



SAFETY DATA SHEET FIBER CONNECTOR CLEANER

According to Appendix D, OSHA Hazard Communication Standard 29 CFR §1910.1200

1. Identification

Product identifier

Product name FIBER CONNECTOR CLEANER

Product number MCC-FCC2, MCC-FCC03M, MCC-FCC2GG, MCC-FCC2P, MCC-FCC2L, MCC-FCC2D, MCC-FCC2GL, MCC-FCC2G, FCC-CLEANER-CONN

Synonyms; trade names NSN: 6850015356196

Recommended use of the chemical and restrictions on use

Application Cleaning agent.

Details of the supplier of the safety data sheet

Supplier MICROCARE CORPORATION

Manufacturer MICROCARE CORPORATION
595 John Downey Drive
New Britain, CT 06051
United States of America
CAGE: OATV9
Tel: + 1 800 638 0125, +1 860-827-0626
Fax: +1 860-827-8105
techsupport@microcare.com

Emergency telephone number

Emergency telephone CHEMTREC 1-800-424-9300 (within the U.S.)
+1 703-741-5970 (from anywhere in the world)

2. Hazard(s) identification

Classification of the substance or mixture

OSHA Regulatory Status This Product is Hazardous under the OSHA Hazard Communication Standard.

Physical hazards Not Classified

Health hazards Acute Tox. 4 - H302 Acute Tox. 4 - H332 STOT SE 1 - H370

Environmental hazards Aquatic Chronic 3 - H412

Human health Prolonged or repeated contact with skin may cause irritation, redness and dermatitis.

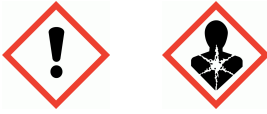
Environmental The product contains a substance which is harmful to aquatic organisms and which may cause long-term adverse effects in the aquatic environment.

Physicochemical Vapors are heavier than air and may travel along the floor and accumulate in the bottom of containers. Gas or vapor displaces oxygen available for breathing (asphyxiant). Not considered to be a significant hazard due to the small quantities used.

Label elements

FIBER CONNECTOR CLEANER

Pictogram



Signal word

Danger

Hazard statements

H302+H332 Harmful if swallowed or if inhaled.
 H370 Causes damage to organs .
 H412 Harmful to aquatic life with long lasting effects.

Precautionary statements

P261 Avoid breathing vapor/ spray.
 P273 Avoid release to the environment.
 P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
 P302+P352 If on skin: Wash with plenty of water.
 P314 Get medical advice/ attention if you feel unwell.
 P501 Dispose of contents/ container in accordance with national regulations.

Supplemental label information

Safety data sheet available on request. For use in industrial installations only.

Contains

METHANOL

Other hazards

This product contains a substance classified as PBT.

3. Composition/information on ingredients

Mixtures

1,1,1,3,3-PENTAFLUOROBUTANE	30-60%
CAS number: 406-58-6	
Classification	
Flam. Liq. 2 - H225	
1,1,1,2,2,3,4,5,5,5-decafluoropentane	30-60%
CAS number: 138495-42-8	
Classification	
Aquatic Chronic 3 - H412	
METHANOL	1-5%
CAS number: 67-56-1	
Classification	
Flam. Liq. 2 - H225	
Acute Tox. 3 - H301	
Acute Tox. 3 - H311	
Acute Tox. 3 - H331	
STOT SE 1 - H370	

The full text for all hazard statements is displayed in Section 16.

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Composition comments The exact percentage (concentration) of composition has been withheld as a trade secret in accordance with paragraph (i) of CFR 1900.1200 TSCA: The ingredients of this product are on the TSCA Inventory.

Composition

4. First-aid measures

Description of first aid measures

General information Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. If breathing stops, provide artificial respiration. Never give anything by mouth to an unconscious person.

Inhalation Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. When breathing is difficult, properly trained personnel may assist affected person by administering oxygen. Get medical attention if any discomfort continues.

Ingestion Never give anything by mouth to an unconscious person. Do not induce vomiting. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Consult a physician for specific advice.

