Goat, liver	1.000000	1.000	1.000	40 CFR 180.443(a)
13021740	13B	Gooseberry	2.000000	1.000	1.000	40 CFR 180.443(a)
95001750	O	Grape	1.000000	1.000	0.250	40 CFR 180.443(a)
95001760	O	Grape, juice	1.000000	1.000	0.250	40 CFR 180.443(a)
95001761	O	Grape, juice_babyfood	1.000000	1.000	0.250	40 CFR 180.443(a)
95001770	O	Grape, leaves	1.000000	1.000	0.250	40 CFR 180.443(a)
95001780	O	Grape, raisin	10.000000	1.000	0.250	40 CFR 180.443(a)
95001790	O	Grape, wine and sherry	1.000000	1.000	0.250	40 CFR 180.443(a)
06031820	6C	Guar, seed	1.000000	1.000	1.000	40 CFR 180.443(d)
06031821	6C	Guar, seed_babyfood	1.000000	1.000	1.000	40 CFR 180.443(d)
09011870	9A	Honeydew melon	0.200000	1.000	1.000	40 CFR 180.443(a)
95001880	O	Hop	10.000000	1.000	1.000	New
24001890	M	Horse, meat	0.100000	1.000	1.000	40 CFR 180.443(a)
01011900	1AB	Horseradish	0.100000	1.000	1.000	40 CFR 180.443(d)
05021940	5B	Kale	1.000000	1.000	1.000	40 CFR 180.443(d)

