SAFETY DATA SHEET
MicroCare SMT Specialty Fluid

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

1.1. Product identifier
Product name: MicroCare SMT Specialty Fluid
Product number: MCC-SMTRD, MCC-SMTRL, MCC-SMTRP, MCC-SMTRG, MCC-SMTRGL, MCC-SMTRGG

1.2. Relevant identified uses of the substance or mixture and uses advised against
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
VEKEESTRAAT 29 B11
INDUSTRIEZONE ‘T SAS
1910 KAMPENHOUT, Belgium
Phone: +32.2.251.95.05
Fax: +32.2.400.96.39

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

1.4. Emergency telephone number

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture
Classification (EC 1272/2008)
Physical hazards: Not Classified
Health hazards: Acute Tox. 4 - H332 STOT SE 1 - H370
Environmental hazards: Aquatic Chronic 3 - H412

2.2. Label elements
Pictogram
Signal word: Danger
Hazard statements: H332 Harmful if inhaled.
H370 Causes damage to organs.
H412 Harmful to aquatic life with long lasting effects.
MicroCare SMT Specialty Fluid

Precautionary statements

- P261 Avoid breathing vapour/ spray.
- P271 Use only outdoors or in a well-ventilated area.
- P273 Avoid release to the environment.
- 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

- EUH210 Safety data sheet available on request.
- RCH001a For use in industrial installations only.

Contains

trans-1,2-DICHLOROETHYLENE, methanol

Supplementary precautionary statements

- P260 Do not breathe vapour/ spray.
- P264 Wash contaminated skin thoroughly after handling.
- P270 Do not eat, drink or smoke when using this product.
- P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
- P302+P310 IF SWALLOWED: Immediately call a POISON CENTER/ doctor.
- P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
- P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- P301+P310 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
- P314 Get medical advice/ attention if you feel unwell.
- P330 Rinse mouth.
- P331 Do NOT induce vomiting.
- P337+P313 If eye irritation persists: Get medical advice/ attention.
- P362+P364 Take off contaminated clothing and wash it before reuse.
- P403+P233 Store in a well-ventilated place. Keep container tightly closed.

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>Substance</th>
<th>Percentage</th>
<th>CAS number</th>
<th>EC number</th>
<th>REACH registration number</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,1,1,2,2,3,4,5,5,5-decafluoropentane</td>
<td>30-60%</td>
<td>138495-42-8</td>
<td>420-640-8</td>
<td>01-2119446695-28-0000</td>
</tr>
<tr>
<td>Classification</td>
<td></td>
<td>Aquatic Chronic 3 - H412</td>
<td></td>
<td></td>
</tr>
<tr>
<td>trans-1,2-DICHLOROETHYLENE</td>
<td>30-60%</td>
<td>156-60-5</td>
<td>205-860-2</td>
<td>01-2120093504-55-0003</td>
</tr>
<tr>
<td>Classification</td>
<td></td>
<td>Flam. Liq. 2 - H225</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Acute Tox. 4 - H332</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Aquatic Chronic 3 - H412</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
# MicroCare SMT Specialty Fluid

## METHANOL

<table>
<thead>
<tr>
<th>CAS number: 67-56-1</th>
<th>EC number: 200-659-6</th>
<th>REACH registration number: 05-2114285316-45-0000</th>
</tr>
</thead>
</table>

**Classification**
- Flam. Liq. 2 - H225
- Acute Tox. 3 - H301
- Acute Tox. 3 - H311
- Acute Tox. 3 - H331
- STOT SE 1 - H370

## NITROMETHANE

<table>
<thead>
<tr>
<th>CAS number: 75-52-5</th>
<th>EC number: 200-876-6</th>
<th>REACH registration number: 05-2114327275-52-0000</th>
</tr>
</thead>
</table>

**Classification**
- Flam. Liq. 3 - H226
- Acute Tox. 4 - H302
- Carc. 2 - H351

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**
Get medical attention if any discomfort continues. Show this Safety Data Sheet to the medical personnel.

**Inhalation**
Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Maintain an open airway. Loosen tight clothing such as collar, tie or belt. When breathing is difficult, properly trained personnel may assist affected person by administering oxygen. Get medical attention. Place unconscious person on their side in the recovery position and ensure breathing can take place.

**Ingestion**
Rinse mouth thoroughly with water. Give a few small glasses of water or milk to drink. Stop if the affected person feels sick as vomiting may be dangerous. Never give anything by mouth to an unconscious person. Place unconscious person on their side in the recovery position and ensure breathing can take place. Keep affected person under observation. Get medical attention if symptoms are severe or persist.

