



MATERIAL SAFETY DATA SHEET FCC2 FIBER CONNECTOR CLEANER

1 IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

PRODUCT NAME	FCC2 FIBER CONNECTOR CLEANER
PRODUCT NO.	MCC-FCC2, MCC-FCC03M, MCC-FCC2GG, MCC-FCC2P
SYNONYMS, TRADE NAMES	NSN: 6850015356196
PRODUCT USE	Cleaning agent.
SUPPLIER	MICROCARE CORPORATION 595 John Downey Drive New Britain, CT 06051 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

Colourless liquid. Slight odor. Ether This product is not flammable. Prolonged or repeated contact with skin may cause redness, itching, irritation and eczema/chapping. No specific ventilation requirements noted, except this product must not be used in a confined space without good ventilation.

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 or repeated contact with skin may cause redness, itching, irritation and eczema/chapping.

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.	Content %
1,1,1,2,3,4,4,5,5,5-decafluoropentane	420-640-8	138495-42-8	30-60%
METHANOL	200-659-6	67-56-1	1-5%
PENTAFLUOROBUTANE		406-58-6	30-60%

4 FIRST-AID MEASURES

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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.

NOTES TO THE PHYSICIAN

No recommendation given, but first aid may still be required in case of accidental exposure, inhalation or ingestion of this chemical. If in doubt, GET MEDICAL ATTENTION PROMPTLY!

INHALATION

Move into fresh air and keep at rest. If respiratory problems, artificial respiration/oxygen. Get medical attention if any discomfort continues.

INGESTION

NEVER MAKE AN UNCONSCIOUS PERSON VOMIT OR DRINK FLUIDS! Do not induce vomiting. If vomiting occurs, the head should be kept low so that stomach vomit doesn't 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 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

Closed containers can burst violently when heated, due to excess pressure build-up. 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 - 7.5

LOWER(%)

FLAMMABILITY LIMIT - UPPER(%) 9.0

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

FLAMMABILITY CLASS

This product is not flammable.

6 ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS

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

ENVIRONMENTAL PRECAUTIONS

Considering the limited amount applied during use and the size of the container, the risk of adverse effects is considered small. 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. Large quantities should not be discharged into the drain but removed with absorbing 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

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PROTECTIVE EQUIPMENT



ENGINEERING MEASURES

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

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	Colourless.
ODOR	Slight odor. Ether
VOLATILITY DESCRIPTION	Volatile
SOLUBILITY	Slightly soluble in water.
Flammability	This product is not flammable.
BOILING POINT (°C)	45
VAPOR DENSITY (air=1)	4
VAPOR PRESSURE	310 mm Hg 20
VOLATILE BY VOL. (%)	100
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 polymerise.

MATERIALS TO AVOID

Alkali metals. Alkali earth metals. Powdered metal. Strong acids.

HAZARDOUS DECOMPOSITION PRODUCTS

When heated, toxic and corrosive vapors/gases may be formed. Hydrogen fluoride (HF). Hydrogen chloride (HCl). Halogenated hydrocarbons. Carbon dioxide (CO₂).

11 TOXICOLOGICAL INFORMATION

Name	METHANOL
Toxic Dose 1 - LD 50	13000 mg/kg (oral 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	11,100 ppm/4h (inh-rat)

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Name	PENTAFLUOROBUTANE
Toxic Dose 1 - LD 50	>2000 mg/kg (oral rat)
Toxic Conc. - LC 50	25000 ppm/4h (inh-rat)
Other Health Effects	
IARC Not Listed. OSHA Not Regulated.	

12 ECOLOGICAL INFORMATION

ECOTOXICITY

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

BIOACCUMULATION

No data available on bioaccumulation.

Name	METHANOL
LC 50, 96 Hrs, Fish mg/l	1368
Name	1,1,1,2,3,4,4,5,5,5-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.

LC 50, 96 Hrs, Fish mg/l	27.2
IC 50, 72 Hrs, Algae, mg/l	120

Bio-accumulative potential

Bioaccumulation is unlikely to be significant because of the low water solubility of this product.

Degradability

The product is not expected to be biodegradable.

Name	PENTAFLUOROBUTANE
LC 50, 96 Hrs, Fish mg/l	>200
EC 50, 48 Hrs, Daphnia, mg/l	>200
IC 50, 72 Hrs, Algae, mg/l	113

Mobility

The product has poor water-solubility.

Bio-accumulative potential

Bioaccumulation is unlikely to be significant because of the low water solubility of this product.

Degradability

The product is heavily biodegradable.

13 DISPOSAL CONSIDERATIONS

WASTE MANAGEMENT

Waste is classified as hazardous waste. Disposal to licensed waste disposal site in accordance with the local Waste Disposal Authority. Recover and reclaim or recycle, if practical.

DISPOSAL METHODS

Dispose of waste and residues in accordance with local authority requirements.

14 TRANSPORT INFORMATION

TRANSPORT NOTES	Not regulated. The product is not covered by international regulation on the transport of dangerous goods (IMDG, IATA, DOT).
	No transport warning sign required.
MARKINGS	None.

15 REGULATORY INFORMATION

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INVENTORIES

COMPONENT	CAN	US	EU	AUS	JAP	KOR	CHN	PHLP
METHANOL	DSL	Yes.						
1,1,1,2,3,4,4,5,5,5-decafluoropentane	DSL	Yes.						
PENTAFLUOROBUTANE	DSL	Yes.						

COMPONENT	TSCA 12(b) Export Notification
1,1,1,2,3,4,4,5,5,5-decafluoropentane	Yes.
PENTAFLUOROBUTANE	No.

SARA (311/312) HAZARD CATEGORIES

None.

REGULATORY STATUS (US)

TSCA: The ingredients of this product are on the TSCA Inventory. SECTION 313: This product does not contain toxic chemical subject to the reporting requirements of Section 313 of Title III of the Superfund Amendment and Reauthorization Act of 1986 and 40 CFR Part 372.

REGULATORY REFERENCES

29 CFR 1910.1010 Federal Regulations (OSHA Standard). NFPA30 Flammable and Combustible Liquids Code.

WORKPLACE HAZARDOUS MATERIALS INFORMATION SYSTEM -WHMIS

LABEL(S) FOR SUPPLY



Materials Causing Other
Toxic Effects.

CONTROLLED PRODUCT CLASSIFICATION

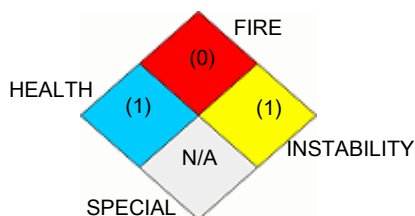
Canadian WHMIS Classification D2B WORKPLACE HAZARDOUS MATERIALS INFORMATION SYSTEM (CPR SECTION (33)) This product has been classified according to the hazard criteria of the Controlled Product Regulations, and the MSDS contains all required information.

16 OTHER INFORMATION

HAZARDOUS MATERIAL INFORMATION SYSTEM (HMIS)

HEALTH	1
FLAMMABILITY	0
PHYSICAL	1
PERSONAL PROTECTION	N/A.

NATIONAL FIRE PROTECTION ASSOCIATION (NFPA)



REVISION COMMENTS

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

REVISION DATE

10/04/2011

VERSION No.

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SAFETY DATA SHEET STATUS

Approved.

DATE

May 19, 2009

DISCLAIMER

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 o