Message

From: Philippe Hoff [phoff@mmm.com]
Sent: 2/5/2018 8:08:31 AM
To: Stefan Posner [Stefan.Posner@swerea.se]
CC: Marie-Ange.BAUCHER@oecd.org; Jacqueline.ALVAREZ@unep.org; lisa.anfalt@kemi.se; sandra.averous@unep.org; Simona.Balan@dtsc.ca.gov; martijn.beekman@rivm.nl; Annegret.Biegel-Engler@uba.de; cecile.blom@miljodir.no; Ex. 6 - Personal Privacy ; ronald.p.bock@chemours.com; g.brambi@iss.it; tom@greensciencepolicy.org; robert.chenier@canada.ca; ciycandy@korea.kr; Mamady.Cisse@hc-sc.gc.ca; Corado, Ana [Corado.Ana@epa.gov]; Ex. 6 - Personal Privacy mara.curaba@environnement.belgique.be; jcurry@outdoorindustry.org; reynold.dsouza@sakataindia.com; Jose.DeMesa@unep.org; jacob.duer@unep.org; Chris.Enlow@keenfootwear.com; Ex. 6 - Personal Privacy greg.hammond@ec.gc.ca; skhazra@riskenergy.co.in; Gary Hohenstein [gahohenstein@mmm.com]; Ex. 6 - Personal Privacy ; valerie.hourdebaigt@canada.ca; imy@miljodir.no; bjensen@outdoorindustry.org; Ex. 6 - Personal Privacy kezuka-chie@meti.go.jp; khalidiya@yandex.ru; brenda.koekkoek@unep.org; Peter.KORYTAR@ec.europa.eu; Krasnic, Toni [krasnic.toni@epa.gov]; jessy kurias [Jessy.Kurias@ec.gc.ca]; fannie.lalonde@canada.ca; gardenh1@korea.kr; Eeva.LEINALA@oecd.org; jgliu@pku.edu.cn; Lloyd, Tyler [Lloyd.Tyler@epa.gov]; Lobar, Bryan [Lobar.Bryan@epa.gov]; annamaria.lopomo@iss.it; richard.luit@rivm.nl; bert-ove.lund@kemi.se; Giuseppina.LUVARA@ec.europa.eu; annmakarova@mail.ru; marco.malvasi@solvay.com; jon.martin@ualberta.ca; Angela.McKinnon@nicnas.gov.au; kevin.munn@unep.org; olga@ewg.org; Nazef, Laura [Nazef.Laura@epa.gov]; HaNTH@moit.gov.vn; kei.ohno-woodall@brsmeas.org; Ex. 6 - Personal Privacy ohzeki-kazuo@meti.go.jp; johanna.peltola-thies@echa.europa.eu; juan.pineros@environnement.belgique.be; Thomas.H.Samples@USA.dupont.com; sneha.satya@nicnas.gov.au; scheringer@chem.ethz.ch; tamar.schlekat@setac.org; kai-volker.schubert@chemours.com; christoph.schulte@uba.de; sebkova@recetox.muni.cz; robert_simon@americanchemistry.com; njsingh@dcmshriram.com; Sleasman, Katherine [Sleasman.Katherine@epa.gov]; ssoto@minae.go.cr; jessica_steinhilber@americanchemistry.com; stoyanova@economy.gov.ru; georg.streck@ec.europa.eu; Nabila.Taha@ec.gc.ca; josef.tremp@bafu.admin.ch; lena.vierke@uba.de; Melissa.wang@greenpeace.org; zhanyun.wang@chem.ethz.ch; steffen.wengert@bag.admin.ch; graham.white@hc-sc.gc.ca; sebastian.winkler@eeb.org; towin@mst.dk; cora.young@mun.ca; zhao.ziying@mepfeco.org.cn
Subject: RE: Updated List of PFASs & comments on accompanying report

Dear Stefan

The SDS extract shows that the tradename is inactive:

FC-98 FLUORAD BRAND FLUOROCHEMICAL SURFACTANT (INACTIVE)

Best regards,

3M Science. Applied to Life.™

Philippe Hoff| Advanced EMEA Product EHS&R Specialist
REACH Coordination Center
3M Belgium bvba/sprl, Hermeslaan 7, 1831 Diegem, Belgium
Office: +32 27 22 48 70 | Mobile: Ex. 6 - Personal Privacy
phoff@mmm.com

3M.com

This communication may contain confidential information. If you are not the intended recipient please return this email to the sender and delete it from your records.

From: Stefan Posner [mailto:Stefan.Posner@swerea.se]
Sent: Monday 5 February 2018 09:00
To: Stefan Posner <Stefan.Posner@swerea.se>; Philippe Hoff <phoff@mmm.com>
Cc: Marie-Ange.BAUCHER@oecd.org; Jacqueline.ALVAREZ@unep.org; lisa.anfalt@kemi.se; sandra.averous@unep.org; Simona.Balan@dtsc.ca.gov; martijn.beekman@rivm.nl; Annegret.Biegel-Engler@uba.de; cecile.blom@miljodir.no; Ex. 6 - Personal Privacy ronald.p.bock@chemours.com; g.brambi@iss.it; tom@greensciencepolicy.org; robert.chenier@canada.ca; ciycandy@korea.kr; Mamady.Cisse@hc-sc.gc.ca; corado.ana@epa.gov; Ex. 6 - Personal Privacy mara.curaba@environnement.belgique.be; jcurry@outdoorindustry.org; reynold.dsouza@sakataindia.com; Jose.DeMesa@unep.org; jacob.duer@unep.org; Chris.Enlow@keenfootwear.com; Ex. 6 - Personal Privacy greg.hammond@ec.gc.ca; skhazra@riskenergy.co.in; Gary Hohenstein <gahohenstein@mmm.com>; Ex. 6 - Personal Privacy; valerie.hourdebaigt@canada.ca; imy@miljodir.no; bjensen@outdoorindustry.org; Ex. 6 - Personal Privacy kezuka-chie@meti.go.jp; khalidiya@yandex.ru; brenda.koekkoek@unep.org; Peter.KORYTAR@ec.europa.eu; krasnic.toni@epa.gov; jessy.kurias@ec.gc.ca; fannie.lalonde@canada.ca; gardenh1@korea.kr; Eeva.LEINALA@oecd.org; jgliu@pku.edu.cn; Lloyd.Tyler@epa.gov; lobar.bryan@epa.gov; annamaria.lopomo@iss.it; richard.luit@rivm.nl; bert-ove.lund@kemi.se; Giuseppina.LUVARA@ec.europa.eu; annmakarova@mail.ru; marco.malvasi@solvay.com; jon.martin@ualberta.ca; Angela.McKinnon@nicnas.gov.au; kevin.munn@unep.org; olga@ewg.org; nazef.laura@epa.gov; HaNTH@moit.gov.vn; kei.ohno-woodall@brsmeas.org; Ex. 6 - Personal Privacy ohzeki-kazuo@meti.go.jp; johanna.peltola-thies@echa.europa.eu; juan.pineros@environnement.belgique.be; Thomas.H.Samples@USA.dupont.com; sneha.satya@nicnas.gov.au; scheringer@chem.ethz.ch; tamar.schlekat@setac.org; kai-volker.schubert@chemours.com; christoph.schulte@uba.de; sebkova@recetox.muni.cz; robert_simon@americanchemistry.com; njsingh@dcmshriram.com; sleasman.katherine@epa.gov; ssoto@minae.go.cr; jessica_steinhilber@americanchemistry.com; stoyanova@economy.gov.ru; georg.streck@ec.europa.eu; Nabila.Taha@ec.gc.ca; josef.tremp@bafu.admin.ch; lena.vierke@uba.de; Melissa.wang@greenpeace.org; zhanyun.wang@chem.ethz.ch; steffen.wengert@bag.admin.ch; graham.white@hc-sc.gc.ca; sebastian.winkler@eeb.org; towin@mst.dk; cora.young@mun.ca; zhao.ziying@mepfeco.org.cn
Subject: [EXTERNAL] SV: Updated List of PFASs & comments on accompanying report