05011960	5A	Kohlrabi	1.000000	1.000	1.000	40 CFR 180.443(d)	
06032030	6C	Lentil, seed	1.000000	1.000	1.000	40 CFR 180.443(d)	
04012040	4A	Lettuce, head	1.000000	1.000	1.000	40 CFR 180.443(d)	
04012050	4A	Lettuce, leaf	1.000000	1.000	1.000	40 CFR 180.443(d)	
13012080	13A	Loganberry	2.000000	1.000	1.000	40 CFR 180.443(a)	
27002220	D	Milk, fat	0.006000	1.000	1.000	40 CFR 180.443(a)	_ PDP
27002221	D	Milk, fat _ baby food/infant for	0.006000	1.000	1.000	40 CFR 180.443(a)	_ PDP
27012230	D	Milk, nonfat solids	0.006000	1.000	1.000	40 CFR 180.443(a)	_ PDP
27012231	D	Milk, nonfat solids_baby food/in	0.006000	1.000	1.000	40 CFR 180.443(a)	_ PDP
27022240	D	Milk, water	0.006000	1.000	1.000	40 CFR 180.443(a)	_ PDP
27022241	D	Milk, water_babyfood/infant form	0.006000	1.000	1.000	40 CFR 180.443(a)	_ PDP
27032251	D	Milk, sugar (lactose)_baby food/	0.006000	1.000	1.000	40 CFR 180.443(a)	_ PDP
15002260	15	Millet, grain	0.030000	1.000	1.000	40 CFR 180.443(d)	
05022290	5B	Mustard greens	1.000000	1.000	1.000	40 CFR 180.443(d)	
12002300	12	Nectarine	2.000000	1.000	0.150	40 CFR 180.443(a)	
15002310	15	Oat, bran	0.030000	1.000	1.000	40 CFR 180.443(d)	
15002320	15	Oat, flour	0.030000	1.000	1.000	40 CFR 180.443(d)	
15002321	15	Oat, flour_babyfood	0.030000	1.000	1.000	40 CFR 180.443(d)	
15002330	15	Oat, groats/rolled oats	0.030000	1.000	1.000	40 CFR 180.443(d)	
15002331	15	Oat, groats/rolled oats_babyfood	0.030000	1.000	1.000	40 CFR 180.443(d)	
08002340	8	Okra	1.000000	1.000	1.000	40 CFR 180.443(d)	
04012480	4A	Parsley, leaves	1.000000	1.000	1.000	40 CFR 180.443(d)	
01012500	1AB	Parsley, turnip rooted	0.100000	1.000	1.000	40 CFR 180.443(d)	
01012510	1AB	Parsnip	0.100000	1.000	1.000	40 CFR 180.443(d)	
01012511	1AB	Parsnip_babyfood	0.100000	1.000	1.000	40 CFR 180.443(d)	
06022550	6B	Pea, succulent	1.000000	1.000	1.000	40 CFR 180.443(d)	
06022551	6B	Pea, succulent_babyfood	1.000000	1.000	1.000	40 CFR 180.443(d)	
06032560	6C	Pea, dry	1.000000	1.000	1.000	40 CFR 180.443(d)	
06032561	6C	Pea, dry_babyfood	1.000000	1.000	1.000	40 CFR 180.443(d)	
06012570	6A	Pea, edible podded, succulent	1.000000	1.000	1.000	40 CFR 180.443(d)	
06032580	6C	Pea, pigeon, seed	1.000000	1.000	1.000	40 CFR 180.443(d)	
06022590	6B	Pea, pigeon, succulent	1.000000	1.000	1.000	40 CFR 180.443(d)	