Skin Contact Due to the small packaging, the risk of skin contact is minimal. Remove contaminated clothing and rinse skin thoroughly with water.

Eye contact Rinse immediately with plenty of water. Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 minutes. Get medical attention if any discomfort continues.

Most important symptoms and effects, both acute and delayed

Inhalation Vapors in high concentrations are anesthetic. Symptoms following overexposure may include the following: Headache. Fatigue. Dizziness. Central nervous system depression.

Ingestion Due to the physical nature of this material it is unlikely that swallowing will occur.

Skin contact Prolonged skin contact may cause redness and irritation. Mild dermatitis, allergic skin rash.

Eye contact May cause temporary eye irritation.

Indication of immediate medical attention and special treatment needed

Notes for the doctor No specific recommendations. If in doubt, get medical attention promptly.

5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media The product is not flammable.

Special hazards arising from the substance or mixture

Flammability Class The product is not flammable.

Specific hazards Protection against nuisance dust must be used when the airborne concentration exceeds 10 mg/m³. Containers can burst violently when heated, due to excess pressure build-up.

Hazardous combustion products Oxides of carbon. Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapors.

Advice for firefighters

Protective actions during firefighting Closed containers can burst violently when heated, due to excess pressure build-up. Containers close to fire should be removed or cooled with water. Keep away from heat, sparks and open flame. Thermal decomposition or combustion products may include the following substances: Toxic and corrosive gases or vapors.

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Special protective equipment for firefighters Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Personal precautions Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible. Unless the assessment indicates a higher degree of protection is required, the following protection should be worn: Tight-fitting safety glasses.

Environmental precautions

Environmental precautions Not considered to be a significant hazard due to the small quantities used. Avoid discharge into drains or watercourses or onto the ground. Contain spillage with sand, earth or other suitable non-combustible material.

Methods and material for containment and cleaning up

Methods for cleaning up Absorb spillage with non-combustible, absorbent material. Do not discharge into drains or watercourses or onto the ground.

Reference to other sections For personal protection, see Section 8. See Section 11 for additional information on health hazards.

7. Handling and storage

Precautions for safe handling

Usage precautions Provide adequate ventilation. Avoid contact with skin and eyes.

Conditions for safe storage, including any incompatibilities

Storage precautions Do not store near heat sources or expose to high temperatures.

Storage class The product is not flammable.

Specific end uses(s)

Specific end use(s) The identified uses for this product are detailed in Section 1.

Reference to other sections. Store away from incompatible materials (see Section 10).

8. Exposure Controls/personal protection

Control parameters

Occupational exposure limits

1,1,1,3,3-PENTAFLUOROBUTANE

Long-term exposure limit (8-hour TWA): SUP 1000 ppm

1,1,1,2,2,3,4,5,5,5-decafluoropentane

No information available that would effect occupational exposure limit values.

METHANOL

Long-term exposure limit (8-hour TWA): ACGIH 200 ppm 262 mg/m³

Short-term exposure limit (15-minute): ACGIH 250 ppm 328 mg/m³

Sk

Long-term exposure limit (8-hour TWA): OSHA 200 ppm 260 mg/m³

ACGIH = American Conference of Governmental Industrial Hygienists.

Sk = Danger of cutaneous absorption.

OSHA = Occupational Safety and Health Administration.

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Additional Occupational Exposure Limits

Ingredient comments WEL = Workplace Exposure Limits ACGIH = US Standard.

METHANOL (CAS: 67-56-1)

Biological limit values 15 mg/l

Exposure controls

Protective equipment



Appropriate engineering controls

No specific ventilation requirements. This product must not be handled in a confined space without adequate ventilation.

Eye/face protection

Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible. Unless the assessment indicates a higher degree of protection is required, the following protection should be worn: Tight-fitting safety glasses.

Hand protection

Hand protection not required. Chemical-resistant, impervious gloves complying with an approved standard should be worn if a risk assessment indicates skin contact is possible. It is recommended that gloves are made of the following material: Neoprene.