Dear Philippe

Sorry for asking but the SDS says

```
Document id        : 10-3797-7        Issue date          : 2015/02/27
    Version            : 13.00            Supersedes date     : 2002/12/12
```

I cannot find any written line that indicate that this document is inactivated. I can only read that the earlier version has been revised (section 16). Please explain.

Kind regards
Stefan

Från: Stefan Posner
Skickat: den 5 februari 2018 08:46
Till: 'Philippe Hoff'
Kopia: Marie-Ange.BAUCHER@oecd.org; Jacqueline.ALVAREZ@unep.org; lisa.anfalt@kemi.se; sandra.averous@unep.org; Simona.Balan@dtsc.ca.gov; martijn.beekman@rivm.nl; Annegret.Biegel-Engler@uba.de; cecile.blom@miljodir.no; Ex. 6 - Personal Privacy ronald.p.bock@chemours.com; g.brambi@iss.it; tom@greensciencepolicy.org; robert.chenier@canada.ca; ciycandy@korea.kr; Mamady.Cisse@hc-sc.gc.ca; corado.ana@epa.gov; Ex. 6 - Personal Privacy mara.curaba@environnement.belgique.be; jcurry@outdoorindustry.org; reynold.dsouza@sakataindia.com; Jose.DeMesa@unep.org; jacob.duer@unep.org; Chris.Enlow@keenfootwear.com; Ex. 6 - Personal Privacy greg.hammond@ec.gc.ca; skhazra@riskenergy.co.in; Gary Hohenstein; Ex. 6 - Personal Privacy Ex. 6 - Personal Privacy valerie.hourdebaigt@canada.ca; imy@miljodir.no; bjensen@outdoorindustry.org; Ex. 6 - Personal Privacy kezuka-chie@meti.go.jp; khalidiya@yandex.ru; brenda.koekkoek@unep.org; Peter.KORYTAR@ec.europa.eu; krasnic.toni@epa.gov; jessy.kurias@ec.gc.ca; fannie.lalonde@canada.ca;

gardenh1@korea.kr; Eeva.LEINALA@oecd.org; jgliu@pku.edu.cn; Lloyd.Tyler@epa.gov; lobar.bryan@epa.gov; annamaria.lopomo@iss.it; richard.luit@rivm.nl; bert-ove.lund@kemi.se; Giuseppina.LUVARA@ec.europa.eu; annmakarova@mail.ru; marco.malvasi@solvay.com; jon.martin@ualberta.ca; Angela.McKinnon@nicnas.gov.au; kevin.munn@unep.org; olga@ewg.org; nazef.laura@epa.gov; HaNTH@moit.gov.vn; kei.ohno-woodall@brsmeas.org; Ex. 6 - Personal Privacy ohzeki-kazuo@meti.go.jp; johanna.peltola-thies@echa.europa.eu; juan.pineros@environnement.belgique.be; Thomas.H.Samples@USA.dupont.com; sneha.satya@nicnas.gov.au; scheringer@chem.ethz.ch; tamar.schlekat@setac.org; kai-volker.schubert@chemours.com; christoph.schulte@uba.de; sebkova@recetox.muni.cz; robert_simon@americanchemistry.com; njsingh@dcmshriram.com; sleasman.katherine@epa.gov; ssoto@minae.go.cr; jessica_steinhilber@americanchemistry.com; stoyanova@economy.gov.ru; georg.streck@ec.europa.eu; Nabila.Taha@ec.gc.ca; josef.tremp@bafu.admin.ch; lena.vierke@uba.de; Melissa.wang@greenpeace.org; zhanyun.wang@chem.ethz.ch; steffen.wengert@bag.admin.ch; graham.white@hc-sc.gc.ca; sebastian.winkler@eeb.org; towin@mst.dk; cora.young@mun.ca; zhao.ziying@mepfeco.org.cn
Ämne: SV: Updated List of PFASs & comments on accompanying report

Dear Philippe

I see. Would that mean that this product was inactivated/ out of production this date as well?