12002600	12	Peach	2.000000	1.000	0.100	40 CFR 180.443(a)	
12002601	12	Peach_babyfood	2.000000	1.000	0.100	40 CFR 180.443(a)	
12002610	12	Peach, dried	2.000000	7.000	0.100	40 CFR 180.443(a)	
12002611	12	Peach, dried_babyfood	2.000000	7.000	0.100	40 CFR 180.443(a)	
12002620	12	Peach, juice	2.000000	1.000	0.100	40 CFR 180.443(a)	
12002621	12	Peach, juice_babyfood	2.000000	1.000	0.100	40 CFR 180.443(a)	
08002700	8	Pepper, bell	1.000000	1.000	0.100	40 CFR 180.443(b)	
08002701	8	Pepper, bell_babyfood	1.000000	1.000	0.100	40 CFR 180.443(b)	
08002710	8	Pepper, bell, dried	1.000000	1.000	0.100	40 CFR 180.443(b)	
08002711	8	Pepper, bell, dried_babyfood	1.000000	1.000	0.100	40 CFR 180.443(b)	
08002720	8	Pepper, nonbell	1.000000	1.000	0.100	40 CFR 180.443(b)	
08002721	8	Pepper, nonbell_babyfood	1.000000	1.000	0.100	40 CFR 180.443(b)	
08002730	8	Pepper, nonbell, dried	1.000000	1.000	0.100	40 CFR 180.443(b)	
95002750	O	Peppermint	3.000000	1.000	1.000	40 CFR 180.443(a)	
95002760	O	Peppermint, oil	3.000000	1.000	1.000	40 CFR 180.443(a)	
95002830	O	Plantain	4.000000	1.000	1.000	40 CFR 180.443(a)	
95002840	O	Plantain, dried	4.000000	3.900	1.000	40 CFR 180.443(a)	
12002850	12	Plum	2.000000	1.000	0.100	40 CFR 180.443(a)	
12002851	12	Plum_babyfood	2.000000	1.000	0.100	40 CFR 180.443(a)	
12002860	12	Plum, prune, fresh	2.000000	1.000	0.100	40 CFR 180.443(a)	
12002861	12	Plum, prune, fresh_babyfood	2.000000	1.000	0.100	40 CFR 180.443(a)	
12002870	12	Plum, prune, dried	8.000000	1.000	0.100	40 CFR 180.443(a)	
12002871	12	Plum, prune, dried_babyfood	8.000000	1.000	0.100	40 CFR 180.443(a)	
12002880	12	Plum, prune, juice	8.000000	1.000	0.100	40 CFR 180.443(a)	
12002881	12	Plum, prune, juice_babyfood	8.000000	1.000	0.100	40 CFR 180.443(a)	
25002900	M	Pork, meat	0.100000	1.000	1.000	40 CFR 180.443(a)	
25002901	M	Pork, meat_babyfood	0.100000	1.000	1.000	40 CFR 180.443(a)	
25002910	M	Pork, skin	0.050000	1.000	1.000	40 CFR 180.443(a)	
25002920	M	Pork, meat byproducts	0.200000	1.000	1.000	40 CFR 180.443(a)	
25002921	M	Pork, meat byproducts_babyfood	0.200000	1.000	1.000	40 CFR 180.443(a)	
25002930	M	Pork, fat	0.050000	1.000	1.000	40 CFR 180.443(a)	
25002931	M	Pork, fat_babyfood	0.050000	1.000	1.000	40 CFR 180.443(a)	