Hygiene measures

When using do not eat, drink or smoke. No specific hygiene procedures recommended but good personal hygiene practices should always be observed when working with chemical products.

Respiratory protection

No specific recommendations. Respiratory protection must be used if the airborne contamination exceeds the recommended occupational exposure limit.

9. Physical and Chemical Properties

Information on basic physical and chemical properties

Appearance	Clear liquid.
Color	Colorless.
Odor	Slight. Ether.
Odor threshold	No information available.
pH	No information available.
Melting point	No information available.
Initial boiling point and range	45°C @ 101.3 kPa
Flash point	The product is not flammable.
Evaporation rate	No information available.
Evaporation factor	No information available.
Flammability (solid, gas)	No information available.
Upper/lower flammability or explosive limits	Upper flammable/explosive limit: 9.0 %(V) Lower flammable/explosive limit: 7.5 %(V)
Other flammability	No information available.

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Vapor pressure	41.3 kPa @ 25°C
Vapor density	4
Relative density	No information available.
Bulk density	No information available.
Solubility(ies)	Slightly soluble in water.
Partition coefficient	No information available.
Auto-ignition temperature	No information available.
Decomposition Temperature	No information available.
Viscosity	No information available.
Explosive properties	No information available.
Refractive index	No information available.
Particle size	Not applicable.
Molecular weight	No information available.
Volatility	100%
Saturation concentration	No information available.
Critical temperature	No information available.
Volatile organic compound	No information available.

10. Stability and reactivity

Reactivity	Strong alkalis. Chemically-active metals.
Stability	Stable at normal ambient temperatures and when used as recommended.
Possibility of hazardous reactions	Will not polymerize.
Conditions to avoid	Keep away from heat, sparks and open flame. Thermal decomposition or combustion products may include the following substances: Toxic and corrosive gases or vapors.
Materials to avoid	Alkali metals. Alkaline earth metals. Powdered metal. Strong acids.
Hazardous decomposition products	Heating may generate the following products: Toxic and corrosive gases or vapors. Hydrogen fluoride (HF). Hydrogen chloride (HCl). Halogenated hydrocarbons. Carbon dioxide (CO ₂).

11. Toxicological information

Information on toxicological effects

Other health effects	There is no evidence that the product can cause cancer.
<u>Acute toxicity - oral</u>	
ATE oral (mg/kg)	500.0
<u>Acute toxicity - dermal</u>	
ATE dermal (mg/kg)	7,500.0
<u>Acute toxicity - inhalation</u>	

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ATE inhalation (vapours mg/l) 11.0

Inhalation	Vapors may irritate throat/respiratory system. A single exposure may cause the following adverse effects: Coughing. Difficulty in breathing.
Ingestion	May cause stomach pain or vomiting. May cause nausea, headache, dizziness and intoxication.
Skin Contact	Repeated exposure may cause skin dryness or cracking. Product has a defatting effect on skin. May cause allergic contact eczema.
Eye contact	May cause temporary eye irritation.

Toxicological information on ingredients.

1,1,1,3,3-PENTAFLUOROBUTANE

Acute toxicity - oral

Acute toxicity oral (LD₅₀ mg/kg) 2,000.0

Species Rat

ATE oral (mg/kg) 2,000.0

Acute toxicity - inhalation

Acute toxicity inhalation (LC₅₀ vapours mg/l) 100,000.0

Species Rat

ATE inhalation (vapours mg/l) 100,000.0

Specific target organ toxicity - single exposure

STOT - single exposure LOAEL 75100 ppm, Inhalation,

Specific target organ toxicity - repeated exposure

STOT - repeated exposure NOAEC 6 mg/l, Inhalation, Rat

Target organs Liver Kidneys

1,1,1,2,2,3,4,5,5,5-decafluoropentane

Acute toxicity - oral

Acute toxicity oral (LD₅₀ mg/kg) 5,000.0

Species Rat

ATE oral (mg/kg) 5,000.0

Acute toxicity - dermal

Acute toxicity dermal (LD₅₀ mg/kg) 5,000.0

Species Rat

ATE dermal (mg/kg) 5,000.0

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Acute toxicity - inhalation

Acute toxicity inhalation (LC₅₀ vapours mg/l) 114.0

Species Rat

ATE inhalation (vapours mg/l) 114.0

Skin corrosion/irritation

Animal data Not irritating. Rabbit

Human skin model test Data lacking.