Kind regards
Stefan

Från: Philippe Hoff [mailto:phoff@mmm.com]
Skickat: den 5 februari 2018 07:46
Till: Stefan Posner
Kopia: Marie-Ange.BAUCHER@oecd.org; Jacqueline.ALVAREZ@unep.org; lisa.anfalt@kemi.se; sandra.averous@unep.org; Simona.Balan@dtsc.ca.gov; martijn.beekman@rivm.nl; Annegret.Biegel-Engler@uba.de; cecile.blom@miljodir.no; Ex. 6 - Personal Privacy ; ronald.p.bock@chemours.com; g.brambi@iss.it; tom@greensciencepolicy.org; robert.chenier@canada.ca; ciycandy@korea.kr; Mamady.Cisse@hc-sc.gc.ca; corado.ana@epa.gov; Ex. 6 - Personal Privacy mara.curaba@environnement.belgique.be; jcurry@outdoorindustry.org; reynold.dsouza@sakataindia.com; Jose.DeMesa@unep.org; jacob.duer@unep.org; Chris.Enlow@keenfootwear.com; Ex. 6 - Personal Privacy greg.hammond@ec.gc.ca; skhazra@riskenergy.co.in; Gary Hohenstein; Ex. 6 - Personal Privacy Ex. 6 - Personal Privacy valerie.hourdebaigt@canada.ca; imy@miljodir.no; bjensen@outdoorindustry.org; Ex. 6 - Personal Privacy kezuka-chie@meti.go.jp; khalidiya@yandex.ru; brenda.koekkoek@unep.org; Peter.KORYTAR@ec.europa.eu; krasnic.toni@epa.gov; jessy.kurias@ec.gc.ca; fannie.lalonde@canada.ca; gardenh1@korea.kr; Eeva.LEINALA@oecd.org; jgliu@pku.edu.cn; Lloyd.Tyler@epa.gov; lobar.bryan@epa.gov; annamaria.lopomo@iss.it; richard.luit@rivm.nl; bert-ove.lund@kemi.se; Giuseppina.LUVARA@ec.europa.eu; annmakarova@mail.ru; marco.malvasi@solvay.com; jon.martin@ualberta.ca; Angela.McKinnon@nicnas.gov.au; kevin.munn@unep.org; olga@ewg.org; nazef.laura@epa.gov; HaNTH@moit.gov.vn; kei.ohno-woodall@brsmeas.org; Ex. 6 - Personal Privacy ohzeki-kazuo@meti.go.jp; johanna.peltola-thies@echa.europa.eu; juan.pineros@environnement.belgique.be; Thomas.H.Samples@USA.dupont.com; sneha.satya@nicnas.gov.au; scheringer@chem.ethz.ch; tamar.schlekat@setac.org; kai-volker.schubert@chemours.com; christoph.schulte@uba.de; sebkova@recetox.muni.cz; robert_simon@americanchemistry.com; njsingh@dcmshriram.com; sleasman.katherine@epa.gov; ssoto@minae.go.cr; jessica_steinhilber@americanchemistry.com; stoyanova@economy.gov.ru; georg.streck@ec.europa.eu; Nabila.Taha@ec.gc.ca; josef.tremp@bafu.admin.ch; lena.vierke@uba.de; Melissa.wang@greenpeace.org; zhanyun.wang@chem.ethz.ch; steffen.wengert@bag.admin.ch; graham.white@hc-sc.gc.ca; sebastian.winkler@eeb.org; towin@mst.dk; cora.young@mun.ca; zhao.ziying@mepfeco.org.cn
Ämne: RE: Updated List of PFASs & comments on accompanying report

Dear Stefan,

The date is indicating when the document was inactivated in our systems.

Best regards,

Philippe Hoff| Advanced EMEA Product EHS&R Specialist
REACH Coordination Center
3M Belgium bvba/sprl, Hermeslaan 7, 1831 Diegem, Belgium
Office: +32 27 22 48 70 | Mobile: Ex. 6 - Personal Privacy
phoff@mmm.com

3M.com

This communication may contain confidential information. If you are not the intended recipient please return this email to the sender and delete it from your records.

From: Stefan Posner [mailto:Stefan.Posner@swerea.se]
Sent: Monday 5 February 2018 07:37
To: Philippe Hoff <phoff@mmm.com>
Cc: Marie-Ange.BAUCHER@oecd.org; Jacqueline.ALVAREZ@unep.org; lisa.anfalt@kemi.se; sandra.averous@unep.org; Simona.Balan@dtsc.ca.gov; martijn.beekman@rivm.nl; Annegret.Biegel-Engler@uba.de; cecile.blom@miljodir.no; Ex. 6 - Personal Privacy ronald.p.bock@chemours.com; g.brambi@iss.it; tom@greensciencepolicy.org; robert.chenier@canada.ca; ciycandy@korea.kr; Mamady.Cisse@hc-sc.gc.ca; corado.ana@epa.gov; Ex. 6 - Personal Privacy mara.curaba@environnement.belgique.be; jcurry@outdoorindustry.org; reynold.dsouza@sakataindia.com; Jose.DeMesa@unep.org; jacob.duer@unep.org; Chris.Enlow@keenfootwear.com; Ex. 6 - Personal Privacy greg.hammond@ec.gc.ca; skhazra@riskenergy.co.in; Gary Hohenstein <gahohenstein@mmm.com>; Ex. 6 - Personal Privacy valerie.hourdebaigt@canada.ca; imy@miljodir.no; bjensen@outdoorindustry.org; Ex. 6 - Personal Privacy kezuka-chie@meti.go.jp; khalidiya@yandex.ru; brenda.koekkoek@unep.org; Peter.KORYTAR@ec.europa.eu; krasnic.toni@epa.gov; jessy.kurias@ec.gc.ca; fannie.lalonde@canada.ca; gardenh1@korea.kr; Eeva.LEINALA@oecd.org; jgliu@pku.edu.cn; Lloyd.Tyler@epa.gov; lobar.bryan@epa.gov; annamaria.lopomo@iss.it; richard.luit@rivm.nl; bert-ove.lund@kemi.se; Giuseppina.LUVARA@ec.europa.eu; annmakarova@mail.ru; marco.malvasi@solvay.com; jon.martin@ualberta.ca; Angela.McKinnon@nicnas.gov.au; kevin.munn@unep.org; olga@ewg.org; nazef.laura@epa.gov; HaNTH@moit.gov.vn; kei.ohno-woodall@brsmeas.org; Ex. 6 - Personal Privacy ohzeki-kazuo@meti.go.jp; johanna.peltola-thies@echa.europa.eu; juan.pineros@environnement.belgique.be; Thomas.H.Samples@USA.dupont.com; sneha.satya@nicnas.gov.au; scheringer@chem.ethz.ch; tamar.schlekat@setac.org; kai-volker.schubert@chemours.com; christoph.schulte@uba.de; sebkova@recetox.muni.cz; robert_simon@americanchemistry.com; njsingh@dcmshriram.com; sleasman.katherine@epa.gov; ssoto@minae.go.cr; jessica_steinhilber@americanchemistry.com; stoyanova@economy.gov.ru; georg.streck@ec.europa.eu; Nabila.Taha@ec.gc.ca; josef.tremp@bafu.admin.ch; lena.vierke@uba.de; Melissa.wang@greenpeace.org; zhanyun.wang@chem.ethz.ch; steffen.wengert@bag.admin.ch; graham.white@hc-sc.gc.ca; sebastian.winkler@eeb.org; towin@mst.dk; cora.young@mun.ca; zhao.ziying@mepfeco.org.cn
Subject: [EXTERNAL] Re: Updated List of PFASs & comments on accompanying report

