



## MATERIAL SAFETY DATA SHEET

### FCC2 FIBER CONNECTOR CLEANER

#### 1 CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

<b>PRODUCT NAME</b>	FCC2 FIBER CONNECTOR CLEANER	<b>MANUFACTURER</b>	MICROCARE CORPORATION
<b>PRODUCT NO.</b>	MCC-FCC2, MCC-FCC03M, MCC-FCC2GG, MCC-FCC2P		595 John Downey Drive
<b>SYNONYMS, TRADE NAMES</b>	NSN: 6850015356196		New Britain, CT 06019
			United States of America
			CAGE: OATV9
			+1 860-827-0626
			+1 860-827-8105
			techsupport@microcare.com
<b>EMERGENCY TELEPHONE</b>	CHEMTREC (800) 424-9300		

#### 2 HAZARDS IDENTIFICATION

##### EMERGENCY OVERVIEW

Colorless 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 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	30-60%
METHANOL	200-659-6	67-56-1	1-5%
PENTAFLUOROBUTANE		406-58-6	30-60%

#### 4 FIRST-AID MEASURES

## FCC2 FIBER CONNECTOR CLEANER

### 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.

#### 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 - 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

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



## FCC2 FIBER CONNECTOR CLEANER

### 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	Colorless		
ODOR	Slight odor Ether		
VOLATILITY DESCRIPTION	Volatile.		
SOLUBILITY	Slightly soluble in water.		
UDF Phrase 1	This product is not flammable.		
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 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	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	114 mg/l/4h (inh-rat)
Name	PENTAFLUOROBUTANE
Toxic Dose 1 - LD 50	>2000 mg/kg (oral rat)
Toxic Conc. - LC 50	25000 ppm/4h (inh-rat)

## 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.

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<b>Name</b>	METHANOL
<b>LC 50, 96 hrs, Fish mg/l</b>	1368
<b>Name</b>	1,1,1,2,3,4,4,5,5,5-decafluoropentane
<b>LC 50, 96 hrs, Fish mg/l</b>	13
<b>IC 50, 72 hrs, Algae, mg/l</b>	120
<b>Name</b>	PENTAFLUOROBUTANE
<b>LC 50, 96 hrs, Fish mg/l</b>	>200
<b>EC 50, 48 hrs, Daphnia, mg/l</b>	>200
<b>IC 50, 72 hrs, Algae, mg/l</b>	113

**Bioaccumulation potential**

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

**Degradability**

The product is not readily biodegradable.

### 13 DISPOSAL CONSIDERATIONS

**WASTE MANAGEMENT**

Waste is classified as hazardous waste. Disposal to licensed waste disposal site in accordance with the local Waste Diposal 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, ADR/RID).

**MARKINGS**

None

### 15 REGULATORY INFORMATION

**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**

### FCC2 FIBER CONNECTOR CLEANER



Materials Causing  
Other Toxic  
Effects.

#### CONTROLLED PRODUCT CLASSIFICATION

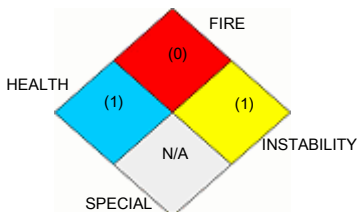
Canadian WHMIS Classification D2B WORKPLACE HAZARDOUS MATERIALS INFORMATION SYSTEM (CPR SECTION (33)) This product has been classified according to the hazard criteria of the Controlled Product Regulations, and the MSDS contains all required information.

#### 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 12/06/2009

VERSION No. 5

##### SAFETY DATA SHEET STATUS

Approved.

DATE May 19, 2009

#### DISCLAIMER

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