Extreme pH Not applicable. Not corrosive to skin.

Serious eye damage/irritation

Serious eye damage/irritation Not irritating. Rabbit

Respiratory sensitization

Respiratory sensitization Data lacking.

Skin sensitization

Skin sensitization Not sensitizing. - Guinea pig: Not sensitizing.

Germ cell mutagenicity

Genotoxicity - in vitro This substance has no evidence of mutagenic properties.

Genotoxicity - in vivo This substance has no evidence of mutagenic properties.

Carcinogenicity

Carcinogenicity Does not contain any substances known to be carcinogenic.

IARC carcinogenicity Not listed.

NTP carcinogenicity Not listed.

OSHA Carcinogenicity Not listed.

Reproductive toxicity

Reproductive toxicity - fertility No evidence of reproductive toxicity in animal studies.

Skin Contact Skin irritation should not occur when used as recommended. May cause defatting of the skin but is not an irritant.

Eye contact May cause eye irritation.

Acute and chronic health hazards There is no evidence that the product can cause cancer.

METHANOL

Acute toxicity - oral

ATE oral (mg/kg) 100.0

Acute toxicity - dermal

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ATE dermal (mg/kg)	300.0
<u>Acute toxicity - inhalation</u>	
Acute toxicity inhalation (LC₅₀ vapours mg/l)	87.5
ATE inhalation (vapours mg/l)	87.5

12. Ecological Information

Ecotoxicity The product contains a substance which has a photochemical ozone creation potential. The product contains a substance or substances that will contribute to global warming (greenhouse effect). The product contains a substance which is harmful to aquatic organisms.

Ecological information on ingredients.

1,1,1,2,2,3,4,5,5,5-decafluoropentane

Ecotoxicity It is unlikely that the substance will dissolve in water in amounts big enough to have a toxic effect on fish and daphnies.

Toxicity Not known.

Ecological information on ingredients.

1,1,1,2,2,3,4,5,5,5-decafluoropentane

Acute toxicity - fish LC₅₀, 96 hours: 13.9 mg/l, Onchorhynchus mykiss (Rainbow trout)

Acute toxicity - aquatic invertebrates LC₅₀, 48 hours: 11.7 mg/l, Daphnia magna

Acute toxicity - aquatic plants EC₅₀, 72 hours: >120 mg/l, Algae

METHANOL

Acute toxicity - fish LC₅₀, 96 hours: >100 mg/l, Pimephales promelas (Fat-head Minnow)

Acute toxicity - aquatic invertebrates EC₅₀, 48 hours: >10000 mg/l, Daphnia magna

Persistence and degradability

Persistence and degradability The product contains mainly inorganic substances which are not biodegradable. The other substances in the product are expected to be readily biodegradable.

Bioaccumulative potential

Bio-Accumulative Potential No data available on bioaccumulation.

Partition coefficient No information available.

Ecological information on ingredients.

1,1,1,2,2,3,4,5,5,5-decafluoropentane

Bio-Accumulative Potential Bioaccumulation is unlikely to be significant because of the low water-solubility of this product.

Partition coefficient Pow: 2.7

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METHANOL

Partition coefficient : -0.77

Mobility in soil

Mobility The product contains volatile substances which may spread in the atmosphere.

Other adverse effects

Other adverse effects The product contains a substance or substances that will contribute to global warming (greenhouse effect).

13. Disposal considerations

Waste treatment methods

General information Waste is classified as hazardous waste. Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority. Reuse or recycle products wherever possible.

Disposal methods Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.

14. Transport information

General Not regulated. The product is not covered by international regulations on the transport of dangerous goods (IMDG, IATA, DOT).