Dear Philippe

Thanks for your reply but why is then the latest version of this SDS issued 2015/02/27 if a phase out happened more than a decade ago?

Please explain

Kind regards
Stefan

5 feb. 2018 kl. 07:20 skrev Philippe Hoff <phoff@mmm.com>:

Dear Stefan,

Our phase-out took place more than a decade ago so your original statement should have read "*3M has produced cyclic PFOS*" instead of "*3M produces cyclic PFOS as a replacement for PFOS in hydraulic fluid oils.*"

The SDS extract shows that the tradename is inactive:

FC-98 FLUORAD BRAND FLUOROCHEMICAL SURFACTANT (INACTIVE)

Best regards,

<image001.gif>

Philippe Hoff| Advanced EMEA Product EHS&R Specialist
REACH Coordination Center
3M Belgium bvba/sprl, Hermeslaan 7, 1831 Diegem, Belgium
Office: +32 27 22 48 70 | Mobile: Ex. 6 - Personal Privacy
phoff@mmm.com

<image002.png><image003.png><image004.png><image005.png><image006.png><image007.png>

This communication may contain confidential information. If you are not the intended recipient please return this email to the sender and delete it from your records.

From: Stefan Posner [mailto:Stefan.Posner@swerea.se]
Sent: Thursday 1 February 2018 08:36
To: Philippe Hoff <phoff@mmm.com>; Marie-Ange.BAUCHER@oecd.org
Cc: Jacqueline.ALVAREZ@unep.org; lisa.anfalt@kemi.se; sandra.averous@unep.org; Simona.Balan@dtsc.ca.gov; martijn.beekman@rivm.nl; Annegret.Biegel-Engler@uba.de; cecile.blom@miljodir.no; Ex. 6 - Personal Privacy ronald.p.bock@chemours.com; g.brambi@iss.it; tom@greensciencepolicy.org; robert.chenier@canada.ca; ciycandy@korea.kr; Mamady.Cisse@hc-sc.gc.ca; corado.ana@epa.gov; Ex. 6 - Personal Privacy mara.curaba@environnement.belgique.be; jcurry@outdoorindustry.org; reynold.dsouza@sakataindia.com; Jose.DeMesa@unep.org; jacob.duer@unep.org; Chris.Enlow@keenfootwear.com; Ex. 6 - Personal Privacy greg.hammond@ec.gc.ca; skhazra@riskenergy.co.in; Gary Hohenstein <gahohenstein@mmm.com>; Ex. 6 - Personal Privacy valerie.hourdebaigt@canada.ca; imy@miljodir.no; bjensen@outdoorindustry.org; Ex. 6 - Personal Privacy kezuka-chie@meti.go.jp; khalidiya@yandex.ru; brenda.koekkoek@unep.org; Peter.KORYTAR@ec.europa.eu; krasnic.toni@epa.gov; jessy.kurias@ec.gc.ca; fannie.lalonde@canada.ca; gardenh1@korea.kr; Eeva.LEINALA@oecd.org; jgliu@pku.edu.cn; Lloyd.Tyler@epa.gov; lobar.bryan@epa.gov; annamaria.lopomo@iss.it; richard.luit@rivm.nl; bert-ove.lund@kemi.se; Giuseppina.LUVARA@ec.europa.eu; annmakarova@mail.ru; marco.malvasi@solvay.com; jon.martin@ualberta.ca; Angela.McKinnon@nicnas.gov.au; kevin.munn@unep.org; olga@ewg.org; nazef.laura@epa.gov; HaNTH@moit.gov.vn; kei.ohno-woodall@brsmeas.org; Ex. 6 - Personal Privacy ohzeki-kazuo@meti.go.jp; johanna.peltola-thies@echa.europa.eu; juan.pineros@environnement.belgique.be; Thomas.H.Samples@USA.dupont.com; sneha.satya@nicnas.gov.au; scheringer@chem.ethz.ch; tamar.schlekat@setac.org; kai-volker.schubert@chemours.com; christoph.schulte@uba.de; sebkova@recetox.muni.cz; robert_simon@americanchemistry.com; njsingh@dcmshriram.com; sleasman.katherine@epa.gov; ssoto@minae.go.cr; jessica_steinhilber@americanchemistry.com; stoyanova@economy.gov.ru; georg.streck@ec.europa.eu; Nabila.Taha@ec.gc.ca;

josef.tremp@bafu.admin.ch; lena.vierke@uba.de; Melissa.wang@greenpeace.org; zhanyun.wang@chem.ethz.ch; steffen.wengert@bag.admin.ch; graham.white@hc-sc.gc.ca; sebastian.winkler@eeb.org; towin@mst.dk; cora.young@mun.ca; zhao.ziying@mepfeco.org.cn
Subject: [EXTERNAL] SV: Updated List of PFASs & comments on accompanying report

Dear Philippe , dear all

I read below as cyclic PFAS from you. If it is not used for hydrualic fluid oils please advise its existence and use.

Kind regards
Stefan Posner

<image008.png>
CAS 67584-42-3

http://multimedia.3m.com/mws/mediawebserver?mwsId=SSSSSuUn_zu8lZNU4xtxoY_1ov70kDVFNvu9lxtD7SSSSSS--

3M Canada Company
1840 Oxford Street East, Post Office Box 5757
London, Ontario N6A 4T1
Medical Emergency Telephone: (519) 451-2500, Ext. 2222
Transportation Emergency Telephone (CANUTEC): (613) 996-6666

==========
Material Safety Data Sheet
==========

Document id	: 10-3797-7	Issue date	: 2015/02/27
Version	: 13.00	Supersedes date	: 2002/12/12

Copyright, 1997, 3M Canada Company. All rights reserved. Copying and/or downloading of this information for the purpose of properly utilizing 3M products is allowed provided that: (1) the information is copied in full with no changes unless prior written agreement is obtained from 3M, and (2) neither the copy nor the original is resold or otherwise distributed with the intention of earning a profit thereon.

