SAFETY DATA SHEET
POC - FIBER OPTIC SPLICE & CONNECTOR CLEANER

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product name: POC - FIBER OPTIC SPLICE & CONNECTOR CLEANER

Product number: MCC-POCGL, MCC-POC03M, MCC-POCP, MCC-POCL, MCC-POCG, MCC-POCGG, MCC-POCD, POC03D, POC03GG, POC03GL, MCC-POC10M

Synonyms; trade names: NSN: 6850-01-592-9391; NATO: 6850-99-328-5073

1.2. Relevant identified uses of the substance or mixture and uses advised against

Identified uses: Cleaning agent.

Uses advised against: No specific uses advised against are identified.

1.3. Details of the supplier of the safety data sheet

Supplier: MICROCARE EUROPE BVBA
VEKESTRAAT 29 B11
INDUSTRIEZONE ‘T SAS
1910 KAMPENHOUT, Belgium
+32.2.251.95.05
techsupport@microcare.com

Manufacturer: MICROCARE EUROPE BVBA
VEKESTRAAT 29 B11
INDUSTRIEZONE ‘T SAS
1910 KAMPENHOUT, Belgium
Phone +32.2.251.95.05
Fax +32.2.400.96.39
EuroSales@MicroCare.com

1.4. Emergency telephone number

Emergency telephone: CHEMTREC UK (London) +(44)-870-8200418 +1 703-741-5970 (from anywhere in the world)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

Physical hazards: Not Classified
Health hazards: Not Classified
Environmental hazards: Not Classified

2.2. Label elements

Hazard statements: NC Not Classified
Supplemental label information: EUH210 Safety data sheet available on request.
RCH001a For use in industrial installations only.
POC - FIBER OPTIC SPLICE & CONNECTOR CLEANER

2.3. Other hazards
This product does not contain any substances classified as PBT or vPvB.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

<table>
<thead>
<tr>
<th>Compound</th>
<th>Percentage</th>
<th>CAS number</th>
<th>EC number</th>
<th>REACH registration number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Methyl Nonafluorobutyl Ether</td>
<td>30-60%</td>
<td>163702-07-6</td>
<td>422-270-2</td>
<td>01-0000016878-53-0001</td>
</tr>
<tr>
<td>Classification</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Methyl Nonafluoroisobutyl Ether</td>
<td>30-60%</td>
<td>163702-08-7</td>
<td>422-270-2</td>
<td>01-0000016878-53-0001</td>
</tr>
<tr>
<td>Classification</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PROPAN-2-OL</td>
<td>5-10%</td>
<td>67-63-0</td>
<td>200-661-7</td>
<td></td>
</tr>
</tbody>
</table>

Classification
Not Classified

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

Composition comments
The data shown are in accordance with the latest EC Directives.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information
If in doubt, get medical attention promptly. Show this Safety Data Sheet to the medical personnel.

Inhalation
No specific recommendations. If throat irritation or coughing persists, proceed as follows. Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Loosen tight clothing such as collar, tie or belt. Get medical attention if any discomfort continues.

Ingestion
No specific recommendations. If throat irritation or coughing persists, proceed as follows. Rinse mouth. Get medical attention if any discomfort continues.

Skin contact
No specific recommendations. Rinse with water. Get medical attention if any discomfort continues.

Eye contact
Remove any contact lenses and open eyelids wide apart. Rinse with water. Get medical attention if any discomfort continues.

Protection of first aiders
Use protective equipment appropriate for surrounding materials.

4.2. Most important symptoms and effects, both acute and delayed
POC - FIBER OPTIC SPLICE & CONNECTOR CLEANER

General information
The severity of the symptoms described will vary dependent on the concentration and the length of exposure.

Inhalation
No specific symptoms known. Spray/mists may cause respiratory tract irritation.

Ingestion
No specific symptoms known. May cause discomfort if swallowed.

Skin contact
No specific symptoms known. May cause discomfort.

Eye contact
No specific symptoms known. May be slightly irritating to eyes.

4.3. Indication of any immediate medical attention and special treatment needed
Notes for the doctor
Treat symptomatically.

Specific treatments
No special treatment required.

SECTION 5: Firefighting measures

5.1. Extinguishing media
Suitable extinguishing media
The product is not flammable. Extinguish with alcohol-resistant foam, carbon dioxide, dry powder or water fog. Use fire-extinguishing media suitable for the surrounding fire.