25002940	M	Pork, kidney	0.200000	1.000	1.000	40 CFR 180.443(a)
25002950	M	Pork, liver	1.000000	1.000	1.000	40 CFR 180.443(a)
01032960	1C	Potato, chips	0.100000	1.000	1.000	40 CFR 180.443(d)
01032970	1C	Potato, dry (granules/ flakes)	0.100000	6.500	1.000	40 CFR 180.443(d)
01032971	1C	Potato, dry (granules/ flakes)_b	0.100000	6.500	1.000	40 CFR 180.443(d)
01032980	1C	Potato, flour	0.100000	1.000	1.000	40 CFR 180.443(d)
01032981	1C	Potato, flour_babyfood	0.100000	1.000	1.000	40 CFR 180.443(d)
01032990	1C	Potato, tuber, w/peel	0.100000	1.000	1.000	40 CFR 180.443(d)
01032991	1C	Potato, tuber, w/peel_babyfood	0.100000	1.000	1.000	40 CFR 180.443(d)
01033000	1C	Potato, tuber, w/o peel	0.100000	1.000	1.000	40 CFR 180.443(d)
01033001	1C	Potato, tuber, w/o peel_babyfood	0.100000	1.000	1.000	40 CFR 180.443(d)
60003010	P	Poultry, other, meat	0.020000	1.000	1.000	40 CFR 180.443(a)
60003020	P	Poultry, other, liver	0.020000	1.000	1.000	40 CFR 180.443(a)
60003030	P	Poultry, other, meat byproducts	0.020000	1.000	1.000	40 CFR 180.443(a)
60003040	P	Poultry, other, fat	0.020000	1.000	1.000	40 CFR 180.443(a)
60003050	P	Poultry, other, skin	0.020000	1.000	1.000	40 CFR 180.443(a)
09023080	9B	Pumpkin	0.200000	1.000	0.150	40 CFR 180.443(a)
09023090	9B	Pumpkin, seed	0.200000	1.000	0.150	40 CFR 180.443(a)
04013130	4A	Radicchio	1.000000	1.000	1.000	40 CFR 180.443(d)
01013140	1AB	Radish, roots	0.100000	1.000	1.000	40 CFR 180.443(d)
02003150	2	Radish, tops	0.200000	1.000	1.000	40 CFR 180.443(d)
01013160	1AB	Radish, Oriental, roots	0.100000	1.000	1.000	40 CFR 180.443(d)
02003170	2	Radish, Oriental, tops	0.200000	1.000	1.000	40 CFR 180.443(d)
05023180	5B	Rape greens	1.000000	1.000	1.000	40 CFR 180.443(d)
13013200	13A	Raspberry	2.000000	1.000	0.250	40 CFR 180.443(a)
13013201	13A	Raspberry_babyfood	2.000000	1.000	1.000	40 CFR 180.443(a)
13013210	13A	Raspberry, juice	2.000000	1.000	1.000	40 CFR 180.443(a)
13013211	13A	Raspberry, juice_babyfood	2.000000	1.000	1.000	40 CFR 180.443(a)
04023220	4B	Rhubarb	1.000000	1.000	1.000	40 CFR 180.443(d)
15003230	15	Rice, white	0.030000	1.000	1.000	40 CFR 180.443(d)
15003231	15	Rice, white_babyfood	0.030000	1.000	1.000	40 CFR 180.443(d)
15003240	15	Rice, brown	0.030000	1.000	1.000	40 CFR 180.443(d)
15003241	15	Rice, brown_babyfood	0.030000	1.000	1.000	40 CFR 180.443(d)
15003250	15	Rice, flour	0.030000	1.000	1.000	40 CFR 180.443(d)
15003251	15	Rice, flour_babyfood	0.030000	1.000	1.000	40 CFR 180.443(d)
15003260	15	Rice, bran	0.030000	1.000	1.000	40 CFR 180.443(d)
15003261	15	Rice, bran_babyfood	0.030000	1.000	1.000	40 CFR 180.443(d)
01013270	1AB	Rutabaga	0.100000	1.000	1.000	40 CFR 180.443(d)
15003280	15	Rye, grain	0.030000	1.000	1.000	40 CFR 180.443(d)
15003290	15	Rye, flour	0.030000	1.000	1.000	40 CFR 180.443(d)
01013310	1AB	Salsify, roots	0.100000	1.000	1.000	40 CFR 180.443(d)
02003320	2	Salsify, tops	0.200000	1.000	1.000	40 CFR 180.443(d)
26003390	M	Sheep, meat	0.100000	1.000	1.000	40 CFR 180.443(a)
26003391	M	Sheep, meat_babyfood	0.100000	1.000	1.000	40 CFR 180.443(a)
26003400	M	Sheep, meat byproducts	0.200000	1.000	1.000	40 CFR 180.443(a)
26003410	M	Sheep, fat	0.050000	1.000	1.000	40 CFR 180.443(a)
26003411	M	Sheep, fat_babyfood	0.050000	1.000	1.000	40 CFR 180.443(a)
26003420	M	Sheep, kidney	0.200000	1.000	1.000	40 CFR 180.443(a)
26003430	M	Sheep, liver	1.000000	1.000	1.000	40 CFR 180.443(a)
15003440	15	Sorghum, grain	0.030000	1.000	1.000	40 CFR 180.443(d)
15003450	15	Sorghum, syrup	0.030000	1.000	1.000	40 CFR 180.443(d)
06003470	6	Soybean, seed	0.050000	1.000	1.000	40 CFR 180.443(d)
06003480	6	Soybean, flour	0.050000	1.000	1.000	40 CFR 180.443(d)
06003481	6	Soybean, flour_babyfood	0.050000	1.000	1.000	40 CFR 180.443(d)
06003490	6	Soybean, soy milk	0.050000	1.000	1.000	40 CFR 180.443(d)
06003491	6	Soybean, soy milk_babyfood or in	0.050000	1.000	1.000	40 CFR 180.443(d)
06003500	6	Soybean, oil	0.050000	1.000	1.000	40 CFR 180.443(d)
06003501	6	Soybean, oil_babyfood	0.050000	1.000	1.000	40 CFR 180.443(d)
95003520	O	Spearmint	3.000000	1.000	1.000	40 CFR 180.443(a)
95003530	O	Spearmint, oil	3.000000	1.000	1.000	40 CFR 180.443(a)
04013550	4A	Spinach	1.000000	1.000	1.000	40 CFR 180.443(d)
04013551	4A	Spinach_babyfood	1.000000	1.000	1.000	40 CFR 180.443(d)
09023560	9B	Squash, summer	0.200000	1.000	0.100	40 CFR 180.443(a)