Prepared by: Corporate Regulatory Services, 3M Canada Company
Telephone: (800) 364-3577, Fax: (800) 603-7758, Web Site: www.3M.ca

---
1 Chemical Product and Company Identification

Tradename:
FC-98 FLUORAD BRAND FLUOROCHEMICAL SURFACTANT (INACTIVE)
Product ID:
98-0207-0203-5 98-0207-0204-3 98-0211-0889-3
Intended Use of Product:
SURFACTANT
Division:

2 Hazards Identification

Critical Hazards:
Moderate Eye Irritation: Signs/symptoms may include redness, swelling, pain, tearing, and blurred or hazy vision.
See Sections 7 and 11 for further information.

3 Composition/Information on Ingredients

Ingredient Name	CAS Number	Percentage
POTASSIUM PERFLUOROETHYL CYCLOHEXYL SULFONATE	67584-42-3	66 - 70
POTASSIUM PERFLUOROMETHYL CYCLOHEXYL SULFONATE	68156-07-0	18 - 22
POTASSIUM PERFLUORODIMETHYL CYCLOHEXYL SULFONATE	68156-01-4	9 - 13
POTASSIUM PERFLUOROCYCLOHEXYL SULFONATE	3107-18-4	1 - 3
RESIDUAL ORGANIC FLUOROCHEMICALS	Mixture	0.1 - 0.5

4 First Aid Measures

Instructions for Eye Contact:
Immediately flush eyes with large amounts of water for at least 15 minutes. Get immediate medical attention.
Instructions for Skin Contact:
Wash affected area with soap and water.
Instructions for Inhalation:
If signs/symptoms occur, remove person to fresh air. If signs/symptoms continue, call a physician.
Instructions for Ingestion:
If swallowed, do NOT induce vomiting. Give victim two glasses of water. Call a physician immediately. Never give anything by mouth to an unconscious person.

5 Fire Fighting Measures

Flash point: None
Lower Explosive Limit (%): Not applicable
Upper Explosive Limit (%): Not applicable
Autoignition temperature: Not applicable
Suitable Extinguishing Media:
Water; Carbon Dioxide; Dry chemical; Foam;
Exposure Hazards during Fire:
No data available.
Combustion Products from Fire:
Carbon monoxide and carbon dioxide; Oxides of sulfur; hydrogen

fluoride; Toxic vapours, gases or particulates;

Unusual Fire and Explosion Hazards

None known.

Fire Fighting Procedures:

Wear full protective clothing, including helmet, self-contained, positive pressure or pressure demand breathing apparatus, bunker coat and pants, bands around arms, waist and legs, face mask, and protective covering for exposed areas of the head.

NFPA: Health	3
NFPA: Fire	0
NFPA: Reactivity	0

NFPA: Unusual Reaction Hazard

none

National Fire Protection Association (NFPA) hazard ratings are designed for use by emergency response personnel to address the hazards that are presented by short-term, acute exposure to a material under conditions of fire, spill, or similar emergencies. Hazard ratings are primarily based on the inherent physical and toxic properties of the material but also include the toxic properties of combustion or decomposition products that are known to be generated in significant quantities.

---

6 Accidental Release Measures

Personal Precautions:

Observe precautions from other sections. Call 3M- HELPS line (1-800-364-3577) for more information on handling and managing the spill.

Environmental Procedures

No data available.

Methods for cleaning up

No data available.

Spill Response:

Collect as much of the spilled material as possible. Vacuum, use wet sweeping compound or water to avoid dusting. CAUTION! A vacuum cleaner could be an ignition source. Clean up residue. Place in a closed container approved for transportation by appropriate authorities.

Methods for Disposal:

As a disposal alternative, incinerate in an industrial or commercial facility in the presence of a combustible material. Combustion products will include HF. Facility must be capable of handling halogenated materials.

---

7 Handling and Storage

Storage Requirements:
Store away from areas where product may come into contact with food or pharmaceuticals. Store at room temperature. Avoid contact with water. Keep container closed when not in use.

Incompatible Materials:
Not applicable.

Ventilation:
No data available.

Explosion Prevention:
Non-flammable: ordinary combustible material.

Use Instructions:
No smoking: Smoking while using this product can result in contamination of the tobacco and/or smoke and lead to the formation of the hazardous decomposition products mentioned in section 10 of this MSDS.

8 Exposure Controls/Personal Protection

Personal Protection

Eye Protection:
Avoid eye contact with vapours, mists, or spray. The following should be worn alone or in combination, as appropriate, to prevent eye contact: Indirect vented goggles;

Hand Protection:
Wear appropriate gloves when handling this material. The following glove material(s) are recommended: butyl rubber;

Skin Protection:
Avoid skin contact. The following protective clothing material(s) are recommended: head covering; coveralls; Protective garments (other than gloves) should be made of either of the following materials: polyethylene/polyvinylidene chloride

Respiratory Protection:
Avoid breathing of airborne material. Select one of the following approved respirators based on airborne concentration of contaminants and in accordance with regulations: half-mask high-efficiency filter respirator; half-mask supplied air respirator;

Ingestion (Prevention):
Do not eat, drink or smoke when using this product. Wash exposed areas thoroughly with soap and water. Wash hands after handling and before eating.

Recommended Ventilation:
If exhaust ventilation is not adequate, use appropriate respiratory

protection. Provide ventilation adequate to control vapour concentrations below recommended exposure limits and/or control spray or mist.