Unsuitable extinguishing media
Do not use water jet as an extinguisher, as this will spread the fire.

5.2. Special hazards arising from the substance or mixture
Specific hazards
Containers can burst violently or explode when heated, due to excessive pressure build-up.

Hazardous combustion products
Thermal decomposition or combustion products may include the following substances: Harmful gases or vapours.

5.3. Advice for firefighters
Protective actions during firefighting
Avoid breathing fire gases or vapours. Evacuate area. Cool containers exposed to heat with water spray and remove them from the fire area if it can be done without risk. Cool containers exposed to flames with water until well after the fire is out. If a leak or spill has not ignited, use water spray to disperse vapours and protect men stopping the leak.

Special protective equipment for firefighters
Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing. Firefighter’s clothing conforming to European standard EN469 (including helmets, protective boots and gloves) will provide a basic level of protection for chemical incidents.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures
Personal precautions
No specific recommendations. For personal protection, see Section 8.

6.2. Environmental precautions
Environmental precautions
Avoid discharge into drains or watercourses or onto the ground.

6.3. Methods and material for containment and cleaning up
Methods for cleaning up
Reuse or recycle products wherever possible. Absorb spillage to prevent material damage. Flush contaminated area with plenty of water. Wash thoroughly after dealing with a spillage. Dispose of contents/container in accordance with national regulations.

6.4. Reference to other sections
Reference to other sections
For personal protection, see Section 8. For waste disposal, see Section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling
POC - FIBER OPTIC SPLICE & CONNECTOR CLEANER

Usage precautions
Read and follow manufacturer's recommendations. Wear protective clothing as described in Section 8 of this safety data sheet. Keep away from food, drink and animal feeding stuffs. Handle all packages and containers carefully to minimise spills. Keep container tightly sealed when not in use. Avoid the formation of mists.

Advice on general occupational hygiene
Wash promptly if skin becomes contaminated. Take off contaminated clothing. Wash contaminated clothing before reuse.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions
Store away from incompatible materials (see Section 10). No specific recommendations.

Storage class
Unspecified storage.

7.3. Specific end use(s)

Specific end use(s)
The identified uses for this product are detailed in Section 1.2.

Usage description
Cleaning agent.

SECTION 8: Exposure controls/Personal protection

8.1. Control parameters

Occupational exposure limits
Methyl Nonafluorobutyl Ether
Long-term exposure limit (8-hour TWA): 750 ppm

Methyl Nonfluoroisobutyl Ether
Long-term exposure limit (8-hour TWA): 750 ppm

PROPAN-2-OL
Long-term exposure limit (8-hour TWA): WEL 400 ppm 999 mg/m³
Short-term exposure limit (15-minute): WEL 500 ppm 1250 mg/m³
WEL = Workplace Exposure Limit

Additional Occupational Exposure Limits

Ingredient comments
WEL = Workplace Exposure Limits Threshold Limit Values (2005), ACGIH, by the American Conference on Governmental Industrial Hygienists. ACGIH = US Standard. SUP = Supplier's recommendation. EU = Indicative Values according to Commission Directive 91/322/EEC.

8.2. Exposure controls

Protective equipment

Appropriate engineering controls
No specific ventilation requirements.

Eye/face protection
No specific eye protection required during normal use. Large Spillages: Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible.

Hand protection
No specific hand protection recommended. Large Spillages: Wear protective gloves.

Hygiene measures
Wash after use and before eating, smoking and using the toilet. Do not eat, drink or smoke when using this product.
POC - FIBER OPTIC SPLICE & CONNECTOR CLEANER

Respiratory protection
No specific recommendations. Provide adequate ventilation. Large Spillages: If ventilation is inadequate, suitable respiratory protection must be worn.