**Skin contact**
Rinse with water.

**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**
First aid personnel should wear appropriate protective equipment during any rescue.

#### 4.2. Most important symptoms and effects, both acute and delayed

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

**Inhalation**
A single exposure may cause the following adverse effects: Pain or irritation. Intoxication. Narcotic effect. Muscle weakness. Nausea, vomiting.
MicroCare SMT Specialty Fluid

Ingestion
A single exposure may cause the following adverse effects: Intoxication. Nausea, vomiting. May cause drowsiness or dizziness. Central nervous system depression. May cause severe internal injury.

Skin contact
A single exposure may cause the following adverse effects: Pain.

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.

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. This product is toxic.

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

5.3. Advice for firefighters
Protective actions during firefighting
Avoid breathing fire gases or vapours. Evacuate area. Keep upwind to avoid inhalation of gases, vapours, fumes and smoke. Ventilate closed spaces before entering them. 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. Avoid discharge to the aquatic environment. Control run-off water by containing and keeping it out of sewers and watercourses. If risk of water pollution occurs, notify appropriate authorities.

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
Wear protective clothing as described in Section 8 of this safety data sheet. No action shall be taken without appropriate training or involving any personal risk. Do not touch or walk into spilled material. Avoid inhalation of vapours and spray/mists. Use suitable respiratory protection if ventilation is inadequate.

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

6.3. Methods and material for containment and cleaning up
MicroCare SMT Specialty Fluid

Methods for cleaning up
Wear protective clothing as described in Section 8 of this safety data sheet. Clear up spills immediately and dispose of waste safely. Provide adequate ventilation. Small Spillages: Collect spillage. Large Spillages: Absorb spillage with non-combustible, absorbent material. The contaminated absorbent may pose the same hazard as the spilled material. Collect and place in suitable waste disposal containers and seal securely. Label the containers containing waste and contaminated materials and remove from the area as soon as possible. Flush contaminated area with plenty of water. Wash thoroughly after dealing with a spillage. Dangerous for the environment. Do not empty into drains. For waste disposal, see Section 13.

6.4. Reference to other sections
Reference to other sections
For personal protection, see Section 8. See Section 11 for additional information on health hazards. See Section 12 for additional information on ecological hazards. For waste disposal, see Section 13.

SECTION 7: Handling and storage

7.1. 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 minimise spills. Keep container tightly sealed when not in use. Avoid the formation of mists. Avoid discharge to the aquatic environment. Do not handle until all safety precautions have been read and understood. Do not handle broken packages without protective equipment. Do not reuse empty containers.

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). Keep only in the original container. Keep container tightly closed, in a cool, well ventilated place. Keep containers upright. Protect containers from damage.

Storage class
Miscellaneous hazardous material storage.

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

SECTION 8: Exposure Controls/personal protection

8.1. Control parameters
Occupational exposure limits
1,1,1,2,2,3,4,5,5,5-decafluoropentane
No information available that would effect occupational exposure limit values.

trans-1,2-DICHLOROETHYLENE
Long-term exposure limit (8-hour TWA): ACGIH
Short-term exposure limit (15-minute): ACGIH 200 ppm

METHANOL
Long-term exposure limit (8-hour TWA): WEL 200 ppm 266 mg/m³
Short-term exposure limit (15-minute): WEL 250 ppm 333 mg/m³

NITROMETHANE
Long-term exposure limit (8-hour TWA): WEL 100 ppm 254 mg/m³
Short-term exposure limit (15-minute): WEL 150 ppm 381 mg/m³
MicroCare SMT Specialty Fluid

ACGIH = American Conference of Governmental Industrial Hygienists.
WEL = Workplace Exposure Limit
Sk = Can be absorbed through the skin.

Additional Occupational Exposure Limits

8.2. Exposure controls

Protective equipment

Appropriate engineering controls

Provide adequate general and local exhaust ventilation. Ensure the ventilation system is regularly maintained and tested. Good general ventilation should be adequate to control worker exposure to airborne contaminants. Observe any occupational exposure limits for the product or ingredients.

Eye/face protection

Unless the assessment indicates a higher degree of protection is required, the following protection should be worn: Tight-fitting safety glasses.

Hand protection

No specific hand protection recommended. Avoid contact with skin.

Other skin and body protection

Wear appropriate clothing to prevent repeated or prolonged skin contact.

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

Ensure all respiratory protective equipment is suitable for its intended use and is ‘CE’-marked. Check that the respirator fits tightly and the filter is changed regularly. Gas and combination filter cartridges should comply with European Standard EN14387. Full face mask respirators with replaceable filter cartridges should comply with European Standard EN136. Half mask and quarter mask respirators with replaceable filter cartridges should comply with European Standard EN140.