Ingredient Exposure Data

POTASSIUM PERFLUOROETHYL CYCLOHEXYL SULFONATE (67584-42-3)

Specific Ingredient Data
No data available.
LD50 (rat, oral) No data available.
LC50 (rat, inhalation/4 hours) No data available.
Exposure Limits
0.1 mg/m3 3M: TWA; skin contact contributes to exposure;
Comments: 3M established limit for fluoros

POTASSIUM PERFLUOROMETHYL CYCLOHEXYL SULFONATE (68156-07-0)
Specific Ingredient Data
No data available.
LD50 (rat, oral) No data available.
LC50 (rat, inhalation/4 hours) No data available.
Exposure Limits
0.1 mg/m3 3M: TWA; skin contact contributes to exposure;
Comments: 3M established limit for fluoros

POTASSIUM PERFLUORODIMETHYL CYCLOHEXYL SULFONATE (68156-01-4)
Specific Ingredient Data
No data available.
LD50 (rat, oral) No data available.
LC50 (rat, inhalation/4 hours) No data available.
Exposure Limits
0.1 mg/m3 3M: TWA; skin contact contributes to exposure;
Comments: 3M established limit for fluoros

POTASSIUM PERFLUOROCYCLOHEXYL SULFONATE (3107-18-4)
Specific Ingredient Data
No data available.
LD50 (rat, oral) No data available.
LC50 (rat, inhalation/4 hours) No data available.
Exposure Limits
0.1 mg/m3 3M: TWA; skin contact contributes to exposure;
Comments: 3M established limit for fluoros

RESIDUAL ORGANIC FLUOROCHEMICALS (Mixture)
Specific Ingredient Data
No data available.
LD50 (rat, oral) No data available.
LC50 (rat, inhalation/4 hours) No data available.
Exposure Limits
No data available.

9 Physical and Chemical Properties

Physical form,Color,Odour:	Free-flowing powder; off-white; slight sulfide odour;
Odour Threshold:	No data available.
pH:	6 - 8 0.1 % Aqueous
Boiling point/boiling range:	Not applicable
Melting point/melting range:	Not available
Vapour pressure:	Not applicable
Water Solubility:	Slight
Specific gravity:	Approximately 0.6 Water=1 (Bulk)
Vapour density:	Not applicable
Volatile organic compounds:	Not applicable

Evaporation rate:	Not applicable
Viscosity:	Not available
Percent Volatile:	No data available.

10 Stability and Reactivity

Conditions to Avoid:
None known.
Materials to Avoid:
Not applicable.
Hazardous Decomposition:
Carbon monoxide and carbon dioxide; Oxides of sulfur; hydrogen fluoride; Toxic vapours, gases or particulates;
Stability and Reactivity:
Stable. Hazardous polymerization will not occur.

11 Toxicological Information

Effects from Eye Contact:
Moderate Eye Irritation: Signs/symptoms may include redness, swelling, pain, tearing, and blurred or hazy vision.
Effects from Skin Contact:
Product is not expected to be irritating to the skin. May be absorbed through the skin and produce effects similar to those caused by inhalation and/or ingestion.
Effects from Inhalation:
Can be harmful or fatal if inhaled. May be absorbed by inhalation and persist in the body for an extended time. Single overexposure, above recommended guidelines, may cause: Upper Respiratory Tract Irritation: Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain. WHILE

THE FOLLOWING EFFECTS ARE ASSOCIATED WITH ONE OR MORE OF THE INDIVIDUAL INGREDIENTS IN THIS PRODUCT AND ARE REQUIRED TO BE INCLUDED ON THE MSDS BY THE U.S. OSHA HAZARD COMMUNICATION STANDARD, THEY ARE NOT EXPECTED EFFECTS DURING FORESEEABLE USE OF THIS PRODUCT.
Prolonged or repeated overexposure, above recommended guidelines, may cause: Liver Effects: signs/symptoms can include yellow skin(jaundice) and tenderness of upper abdomen. Lung Damage: signs/symptoms can include coughing, difficulty breathing, wheezing, tightness in chest, congestion, and coughing up of blood.
Effects from Ingestion:
Animal studies conducted on organic fluorochemicals which may be present in this product indicate effects including liver disturbances, weight loss, loss of appetite, lethargy, and neurological, pancreatic, adrenal and hematologic effects. There are no known human health effects from anticipated exposure to these organic fluorochemicals when used as intended and instructed.
Sensitization Information:
No data available.
Carcinogenicity:
No data available.
Mutagenicity:

No data available.

Reproductive Effects:

No data available.

Component Based Information:

No data available.

Product Based Information:

No data available.

Other Effects & Information:

A Material Toxicity Summary Sheet (MTSS) has been developed for this product. Please contact the address listed on the first page of this MSDS to obtain a copy of the MTSS for this product. This product may contain one or more organic fluorochemicals that have the potential to be absorbed and remain in the body for long periods of time, either as the parent molecule or as metabolites, and may accumulate with repeated exposures. There are no known human health effects from anticipated exposure to these organic fluorochemicals when used as intended and instructed The presence of organic fluorochemicals in the blood of the general population and subpopulations, such as workers, has been published dating back to the 1970's. 3M's epidemiological study of its own workers indicates no adverse effects.

12 Ecological Information

Environmental Data:

Persistence/Biodegradability:

This product may contain one or more organic fluorochemicals that have the potential to resist degradation and persist in the environment.

Ecotoxicity Data:

No data available.

Ecofate Data:

Other Effects and Information:

96 hour LC50: Fathead minnow (Pimephales promelas): 155 mg/l
Total Organic Carbon (TOC, per gram of product): 0.17 g/g
Chemical Oxygen Demand (COD): 0.004 g/g
20-Day Biochemical Demand (BOD20): Nil Since regulations vary, consult applicable regulations or authorities before disposal.

13 Disposal Considerations

Product as Sold:

No data available.

Product Packaging:

No data available.

Special Instructions:

Since regulations vary, consult applicable regulations or authorities before disposal.

14 Transport Information

Transportation of Dangerous Goods

TDG Classification: Non-Regulated Material
Special Information:

15 Regulatory Information

WHMIS Classification: D2B
NOTE:
This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.
Product Certifications:
The product on this MSDS, or all its components, is included on the following countries' chemical inventories, as noted:

AICS - Australian Inventory of Chemical Substances
DSL - Domestic Substances List (Canada)
EINECS - European Inventory of Existing Commercial Chemical Substances
TSCA - Toxic Substances Control Act (USA)
PICCS - Philippines Inventory of Commercial Chemical Substances
CICS - Chinese Inventory of Chemical Substances

16 Other Information

Reason for Reissue:
The following Sections and topics have been updated or revised:
Section 8 - Exposure Controls/Personal Protection

The information in this Material Safety Data Sheet (MSDS) is believed to be correct as of the date issued. 3M MAKES NO WARRANTIES, EXPRESSED OR IMPLIED, STATUTORY OR OTHERWISE, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OR CONDITION OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR COURSE OF PERFORMANCE OR USAGE OF TRADE. User is responsible for determining whether the 3M product is fit for a particular purpose and suitable for user's method of use or application. Given the variety of factors that can affect the use and application of a 3M product, some of which are uniquely within the user's knowledge and control, it is essential that the user evaluate the 3M product to determine whether it is fit for a particular purpose and suitable for user's method of use or application.