UN proper shipping name

Not regulated. No information required.

Transport hazard class(es)

Not applicable.

Transport labels

No transport warning sign required.

Packing group

Not applicable.

Environmental hazards

Environmentally Hazardous Substance

No.

Special precautions for user

Not applicable. No information required.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable. No information required.

15. Regulatory information

US Federal Regulations

SARA Section 302 Extremely Hazardous Substances Tier II Threshold Planning Quantities

Not listed.

CERCLA/Superfund, Hazardous Substances/Reportable Quantities (EPA)

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METHANOL

Final CERCLA RQ: 5000(2270) pounds (Kilograms)

SARA Extremely Hazardous Substances EPCRA Reportable Quantities

Not listed.

SARA 313 Emission Reporting

METHANOL

1.0 %

CAA Accidental Release Prevention

Not listed.

OSHA Highly Hazardous Chemicals

Not listed.

US State Regulations

California Proposition 65 Carcinogens and Reproductive Toxins

METHANOL

Known to the State of California to cause developmental and reproductive toxicity.

California Air Toxics "Hot Spots" (A-I)

METHANOL

Present.

California Air Toxics "Hot Spots" (A-II)

Not listed.

California Directors List of Hazardous Substances

METHANOL

Present.

Massachusetts "Right To Know" List

METHANOL

Present.

Rhode Island "Right To Know" List

METHANOL

Present.

Minnesota "Right To Know" List

METHANOL

Present.

New Jersey "Right To Know" List

METHANOL

Present.

Pennsylvania "Right To Know" List

FIBER CONNECTOR CLEANER

METHANOL

Present.

Inventories

Canada - DSL/NDSL

1,1,1,3,3-PENTAFLUOROBUTANE

DSL

METHANOL

DSL

1,1,1,2,2,3,4,5,5,5-decafluoropentane

DSL

US - TSCA

Yes

1,1,1,3,3-PENTAFLUOROBUTANE

Present.

METHANOL

Present.

1,1,1,2,2,3,4,5,5,5-decafluoropentane

Present.

1,1,1,2,2,3,4,5,5,5-DECAFLUOROPENTANE (CAS# 138495-42-8) is controlled by TSCA Section 5, Significant New Use Rule

(SNUR; 40 CFR 721.5645) The approved uses are: precision and general cleaning, carrier fluid, displacement drying, printed circuit board cleaning, particulate removal and film cleaning, process medium, heat transfer fluid (dielectric and non-dielectric), and test fluid. Processors and users of this substance must also comply with the applicable general SNUR requirements set forth in 40 CFR 721 subpart A, including export notification requirements if applicable (40 CFR 721.20), and the applicable record keeping requirements set forth at 40 CFR 721.125.

1,1,1,2,2,3,4,5,5,5-Decafluoropentane 138495-42-8

The United States Environmental Protection Agency (USEPA) has established a Significant New Use Rule (SNUR) for one of the components in this product. This material contains one or more substances which requires export notification under TSCA Section 12(b) and 40 CFR Part 707 Subpart D:

16. Other information

Revision comments	NOTE: Lines within the margin indicate significant changes from the previous revision.
Revision date	12/7/2017
Revision	39
Supersedes date	12/6/2017
SDS No.	BULK - FCC2
SDS status	Approved.

FIBER CONNECTOR CLEANER

Hazard statements in full

H225 Highly flammable liquid and vapor.
H301 Toxic if swallowed.
H302 Harmful if swallowed.
H311 Toxic in contact with skin.
H331 Toxic if inhaled.
H332 Harmful if inhaled.
H370 Causes damage to organs .
H412 Harmful to aquatic life with long lasting effects.

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.