Environmental exposure controls
Not regarded as dangerous for the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Clear liquid</td>
</tr>
<tr>
<td>Colour</td>
<td>Colourless</td>
</tr>
<tr>
<td>Odour</td>
<td>Slight alcoholic</td>
</tr>
<tr>
<td>Odour threshold</td>
<td>No information available</td>
</tr>
<tr>
<td>pH</td>
<td>No information available</td>
</tr>
<tr>
<td>Melting point</td>
<td>No information available. Not applicable.</td>
</tr>
<tr>
<td>Initial boiling point and range</td>
<td>54°C/129°F @ 101.3 kPa</td>
</tr>
<tr>
<td>Flash point</td>
<td>The product is not flammable. On basis of test data. Tag Closed Cup (ASTM D 56)</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>58 (BUOAC = 1)</td>
</tr>
<tr>
<td>Evaporation factor</td>
<td>No information available</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>No information available</td>
</tr>
<tr>
<td>Upper/lower flammability or explosive limits</td>
<td>Upper flammable/explosive limit: 16.7 %(V) ASTM E681 Lower flammable/explosive limit: 4.0 %(V) ASTM E681</td>
</tr>
<tr>
<td>Vapour pressure</td>
<td>27.6 kPa @ 25°C</td>
</tr>
<tr>
<td>Vapour density</td>
<td>7.0</td>
</tr>
<tr>
<td>Relative density</td>
<td>1.48 (H2O = 1) @ 25°C</td>
</tr>
<tr>
<td>Bulk density</td>
<td>No information available</td>
</tr>
<tr>
<td>Solubility(ies)</td>
<td>Slightly soluble in water. &gt;10%</td>
</tr>
<tr>
<td>Partition coefficient</td>
<td>No information available</td>
</tr>
<tr>
<td>Auto-ignition temperature</td>
<td>443°C ASTM E659</td>
</tr>
<tr>
<td>Decomposition Temperature</td>
<td>No information available</td>
</tr>
<tr>
<td>Viscosity</td>
<td>&lt;=0.01 Pa s @ 23°C</td>
</tr>
<tr>
<td>Explosive properties</td>
<td>No information available</td>
</tr>
<tr>
<td>Global Warming Potential (GWP)</td>
<td></td>
</tr>
</tbody>
</table>

9.2. Other information

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Refractive index</td>
<td>No information available</td>
</tr>
<tr>
<td>Particle size</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Molecular weight</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Volatility</td>
<td>100%</td>
</tr>
<tr>
<td>Saturation concentration</td>
<td>No information available.</td>
</tr>
</tbody>
</table>
POC - FIBER OPTIC SPLICE & CONNECTOR CLEANER

<table>
<thead>
<tr>
<th>Critical temperature</th>
<th>No information available.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Volatile organic compound</td>
<td>This product contains a maximum VOC content of 67 g/l.</td>
</tr>
</tbody>
</table>

### SECTION 10: Stability and reactivity

#### 10.1. Reactivity

**Reactivity**
See the other subsections of this section for further details.

#### 10.2. Chemical stability

**Stability**
Stable at normal ambient temperatures and when used as recommended. Stable under the prescribed storage conditions.

#### 10.3. Possibility of hazardous reactions

**Possibility of hazardous reactions**
No potentially hazardous reactions known.

#### 10.4. Conditions to avoid

**Conditions to avoid**
There are no known conditions that are likely to result in a hazardous situation.

#### 10.5. Incompatible materials

**Materials to avoid**
No specific material or group of materials is likely to react with the product to produce a hazardous situation.

#### 10.6. Hazardous decomposition products

**Hazardous decomposition products**
Does not decompose when used and stored as recommended. Thermal decomposition or combustion products may include the following substances: Harmful gases or vapours.

### SECTION 11: Toxicological information

#### 11.1. Information on toxicological effects

**Toxicological effects**
Not regarded as a health hazard under current legislation.

**Acute toxicity - oral**
Based on available data the classification criteria are not met.

**Acute toxicity - dermal**
Based on available data the classification criteria are not met.

**Acute toxicity - inhalation**
Based on available data the classification criteria are not met.

**Skin corrosion/irritation**
Based on available data the classification criteria are not met.

**Serious eye damage/irritation**
Based on available data the classification criteria are not met.

**Respiratory sensitisation**
Based on available data the classification criteria are not met.

**Skin sensitisation**
Based on available data the classification criteria are not met.

**Germ cell mutagenicity**
Based on available data the classification criteria are not met.

**Genotoxicity - in vitro**
Based on available data the classification criteria are not met.

**Carcinogenicity**
POC - FIBER OPTIC SPLICE & CONNECTOR CLEANER

Carcinogenicity
Based on available data the classification criteria are not met.

IARC carcinogenicity
Contains a substance which may be potentially carcinogenic. IARC Group 3 Not classifiable as to its carcinogenicity to humans.