09023561	9B	Squash, summer_babyfood	0.200000	1.000	0.100	40 CFR 180.443(a)
09023570	9B	Squash, winter	0.200000	1.000	0.100	40 CFR 180.443(a)
09023571	9B	Squash, winter_babyfood	0.200000	1.000	0.100	40 CFR 180.443(a)
95003590	O	Strawberry	0.500000	1.000	0.350	40 CFR 180.443(a)
95003591	O	Strawberry_babyfood	0.500000	1.000	0.350	40 CFR 180.443(a)
95003600	O	Strawberry, juice	0.500000	1.000	0.350	40 CFR 180.443(a)
95003601	O	Strawberry, juice_babyfood	0.500000	1.000	0.350	40 CFR 180.443(a)
01033660	1CD	Sweet potato	0.100000	1.000	1.000	40 CFR 180.443(d)
01033661	1CD	Sweet potato_babyfood	0.100000	1.000	1.000	40 CFR 180.443(d)
04023670	4B	Swiss chard	1.000000	1.000	1.000	40 CFR 180.443(d)
01033710	1CD	Tanier, corm	0.100000	1.000	1.000	40 CFR 180.443(d)
08003740	8	Tomatillo	1.000000	1.000	1.000	40 CFR 180.443(b)
08003750	8	Tomato	0.300000	1.000	0.050	40 CFR 180.443(a)
08003751	8	Tomato_babyfood	0.300000	1.000	0.050	40 CFR 180.443(a)
08003760	8	Tomato, paste	1.000000	1.000	0.050	40 CFR 180.443(a)
08003761	8	Tomato, paste_babyfood	1.000000	1.000	0.050	40 CFR 180.443(a)
08003770	8	Tomato, puree	0.500000	1.000	0.050	40 CFR 180.443(a)
08003771	8	Tomato, puree_babyfood	0.500000	1.000	0.050	40 CFR 180.443(a)
08003780	8	Tomato, dried	0.300000	14.300	0.050	40 CFR 180.443(a)
08003781	8	Tomato, dried_babyfood	0.300000	14.300	0.050	40 CFR 180.443(a)
08003790	8	Tomato, juice	0.300000	1.500	0.050	40 CFR 180.443(a)
15003810	15	Triticale, flour	0.030000	1.000	1.000	40 CFR 180.443(d)
15003811	15	Triticale, flour_babyfood	0.030000	1.000	1.000	40 CFR 180.443(d)
50003820	P	Turkey, meat	0.020000	1.000	1.000	40 CFR 180.443(a)
50003821	P	Turkey, meat_babyfood	0.020000	1.000	1.000	40 CFR 180.443(a)
50003830	P	Turkey, liver	0.020000	1.000	1.000	40 CFR 180.443(a)
50003831	P	Turkey, liver_babyfood	0.020000	1.000	1.000	40 CFR 180.443(a)
50003840	P	Turkey, meat byproducts	0.020000	1.000	1.000	40 CFR 180.443(a)
50003841	P	Turkey, meat byproducts_babyfood	0.020000	1.000	1.000	40 CFR 180.443(a)
50003850	P	Turkey, fat	0.020000	1.000	1.000	40 CFR 180.443(a)
50003851	P	Turkey, fat_babyfood	0.020000	1.000	1.000	40 CFR 180.443(a)
50003860	P	Turkey, skin	0.020000	1.000	1.000	40 CFR 180.443(a)
50003861	P	Turkey, skin_babyfood	0.020000	1.000	1.000	40 CFR 180.443(a)
01033870	1CD	Turmeric	0.100000	1.000	1.000	40 CFR 180.443(d)
05023890	5B	Turnip, greens	1.000000	1.000	1.000	40 CFR 180.443(d)
01013880	1AB	Turnip, roots	0.100000	1.000	1.000	40 CFR 180.443(d)
86010000	O	Water, direct, all sources	0.086000	1.000	1.000	
86020000	O	Water, indirect, all sources	0.086000	1.000	1.000	
09013990	9A	Watermelon	0.200000	1.000	0.050	40 CFR 180.443(a)
09014000	9A	Watermelon, juice	0.200000	1.000	0.050	40 CFR 180.443(a)
15004010	15	Wheat, grain	0.030000	1.000	1.000	40 CFR 180.443(d)
15004011	15	Wheat, grain_babyfood	0.030000	1.000	1.000	40 CFR 180.443(d)
15004020	15	Wheat, flour	0.030000	1.000	1.000	40 CFR 180.443(d)
15004021	15	Wheat, flour_babyfood	0.030000	1.000	1.000	40 CFR 180.443(d)
15004030	15	Wheat, germ	0.030000	1.000	1.000	40 CFR 180.443(d)
15004040	15	Wheat, bran	0.030000	1.000	1.000	40 CFR 180.443(d)
15004050	15	Wild rice	0.030000	1.000	1.000	40 CFR 180.443(d)
01034060	1CD	Yam, true	0.100000	1.000	1.000	40 CFR 180.443(d)
01034070	1CD	Yam bean	0.100000	1.000	1.000	40 CFR 180.443(d)