---End---

Från: Philippe Hoff [mailto:phoff@mmm.com]
Skickat: den 1 februari 2018 07:25
Till: Stefan Posner; Marie-Ange.BAUCHER@oecd.org
Kopia: Jacqueline.ALVAREZ@unep.org; lisa.anfalt@kemi.se; sandra.averous@unep.org; Simona.Balan@dtsc.ca.gov; martijn.beekman@rivm.nl; Annegret.Biegel-Engler@uba.de; cecile.blom@miljodir.no; Ex. 6 - Personal Privacy ronald.p.bock@chemours.com; g.brambi@iss.it; tom@greensciencepolicy.org; robert.chenier@canada.ca; ciycandy@korea.kr; Mamady.Cisse@hc-sc.gc.ca; corado.ana@epa.gov; Ex. 6 - Personal Privacy mara.curaba@environnement.belgique.be; jcurry@outdoorindustry.org; reynold.dsouza@sakataindia.com; Jose.DeMesa@unep.org; jacob.duer@unep.org; Chris.Enlow@keenfootwear.com; Ex. 6 - Personal Privacy greg.hammond@ec.gc.ca; skhazra@riskenergy.co.in; Gary Hohenstein; Ex. 6 - Personal Privacy Ex. 6 - Personal Privacy valerie.hourdebaigt@canada.ca; imy@miljodir.no; bjensen@outdoorindustry.org; Ex. 6 - Personal Privacy kezuka-chie@meti.go.jp; khalidiya@yandex.ru; brenda.koekkoek@unep.org; Peter.KORYTAR@ec.europa.eu; krasnic.toni@epa.gov; jessy.kurias@ec.gc.ca; fannie.lalonde@canada.ca; gardenh1@korea.kr; Eeva.LEINALA@oecd.org; jgliu@pku.edu.cn; Lloyd.Tyler@epa.gov; lobar.bryan@epa.gov; annamaria.lopomo@iss.it; richard.luit@rivm.nl; bert-ove.lund@kemi.se; Giuseppina.LUVARA@ec.europa.eu; annmakarova@mail.ru; marco.malvasi@solvay.com; jon.martin@ualberta.ca; Angela.McKinnon@nicnas.gov.au; kevin.munn@unep.org; olga@ewg.org; nazef.laura@epa.gov; HaNTH@moit.gov.vn; kei.ohno-woodall@brsmeas.org; Ex. 6 - Personal Privacy ohzeki-kazuo@meti.go.jp; johanna.peltola-thies@echa.europa.eu; juan.pineros@environnement.belgique.be; Thomas.H.Samples@USA.dupont.com; sneha.satya@nicnas.gov.au; scheringer@chem.ethz.ch; tamar.schlekat@setac.org; kai-volker.schubert@chemours.com; christoph.schulte@uba.de; sebkova@recetox.muni.cz; robert_simon@americanchemistry.com; njsingh@dcmshriram.com; sleasman.katherine@epa.gov; ssoto@minae.go.cr; jessica_steinhilber@americanchemistry.com; stoyanova@economy.gov.ru; georg.streck@ec.europa.eu; Nabila.Taha@ec.gc.ca; josef.tremp@bafu.admin.ch; lena.vierke@uba.de; Melissa.wang@greenpeace.org; zhanyun.wang@chem.ethz.ch; steffen.wengert@bag.admin.ch; graham.white@hc-sc.gc.ca; sebastian.winkler@eeb.org; towin@mst.dk; cora.young@mun.ca; zhao.ziying@mepfeco.org.cn
Ämne: RE: Updated List of PFASs & comments on accompanying report

Dears,

I want to point out that 3M does not produce any PFOS products including the cyclic variants.
We actually do not have a replacement fluoromaterial at all for the hydraulic fluid application.

Best regards,

<image001.gif>

Philippe Hoff| Advanced EMEA Product EHS&R Specialist
REACH Coordination Center
3M Belgium bvba/sprl, Hermeslaan 7, 1831 Diegem, Belgium
Office: +32 27 22 48 70 | Mobile: + Ex. 6 - Personal Privacy
phoff@mmm.com

<image002.png><image003.png><image004.png><image005.png><image006.png><image007.png>

This communication may contain confidential information. If you are not the intended recipient please return this email to the sender and delete it from your records.

From: Stefan Posner [mailto:Stefan.Posner@swerea.se]
Sent: Friday 26 January 2018 23:43
To: Marie-Ange.BAUCHER@oecd.org