Reproductive toxicity
Reproductive toxicity - fertility
Based on available data the classification criteria are not met.

Reproductive toxicity - development
Based on available data the classification criteria are not met.

Specific target organ toxicity - single exposure
STOT - single exposure
Not classified as a specific target organ toxicant after a single exposure.

Specific target organ toxicity - repeated exposure
STOT - repeated exposure
Not classified as a specific target organ toxicant after repeated exposure.

Aspiration hazard
Based on available data the classification criteria are not met.

General information
No specific health hazards known. The severity of the symptoms described will vary dependent on the concentration and the length of exposure.

Inhalation
No specific symptoms known. Spray/mists may cause respiratory tract irritation.

Ingestion
No specific symptoms known. May cause discomfort if swallowed.

Skin contact
No specific symptoms known. May cause discomfort.

Eye contact
No specific symptoms known. May be slightly irritating to eyes.

Route of exposure
Ingestion Inhalation Skin and/or eye contact

Target organs
No specific target organs known.

Toxicological information on ingredients.

Methyl Nonafluorobutyl Ether

Other health effects
There is no evidence that the product can cause cancer.

Acute toxicity - oral
Acute toxicity oral (LD₅₀ mg/kg) 5,000.0
Species Rat
ATE oral (mg/kg) 5,000.0

Acute toxicity - inhalation
Acute toxicity inhalation (LC₅₀ vapours mg/l) 1,000.0
Species Rat
ATE inhalation (vapours mg/l) 1,000.0

Methyl Nonafluoroisobutyl Ether

Acute toxicity - oral
POC - FIBER OPTIC SPLICE & CONNECTOR CLEANER

<table>
<thead>
<tr>
<th>Acute toxicity oral (LD₅₀ mg/kg)</th>
<th>5,000.0</th>
</tr>
</thead>
<tbody>
<tr>
<td>Species</td>
<td>Rat</td>
</tr>
</tbody>
</table>

Acute toxicity - Inhalation

<table>
<thead>
<tr>
<th>Acute toxicity inhalation (LC₅₀ vapours mg/l)</th>
<th>1,000.0</th>
</tr>
</thead>
<tbody>
<tr>
<td>Species</td>
<td>Rat</td>
</tr>
</tbody>
</table>

ATE inhalation (vapours mg/l) 1,000.0

**PROPAN-2-OL**

Carcinogenicity

<table>
<thead>
<tr>
<th>IARC carcinogenicity</th>
<th>IARC Group 3</th>
<th>Not classifiable as to its carcinogenicity to humans.</th>
</tr>
</thead>
<tbody>
<tr>
<td>NTP carcinogenicity</td>
<td>Not listed.</td>
<td></td>
</tr>
</tbody>
</table>

**SECTION 12: Ecological Information**

Ecotoxicity

Not regarded as dangerous for the environment. However, large or frequent spills may have hazardous effects on the environment.

Ecological information on ingredients.

**Methyl Nonafluorobutyl Ether**

Ecotoxicity

There are no data on the ecotoxicity of this product.

**Methyl Nonafluoroisobutyl Ether**

Ecotoxicity

The product is not expected to be toxic to aquatic organisms.

12.1. Toxicity

Toxicity

Based on available data the classification criteria are not met.

Ecological information on ingredients.

**Methyl Nonafluorobutyl Ether**

Toxicity

Not considered toxic to fish.

**Methyl Nonafluoroisobutyl Ether**

Toxicity

Not considered toxic to fish.

**PROPAN-2-OL**

Acute aquatic toxicity

<table>
<thead>
<tr>
<th>Acute toxicity - fish</th>
<th>LC₅₀, 96 hours: 9,640 mg/l, Fish</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute toxicity - aquatic invertebrates</td>
<td>EC₅₀, 48 hours: 5102 mg/l, Daphnia magna</td>
</tr>
<tr>
<td>Acute toxicity - aquatic plants</td>
<td>IC₅₀, 72 hours: &gt;2,000 mg/l, Algae</td>
</tr>
</tbody>
</table>
12.2. Persistence and degradability

Persistence and degradability The degradability of the product is not known.

Ecological information on ingredients.

