SAFETY DATA SHEET
POC - FIBER OPTIC SPLICE & CONNECTOR CLEANER

1. Identification

<table>
<thead>
<tr>
<th>Product identifier</th>
<th>POC - FIBER OPTIC SPLICE &amp; CONNECTOR CLEANER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product name</td>
<td>MCC-POCGL, MCC-POC03M, MCC-POCP, MCC-POCL, MCC-POCG, MCC-POCGG, MCC-POCD, POC03D, POC03GG, POC03GL, MCC-POC10M</td>
</tr>
<tr>
<td>Synonyms; trade names</td>
<td>NSN: 6850-01-592-9391; NATO: 6850-99-328-5073</td>
</tr>
</tbody>
</table>

Recommended use of the chemical and restrictions on use

- **Application**: Cleaning agent.
- **Uses advised against**: No specific uses advised against are identified.

Details of the supplier of the safety data sheet

<table>
<thead>
<tr>
<th>Supplier</th>
<th>MICROCARE CORPORATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manufacturer</td>
<td>MICROCARE CORPORATION</td>
</tr>
</tbody>
</table>

Emergency telephone number

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

2. Hazard(s) identification

<table>
<thead>
<tr>
<th>Classification of the substance or mixture</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>OSHA Regulatory Status</strong></td>
</tr>
<tr>
<td>This Product is Not Hazardous under the OSHA Hazard Communication Standard.</td>
</tr>
<tr>
<td><strong>Physical hazards</strong></td>
</tr>
<tr>
<td>Not Classified</td>
</tr>
<tr>
<td><strong>Health hazards</strong></td>
</tr>
<tr>
<td>Not Classified</td>
</tr>
<tr>
<td><strong>Environmental hazards</strong></td>
</tr>
<tr>
<td>Not Classified</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Label elements</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Hazard statements</strong></td>
</tr>
<tr>
<td>NC Not Classified</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Supplemental label information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Safety data sheet available on request. For use in industrial installations only.</td>
</tr>
</tbody>
</table>

Other hazards

- This product does not contain any substances classified as PBT or vPvB.

3. Composition/Information on ingredients

| Mixtures |
POC - FIBER OPTIC SPLICE & CONNECTOR CLEANER

**Methyl Nonafluorobutyl Ether**
CAS number: 163702-07-6

**Classification**
Not Classified

**Methyl Nonafluoroisobutyl Ether**
CAS number: 163702-08-7

**Classification**
Not Classified

**PROPA-2-OL**
CAS number: 67-63-0

**Classification**
Flam. Liq. 2 - H225  
Eye Irrit. 2A - H319  
STOT SE 3 - H336

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

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

**Ingredient notes**
PROPOSITION 65: This product does not contain chemicals considered by the State of California's Safe Drinking Water and Toxic Enforcement Act of 1986 as causing cancer or reproductive toxicity and for which warnings are now required.

**Composition**

4. **First-aid measures**

**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.

**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.

Indication of immediate medical attention and special treatment needed

Notes for the doctor
Treat symptomatically.

Specific treatments
No special treatment required.

5. Fire-fighting measures

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.

Special hazards arising from the substance or mixture

Flammability Class
The product is not flammable.

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 vapors.

Advice for firefighters

Protective actions during firefighting
Avoid breathing fire gases or vapors. 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 vapors and protect men stopping the leak.

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

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Personal precautions
No specific recommendations. For personal protection, see Section 8.

Environmental precautions

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

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.

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

7. Handling and storage
POC - FIBER OPTIC SPLICE & CONNECTOR CLEANER

Precautions for safe handling

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 minimize 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 and wash before reuse. Wash contaminated clothing before reuse.

Conditions for safe storage, including any incompatibilities

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

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

Usage description
Cleaning agent.

8. Exposure controls/Personal protection

Control parameters

Occupational exposure limits

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

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

PROPAN-2-OL
Long-term exposure limit (8-hour TWA): OSHA 400 ppm 980 mg/m³
Long-term exposure limit (8-hour TWA): ACGIH 200 ppm 492 mg/m³
Short-term exposure limit (15-minute): ACGIH 400 ppm 984 mg/m³

OSHA = Occupational Safety and Health Administration.
ACGIH = American Conference of Governmental Industrial Hygienists.
A4 = Not Classifiable as a Human Carcinogen.

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.

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.
POC - FIBER OPTIC SPLICER & CONNECTOR CLEANER

Hygiene measures
Wash after use and before eating, smoking and using the toilet. Do not eat, drink or smoke when using this product.

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.

9. Physical and chemical properties

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>Color</td>
<td>Colorless</td>
</tr>
<tr>
<td>Odor</td>
<td>Slight alcoholic</td>
</tr>
<tr>
<td>Odor 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>Vapor pressure</td>
<td>27.6 kPa @ 25°C</td>
</tr>
<tr>
<td>Vapor 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>
<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>
</tbody>
</table>
POC - FIBER OPTIC SPLICE & CONNECTOR CLEANER

Saturation concentration  
No information available.

Critical temperature  
No information available.

Volatile organic compound  
This product contains a maximum VOC content of 67 g/l.

10. Stability and reactivity

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

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

Possibility of hazardous reactions  
No potentially hazardous reactions known.

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

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

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 vapors.

11. Toxicological information

Information on toxicological effects

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

Acute toxicity - oral

Notes (oral LD₅₀)  
Based on available data the classification criteria are not met.

Acute toxicity - dermal

Notes (dermal LD₅₀)  
Based on available data the classification criteria are not met.