MATERIAL SAFETY DATA SHEET

PPF1 FIBER PREPARATION FLUID

1 CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME	PPF1 FIBER PREPARATION FLUID	MANUFACTURER	MICROCARE CORPORATION
PRODUCT NO.	MCC-PPF1, MCC-PPF03M, FPFC3M, FCC-CLEANER-FIBER, MCC-PPFG, MCC-PPF1P		595 John Downey Drive
SYNONYMS, TRADE NAMES	NSN: 6850015464699		New Britain, CT 06019
			United States of America
			CAGE: OATV9
			+1 860-827-0626
			+1 860-827-8105
			techsupport@microcare.com
EMERGENCY TELEPHONE	CHEMTREC (800) 424-9300		

2 HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

Colorless liquid Slight odor of alcohol This product is not flammable. Prolonged contact may cause redness, irritation and dry skin. Vapors are heavier than air and may travel along the floor and in the bottom of containers. Keep out of reach of children.

ENVIRONMENT

The product contains a substance which is harmful to aquatic organisms and which may cause long term adverse effects in the aquatic environment.

PHYSICAL AND CHEMICAL HAZARDS

Vapors are heavier than air and may travel along the floor and in the bottom of containers. Gas or vapor displaces oxygen available for breathing (asphyxiant). Considering the limited amount applied during use and the size of the container, the risk of adverse effects is considered small.

HUMAN HEALTH

Prolonged skin contact may cause redness, irritation and dry skin. Mild dermatitis, allergic skin rash.

POTENTIAL HEALTH EFFECTS

INHALATION

Vapors may irritate the respiratory system and cause coughing, asthmatic breathing and breathlessness.

INGESTION

May cause stomach pain or vomiting. May cause nausea, headache, dizziness and intoxication.

SKIN CONTACT

Repeated exposure may cause skin dryness or cracking. Acts as a defatting agent on skin. May cause cracking of skin, and eczema.

EYE CONTACT

May cause temporary eye irritation.

3 COMPOSITION/INFORMATION ON INGREDIENTS

Name	EC No.	CAS-No.	Weight
1,1,1,2,3,4,4,5,5,5-decafluoropentane	420-640-8	138495-42-8	60-100%
PROPAN-2-OL	200-661-7	67-63-0	30-60%

4 FIRST-AID MEASURES

GENERAL INFORMATION

Provide fresh air, warmth and rest, preferably in comfortable upright sitting position. Perform artificial respiration if breathing has stopped. Do not give victim anything to drink if they are unconscious.

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INHALATION

Move into fresh air and keep at rest. Get medical attention if any discomfort continues.

INGESTION

DO NOT INDUCE VOMITING! Immediately rinse mouth and drink plenty of water (200-300 ml). Do not give victim anything to drink if they are unconscious. Consult a physician for specific advice.

SKIN CONTACT

Remove contaminated clothes and rinse skin thoroughly with water.

EYE CONTACT

Immediately flush with plenty of water for up to 15 minutes. Remove any contact lenses and open eyes wide apart. Contact physician if discomfort continues.

5 FIRE-FIGHTING MEASURES

EXTINGUISHING MEDIA

This product is not flammable.

SPECIAL FIRE FIGHTING PROCEDURES

Containers close to fire should be removed or cooled with water. Avoid contact with naked flames and hot surfaces as corrosive and toxic decomposition products can be formed.

UNUSUAL FIRE & EXPLOSION HAZARDS

Containers can burst violently when heated, due to excess pressure build-up.

SPECIFIC HAZARDS

In case of fire, toxic gases may be formed.

PROTECTIVE MEASURES IN FIRE

Self contained breathing apparatus and full protective clothing must be worn in case of fire.

FLAMMABILITY LIMIT - 5.0

LOWER(%)

FLAMMABILITY LIMIT - UPPER(%) 11.0

FLASH POINT (°C) None TCC (Tag closed cup).

6 ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS

Wear approved, tight fitting safety glasses where splashing is probable.

ENVIRONMENTAL PRECAUTIONS

Avoid discharge into drains, water courses or onto the ground. Contain spillages with sand, earth or any suitable adsorbent material.

SPILL CLEAN UP METHODS

Absorb spillage with suitable absorbent material.

7 HANDLING AND STORAGE

HANDLING

Provide good ventilation. Avoid contact with skin and eyes.