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Persistence and degradability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Methyl Nonafluorobutyl Ether</td>
<td>No data available.</td>
</tr>
<tr>
<td>Methyl Nonafluoroisobutyl Ether</td>
<td>The product is not expected to be biodegradable.</td>
</tr>
</tbody>
</table>

12.3. Bioaccumulative potential

Bioaccumulative potential No data available on bioaccumulation.

Partition coefficient No information available.

Ecological information on ingredients.

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Bioaccumulative potential</th>
</tr>
</thead>
<tbody>
<tr>
<td>Methyl Nonafluorobutyl Ether</td>
<td>No data available on bioaccumulation.</td>
</tr>
<tr>
<td>Methyl Nonafluoroisobutyl Ether</td>
<td>No data available on bioaccumulation.</td>
</tr>
<tr>
<td>PROPAN-2-OL</td>
<td></td>
</tr>
</tbody>
</table>

| Partition coefficient | 0.05 |

12.4. Mobility in soil

Mobility No data available.

Adsorption/desorption coefficient Not known.

Henry's law constant Not known.

Surface tension Not determined.

Ecological information on ingredients.

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Mobility</th>
</tr>
</thead>
<tbody>
<tr>
<td>Methyl Nonafluorobutyl Ether</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Methyl Nonafluoroisobutyl Ether</td>
<td>Not applicable.</td>
</tr>
</tbody>
</table>

PROPAV-2-OL

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB assessment This substance is not classified as PBT or vPvB according to current EU criteria.

12.6. Other adverse effects
POC - FIBER OPTIC SPLICE & CONNECTOR CLEANER

Other adverse effects
None known.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

General information
The generation of waste should be minimised or avoided wherever possible. Reuse or recycle products wherever possible. This material and its container must be disposed of in a safe way.

Disposal methods
Dispose of surplus products and those that cannot be recycled via a licensed waste disposal contractor. Waste packaging should be collected for reuse or recycling. Incineration or landfill should only be considered when recycling is not feasible. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of the local water authority.

SECTION 14: Transport information

14.1. UN number

14.2. UN proper shipping name
Not applicable. Non-hazardous substance.

14.3. Transport hazard class(es)
Not applicable. Non-hazardous substance.

Transport labels
No transport warning sign required. Not regulated.

14.4. Packing group
Not applicable. Non-hazardous substance.

14.5. Environmental hazards
Environmentally hazardous substance/marine pollutant
No.

14.6. Special precautions for user
No information required.

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

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

National regulations
POC - FIBER OPTIC SPLICE & CONNECTOR CLEANER

EU legislation


15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

Inventories

EU - EINECS/ELINCS

None of the ingredients are listed or exempt.

*PROPAN-2-OL*

EINECS

Philippines – PICCS

*PROPAN-2-OL*

Yes

New Zealand - NZIOC

Not listed.

Taiwan - NECI

Not listed.

SECTION 16: Other information

<table>
<thead>
<tr>
<th>Abbreviations and acronyms used in the safety data sheet</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.</td>
</tr>
<tr>
<td>ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways.</td>
</tr>
<tr>
<td>RID: European Agreement concerning the International Carriage of Dangerous Goods by Rail.</td>
</tr>
<tr>
<td>IATA: International Air Transport Association.</td>
</tr>
<tr>
<td>IMDG: International Maritime Dangerous Goods.</td>
</tr>
<tr>
<td>CAS: Chemical Abstracts Service.</td>
</tr>
<tr>
<td>ATE: Acute Toxicity Estimate.</td>
</tr>
<tr>
<td>LC₅₀: Lethal Concentration to 50% of a test population.</td>
</tr>
<tr>
<td>LD₅₀: Lethal Dose to 50% of a test population (Median Lethal Dose).</td>
</tr>
<tr>
<td>EC₅₀: 50% of maximal Effective Concentration.</td>
</tr>
<tr>
<td>PBT: Persistent, Bioaccumulative and Toxic substance.</td>
</tr>
<tr>
<td>vPvB: Very Persistent and Very Bioaccumulative.</td>
</tr>
</tbody>
</table>

Training advice

Only trained personnel should use this material.

Revision comments

NOTE: Lines within the margin indicate significant changes from the previous revision.
POC - FIBER OPTIC SPLICE & CONNECTOR CLEANER

Hazard statements in full
H225 Highly flammable liquid and vapour.
H319 Causes serious eye irritation.
H336 May cause drowsiness or dizziness.

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.