Acute toxicity - inhalation

Notes (inhalation LC₅₀)  
Based on available data the classification criteria are not met.

Skin corrosion/irritation

Animal data  
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 sensitization

Based on available data the classification criteria are not met.

Skin sensitization

Based on available data the classification criteria are not met.

Germ cell mutagenicity

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

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.
POC - FIBER OPTIC SPLICE & CONNECTOR CLEANER

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
- 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
- Acute toxicity oral (LD₅₀ mg/kg): 5,000.0
- Species: Rat
POC - FIBER OPTIC SPLICE & CONNECTOR CLEANER

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

PROPAN-2-OL

Acute toxicity - inhalation
Acute toxicity inhalation (LC₅₀ vapours mg/l) 16,000.0
ATE inhalation (vapours mg/l) 16,000.0

Carcinogenicity
IARC carcinogenicity IARC Group 3 Not classifiable as to its carcinogenicity to humans.
NTP carcinogenicity Not listed.
OSHA Carcinogenicity Not listed.

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.

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
Acute toxicity - fish LC₅₀, 96 hours: 9,640 mg/l, Fish
Acute toxicity - aquatic invertebrates EC₅₀, 48 hours: 5102 mg/l, Daphnia magna
POC - FIBER OPTIC SPLICER & CONNECTOR CLEANER

Acute toxicity - aquatic plants
IC₅₀, 72 hours: >2,000 mg/l, Algae

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

Ecological information on ingredients.

Methyl Nonafluorobutyl Ether
Persistence and degradability
No data available.

Methyl Nonafluoroisobutyl Ether
Persistence and degradability
The product is not expected to be biodegradable.

No data available on bioaccumulation.

No information available.

Ecological information on ingredients.

Methyl Nonafluorobutyl Ether
Bio-Accumulative Potential
No data available on bioaccumulation.

Methyl Nonafluoroisobutyl Ether
Bio-Accumulative Potential
No data available on bioaccumulation.

PROPan-2-OL
Partition coefficient
0.05

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.

Methyl Nonafluorobutyl Ether
Mobility
Not applicable.

Methyl Nonafluoroisobutyl Ether
Mobility
Not applicable.

Other adverse effects
None known.
POC - FIBER OPTIC SPLICE & CONNECTOR CLEANER

13. Disposal considerations

Waste treatment methods

General information
The generation of waste should be minimized 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.

14. Transport information

UN proper shipping name

Proper shipping name
Not applicable., Non-hazardous substance.

Transport hazard class(es)

Transport Labels
Not applicable., Non-hazardous substance.

Transport labels
No transport warning sign required. Not regulated.

Packing group

Packing group (International)
Not applicable., Non-hazardous substance.

Environmental hazards

Environmentally Hazardous Substance
No.

Special precautions for user

No information required.

Transport in bulk according to

Annex II of MARPOL 73/78 and the IBC Code
No information required. Not relevant.

15. Regulatory information

US Federal Regulations

SARA Section 302 Extremely Hazardous Substances Tier II Threshold Planning Quantities
None of the ingredients are listed or exempt.

CERCLA/Superfund, Hazardous Substances/Reportable Quantities (EPA)
None of the ingredients are listed or exempt.

SARA Extremely Hazardous Substances EPCRA Reportable Quantities
None of the ingredients are listed or exempt.

SARA 313 Emission Reporting
None of the ingredients are listed or exempt.
POC - FIBER OPTIC SPLICE & CONNECTOR CLEANER

CAA Accidental Release Prevention
None of the ingredients are listed or exempt.

FDA - Essential Chemical
None of the ingredients are listed or exempt.

FDA - Precursor Chemical
None of the ingredients are listed or exempt.

SARA (311/312) Hazard Categories
None of the ingredients are listed or exempt.

OSHA Highly Hazardous Chemicals
None of the ingredients are listed or exempt.

US State Regulations
California Proposition 65 Carcinogens and Reproductive Toxins
None of the ingredients are listed or exempt.

California Air Toxics "Hot Spots" (A-I)
The following ingredients are listed or exempt:
PROPA-2-OL

California Air Toxics "Hot Spots" (A-II)
None of the ingredients are listed or exempt.

California Directors List of Hazardous Substances
The following ingredients are listed or exempt:
PROPA-2-OL

Massachusetts "Right To Know" List
The following ingredients are listed or exempt:
PROPA-2-OL

Rhode Island "Right To Know" List
The following ingredients are listed or exempt:
PROPA-2-OL

Minnesota "Right To Know" List
The following ingredients are listed or exempt:
PROPA-2-OL

New Jersey "Right To Know" List
The following ingredients are listed or exempt:
PROPA-2-OL

Pennsylvania "Right To Know" List
The following ingredients are listed or exempt:
PROPA-2-OL

Inventories
EU - EINECS/ELINCS
POC - FIBER OPTIC SPLICE & CONNECTOR CLEANER

PROPAN-2-OL
EINECS

Canada - DSL/NDSL
DSL

US - TSCA
All the ingredients are listed or exempt.

US - TSCA 12(b) Export Notification
The following ingredients are listed or exempt:
Methyl Nonafluorobutyl Ether
Methyl Nonafluoroisobutyl Ether

Philippines - PICCS
PROPAN-2-OL
Yes

New Zealand - NZIOC
Not listed.

Taiwan - NECI
Not listed.

16. Other information

Training advice
Only trained personnel should use this material.

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

Revision date
4/9/2019

Revision
63

Supersedes date
11/27/2018

SDS No.
BULK - POC

Hazard statements in full
H225 Highly flammable liquid and vapor.
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.