STORAGE

Do not store near heat sources or expose to high temperatures.

STORAGE CLASS

This product is not flammable.

8 EXPOSURE CONTROLS/PERSONAL PROTECTION

PROTECTIVE EQUIPMENT



ENGINEERING MEASURES

No specific ventilation requirements noted, except this product must not be used in a confined space without good ventilation.

FPF1 FIBER PREPARATION FLUID

RESPIRATORY EQUIPMENT

No specific recommendation made, but respiratory protection must be used if the general level exceeds the Recommended Occupational Exposure Limit

HAND PROTECTION

Hand protection not required. For prolonged or repeated skin contact use suitable protective gloves. Neoprene gloves are recommended.

EYE PROTECTION

Wear approved, tight fitting safety glasses where splashing is probable.

HYGIENE MEASURES

When using do not eat, drink or smoke. No specific hygiene procedures noted, but good personal hygiene practices are always advisable, especially when working with chemicals.

9 PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE	Clear liquid		
COLOR	Colorless		
ODOR	Slight odor of alcohol		
VOLATILITY DESCRIPTION	Volatile.		
SOLUBILITY	Slightly soluble in water.		
UDF Phrase 1	This product is not flammable.		
This product is not flammable.			
BOILING POINT (°C)	54 C / 129 F (calculated)	VAPOR DENSITY (air=1)	4
VAPOR PRESSURE	226 mm Hg 25 C / 77 F	FLASH POINT (°C)	None TCC (Tag closed cup).

10 STABILITY AND REACTIVITY

STABILITY

Stable under normal temperature conditions and recommended use.

CONDITIONS TO AVOID

Avoid contact with naked flames and hot surfaces as corrosive and toxic decomposition products can be formed.

HAZARDOUS POLYMERISATION

Will not polymerize.

MATERIALS TO AVOID

Alkali metals. Alkali earth metals. Powdered metal.

HAZARDOUS DECOMPOSITION PRODUCTS

Fire or high temperatures may form toxic and corrosive vapors. Hydrogen fluoride (HF). Halogenated hydrocarbons. Carbon dioxide (CO₂).

11 TOXICOLOGICAL INFORMATION

Name	PROPAN-2-OL
Toxic Dose 1 - LD 50	5045 mg/kg (oral rat)
Toxic Dose 2 - LD 50	3600 mg/kg (oral-mouse)
Toxic Conc. - LC 50	16,000 ppm/1h (inh-rat)
Name	1,1,1,2,3,4,4,5,5,5-decafluoropentane
Toxic Dose 1 - LD 50	>5,000 mg/kg (oral rat)
Toxic Conc. - LC 50	114 mg/l/4h (inh-rat)

12 ECOLOGICAL INFORMATION

LC 50, 96 hrs, Fish mg/l 27.2

EC 50, 48 hrs, Daphnia, mg/l 11.7

BIOACCUMULATION

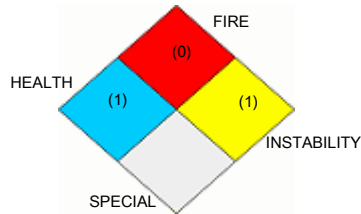
No data available on bioaccumulation.

Name	PROPAN-2-OL
LC 50, 96 hrs, Fish mg/l	9,640
EC 50, 48 hrs, Daphnia, mg/l	5102
IC 50, 72 hrs, Algae, mg/l	>2,000
Name	1,1,1,2,3,4,4,5,5,5-decafluoropentane

FPF1 FIBER PREPARATION FLUID

HEALTH	1
FLAMMABILITY	0
PHYSICAL	1
PERSONAL PROTECTION	supervisor fc

NATIONAL FIRE PROTECTION ASSOCIATION (NFPA)



REVISION COMMENTS

NOTE: Lines within the margin indicate significant changes from the previous revision.

REVISION DATE 12/06/2009

VERSION No. 2

SAFETY DATA SHEET STATUS

Approved.

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