Cc: Jacqueline.ALVAREZ@unep.org; lisa.anfalt@kemi.se; sandra.averous@unep.org; Simona.Balan@dtsc.ca.gov; martijn.beekman@rivm.nl; Annegret.Biegel-Engler@uba.de; cecile.blom@miljodir.no; Ex. 6 - Personal Privacy ronald.p.bock@chemours.com; g.brambi@iss.it; tom@greensciencepolicy.org; robert.chenier@canada.ca; ciycandy@korea.kr; Mamady.Cisse@hc-sc.gc.ca; corado.ana@epa.gov; Ex. 6 - Personal Privacy mara.curaba@environnement.belgique.be; jcurry@outdoorindustry.org; reynold.dsouza@sakataindia.com; Jose.DeMesa@unep.org; jacob.duer@unep.org; Chris.Enlow@keenfootwear.com; Ex. 6 - Personal Privacy greg.hammond@ec.gc.ca; skhazra@riskenergy.co.in; Philippe Hoff <phoff@mmm.com>; Gary Hohenstein <gahohenstein@mmm.com>; Ex. 6 - Personal Privacy; Ex. 6 - Personal Privacy valerie.hourdebaigt@canada.ca; imy@miljodir.no; bjensen@outdoorindustry.org; Ex. 6 - Personal Privacy kezuka-chie@meti.go.jp; khalidiya@yandex.ru; brenda.koekkoek@unep.org; Peter.KORYTAR@ec.europa.eu; krasnic.toni@epa.gov; jessy.kurias@ec.gc.ca; fannie.lalonde@canada.ca; gardenh1@korea.kr; Eeva.LEINALA@oecd.org; jgliu@pku.edu.cn; Lloyd.Tyler@epa.gov; lobar.bryan@epa.gov; annamaria.lopomo@iss.it; richard.luit@rivm.nl; bert-ove.lund@kemi.se; Giuseppina.LUVARA@ec.europa.eu; annmakarova@mail.ru; marco.malvasi@solvay.com; jon.martin@ualberta.ca; Angela.McKinnon@nicnas.gov.au; kevin.munn@unep.org; olga@ewg.org; nazef.laura@epa.gov; HaNTH@moit.gov.vn; kei.ohno-woodall@brsmeas.org; Ex. 6 - Personal Privacy ohzeki-kazuo@meti.go.jp; johanna.peltola-thies@echa.europa.eu; juan.pineros@environnement.belgique.be; Thomas.H.Samples@USA.dupont.com; sneha.satya@nicnas.gov.au; scheringer@chem.ethz.ch; tamar.schlekat@setac.org; kai-volker.schubert@chemours.com; christoph.schulte@uba.de; sebkova@recetox.muni.cz; robert_simon@americanchemistry.com; njsingh@dcmshriram.com; sleasman.katherine@epa.gov; ssoto@minae.go.cr; jessica_steinhilber@americanchemistry.com; stoyanova@economy.gov.ru; georg.streck@ec.europa.eu; Nabila.Taha@ec.gc.ca; josef.tremp@bafu.admin.ch; lena.vierke@uba.de; Melissa.wang@greenpeace.org; zhanyun.wang@chem.ethz.ch; steffen.wengert@bag.admin.ch; graham.white@hc-sc.gc.ca; sebastian.winkler@eeb.org; towin@mst.dk; cora.young@mun.ca; zhao.ziying@mepfeco.org.cn
Subject: [EXTERNAL] Re: Updated List of PFASs & comments on accompanying report

Dear Marie-Ange

Please include cyclic PFAS with generic formula CnF2n in the current overview of OECD PFASs.

3M produces cyclic PFOS as a replacement for PFOS in hydrualic fluid oils.

There are repeated CAS overlaps in the spread sheet but I assume you are aware of it.

Kind regards
Stefan Posner

5 jan. 2018 kl. 15:21 skrev "Marie-Ange.BAUCHER@oecd.org" <Marie-Ange.BAUCHER@oecd.org>:

> **To : Members of the OECD/UNEP Global PFC Group**
>
> Dear colleagues,
>
> We wish you a very happy New Year and all the best for 2018! We are looking forward to our continued collaboration this year.

You will find attached the final updated list of PFASs. Thanks a lot to all of you who provided comments. We will be looking next to adding complementary information to the list such as information on uses, etc.

You will also find attached the accompanying report providing information on the methodology used to develop the list. Could you please provide comments on this accompanying report by January 26th?

Once we have integrated your comments on this report, both the list and report will be sent to the Joint Meeting for declassification.

Should you have any questions, do not hesitate to get back to us,

Best wishes,

Marie-Ange

<Final Updated list PFASs.xlsx>

<Summar report_draft_18Dec2017.docx>

*** Attention ***
This electronic mail including attachments is intended only for the person(s) or entity to which it is addressed and may contain confidential and/or legally privileged material and information. Unauthorized disclosure, copying, distribution or use of this material and information may be unlawful and is prohibited. If you are not the intended recipient and have received this mail in error, please contact the sender and delete all contents of the e-mail as well as any copies made. Thank you!

3M Note: This message is from an [EXTERNAL] sender.
If you suspect this message is malicious or spam, please click on the "Report Phishing - PhishMe" icon within the Outlook Ribbon to report it for evaluation, and do NOT open any attachments or click on any links. If you are using OWA, a handheld device, or do not see the icon, please follow the instructions below:
Click here to report this email as spam

*** Attention ***
This electronic mail including attachments is intended only for the person(s) or entity to which it is addressed and may contain confidential and/or legally privileged material and information. Unauthorized disclosure, copying, distribution or use of this material and information may be unlawful and is prohibited. If you are not the intended recipient and have received this mail in error, please contact the sender and delete all contents of the e-mail as well as any copies made. Thank you!

3M Note: This message is from an [EXTERNAL] sender.
If you suspect this message is malicious or spam, please click on the "Report Phishing - PhishMe" icon within the Outlook Ribbon to report it for evaluation, and do NOT open any attachments or click on any links. If you are using OWA, a handheld device, or do not see the icon, please follow the instructions below:
Click here to report this email as spam

*** Attention ***
This electronic mail including attachments is intended only for the person(s) or entity to which it is addressed and may contain confidential and/or legally privileged material and information. Unauthorized disclosure, copying, distribution or use of this material and information may be unlawful and is prohibited. If you are not the intended recipient and have received this mail in error, please contact the sender and delete all contents of the e-mail as well as any copies made. Thank you!

3M Note: This message is from an [EXTERNAL] sender.
If you suspect this message is malicious or spam, please click on the "Report Phishing - PhishMe" icon within the Outlook Ribbon to report it for evaluation, and do NOT open any attachments or click on any links. If you are using OWA, a handheld device, or do not see the icon, please follow the instructions below:
Click here to report this email as spam

*** Attention ***
This electronic mail including attachments is intended only for the person(s) or entity to which it is addressed and may contain confidential and/or legally privileged material and information. Unauthorized disclosure, copying, distribution or use of this material and information may be unlawful and is prohibited. If you are not the intended recipient and have received this mail in error, please contact the sender and delete all contents of the e-mail as well as any copies made. Thank you!

3M Note: This message is from an [EXTERNAL] sender.
If you suspect this message is malicious or spam, please click on the "Report Phishing - PhishMe" icon within the Outlook Ribbon to report it for evaluation, and do NOT open any attachments or click on any links. If you are using OWA, a handheld device, or do not see the icon, please follow the instructions below:
Click here to report this email as spam