Attachment 4. Myclobutanil Chronic DEEM-FCID™ Analysis.

U.S. Environmental Protection Agency Ver. 2.00
DEEM_FCID Chronic analysis for MYCLOBUTANIL (1994_98 data)
Residue file name: C:\Documents and Settings\jtyler\My Documents\JenWork\Myclobutanil\Home and Garden Uses\128857c.R98 Adjustment factor #2 used.
Analysis Date 02_22_2006/12:47:54 Residue file dated: 02_22_2006/11:39:01/8
Reference dose (RfD, Chronic) = .025 mg/kg bw/day
COMMENT 1: Tolerance file to included hops

Total exposure by population subgroup

Population Subgroup	Total Exposure mg/kg body wt/day	Total Exposure Percent of Rfd
U.S. Population (total)	0.003842	15.4%
U.S. Population (spring season)	0.003806	15.2%
U.S. Population (summer season)	0.004001	16.0%
U.S. Population (autumn season)	0.003757	15.0%
U.S. Population (winter season)	0.003803	15.2%
Northeast region	0.003855	15.4%
Midwest region	0.003803	15.2%
Southern region	0.003655	14.6%
Western region	0.004169	16.7%
Hispanics	0.004304	17.2%
Non_hispanic whites	0.003703	14.8%
Non_hispanic blacks	0.003940	15.8%
Non_hisp/non_white/non_black	0.004738	19.0%
All infants (< 1 year)	0.009005	36.0%
Nursing infants	0.003914	15.7%
Non_nursing infants	0.010936	43.7%
Children 1_6 yrs	0.006690	26.8%
Children 7_12 yrs	0.003964	15.9%
Females 13_19 (not preg or nursing)	0.002680	10.7%
Females 20+ (not preg or nursing)	0.003534	14.1%
Females 13_50 yrs	0.003465	13.9%
Females 13+ (preg/not nursing)	0.003723	14.9%
Females 13+ (nursing)	0.004440	17.8%
Males 13_19 yrs	0.002980	11.9%
Males 20+ yrs	0.003410	13.6%
Seniors 55+	0.003583	14.3%
Children 1_2 yrs	0.007697	30.8%
Children 3_5 yrs	0.006435	25.7%
Children 6_12 yrs	0.004189	16.8%
Youth 13_19 yrs	0.002840	11.4%
Adults 20_49 yrs	0.003418	13.7%
Adults 50+ yrs	0.003595	14.4%
Females 13_49 yrs	0.003320	13.3%

Attachment 5. Percent Crop Treated Data.

(Memo. J. Alsadek, 2/16/06)

Screening Level Estimates of Agricultural Uses of myclobutanil
Sorted Alphabetically

	Crop[a]	Pounds of Active Ingredient	Percent of Crop Treated	Maximum Percent of Crop Treated
1	Almonds *	9,000	10	25
2	Apples	50,000	40	45
3	Apricots	1,000	25	45
4	Artichokes *	1,000	45	80
5	Asparagus	1,000	5	15
6	Beans, Green	1,000	<1	5
7	Blackberries	<500	15	15
8	Broccoli	<500	<1	<2.5
9	Brussels Sprouts *	<500		
10	Cantaloupes	1,000	10	15
11	Cauliflower	<500	5	5
12	Cherries	9,000	35	45
13	Cucumbers	<500	<1	<2.5
14	Grapes	60,000	25	35
15	Nectarines	1,000	15	20
16	Peaches	3,000	10	15
17	Pears	<500	5	5
18	Peppers	2,000	10	20
19	Prunes & Plums	1,000	10	10
20	Pumpkins	2,000	15	25
21	Raspberries	<500	25	30
22	Squash	1,000	10	20
23	Strawberries	6,000	35	50
24	Sugar Beets	1,000	<1	<2.5
25	Tomatoes	2,000	5	10
26	Walnuts	<500	<1	<2.5
27	Watermelons	2,000	5	10

All numbers rounded.
'<500' indicates less than 500 pounds of active ingredient.
'<2.5' indicates less than 2.5 percent of crop is treated.
* CA data only, but 95% or *more of U.S. acres are in California*

[a] I checked California Department of Regulation (CALDPR) and National Center for Agricultural Policy (NCFAP) for crops that did not show up in the Screening Level Usage Analysis (SLUA). . CALDPR database shows a three-year average (2002, 2003, and 2004) of approximately 2,000 pounds of myclobutanil is used on cotton. NCFAP 2002 data show 15 percent of hops, in Oregon, 50 percent, in Idaho, and 80 percent in Washington are treated with myclobutanil. About 22 percent of hot peppers are treated with the chemical in both New Mexico and California in 2002. No myclobutanil is applied to oats, wheat, eggplant, okra, and soybeans in all states for 2002.

13544

R128928

Chemical: **Myclobutanil**

PC Code:
128857
HED File Code: **14000 Risk Reviews**
Memo Date: **6/8/2006**
File ID: **DPD319228**
Accession #: **412-06-0192**

HED Records Reference Center
7/12/2006