Environmental exposure controls

Keep container tightly sealed when not in use. Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

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>Melting point</td>
<td>&lt;-50°C/&lt;-58°F</td>
</tr>
<tr>
<td>Initial boiling point and range</td>
<td>37°C @ 101.3 kPa</td>
</tr>
<tr>
<td>Upper/lower flammability or explosive limits</td>
<td>Lower flammable/explosive limit: 7.0 %(V) Upper flammable/explosive limit: 15.0 %(V)</td>
</tr>
<tr>
<td>Other flammability</td>
<td>The product is not flammable.</td>
</tr>
<tr>
<td>Vapour pressure</td>
<td>64.7 kPa @ 25°C/77°F</td>
</tr>
<tr>
<td>Vapour density</td>
<td>4.4</td>
</tr>
<tr>
<td>Relative density</td>
<td>1.42 g/cm3 @ 0°C</td>
</tr>
<tr>
<td>Solubility(ies)</td>
<td>3.4 g/l water @ 25°C/77°F</td>
</tr>
<tr>
<td>Viscosity</td>
<td>0.47 mPa s @ 25°C</td>
</tr>
</tbody>
</table>
### 9.2. Other information

**Molecular weight**

Not applicable.

### 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: Toxic gases or vapours.

### SECTION 11: Toxicological information

#### 11.1. Information on toxicological effects

**Acute toxicity - oral**

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

ATE oral (mg/kg) 2,500.0

**Acute toxicity - dermal**

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

ATE dermal (mg/kg) 7,500.0

**Acute toxicity - inhalation**

**Notes (inhalation LC₅₀)** Acute Tox. 4 - H332 Harmful if inhaled.

ATE inhalation (vapours mg/l) 19.08

**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 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**
MicroCare SMT Specialty Fluid

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

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

IARC carcinogenicity  Contains a substance which may be potentially carcinogenic. IARC Group 2B  Possibly carcinogenic 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  STOT SE 1 - H370 Causes damage to organs.

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

Inhalation  A single exposure may cause the following adverse effects: Pain or irritation. Intoxication. Narcotic effect. Muscle weakness. Nausea, vomiting.

Ingestion  A single exposure may cause the following adverse effects: Intoxication. Nausea, vomiting. May cause drowsiness or dizziness. Central nervous system depression. May cause severe internal injury.

Skin contact  A single exposure may cause the following adverse effects: Pain.

Eye contact  No specific symptoms known.

Route of exposure  Ingestion Inhalation Skin and/or eye contact

Target organs  No specific target organs known.

Toxicological information on ingredients.

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

<table>
<thead>
<tr>
<th>Toxicity Type</th>
<th>Route</th>
<th>Species</th>
<th>LD₅₀ (mg/kg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute toxicity - oral</td>
<td>Oral</td>
<td>Rat</td>
<td>5,000.0</td>
</tr>
<tr>
<td>Acute toxicity dermal</td>
<td>Dermal</td>
<td>Rat</td>
<td>5,000.0</td>
</tr>
</tbody>
</table>

8/15
MicroCare SMT Specialty Fluid

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 sensitisation

Respiratory sensitisation Data lacking.

Skin sensitisation

Skin sensitisation Not sensitising. - Guinea pig: Not sensitising.

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.

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.

trans-1,2-DICHLOROETHYLENE

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

METHANOL

Acute toxicity - oral

Notes (oral LD₅₀) Acute Tox. 3 - H301 Toxic if swallowed.
# MicroCare SMT Specialty Fluid

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ATE oral (mg/kg)</strong></td>
<td>100.0</td>
</tr>
<tr>
<td><strong>Acute toxicity - dermal</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Notes (dermal LD₅₀)</strong></td>
<td>Acute Tox. 3 - H311 Toxic in contact with skin.</td>
</tr>
<tr>
<td><strong>ATE dermal (mg/kg)</strong></td>
<td>300.0</td>
</tr>
<tr>
<td><strong>Acute toxicity - inhalation</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Notes (inhalation LC₅₀)</strong></td>
<td>Acute Tox. 3 - H331 Toxic if inhaled.</td>
</tr>
<tr>
<td><strong>ATE inhalation (vapours mg/l)</strong></td>
<td>3.0</td>
</tr>
<tr>
<td><strong>ATE inhalation (dusts/mists mg/l)</strong></td>
<td>0.5</td>
</tr>
<tr>
<td><strong>Skin corrosion/irritation</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Animal data</strong></td>
<td>Based on available data the classification criteria are not met.</td>
</tr>
<tr>
<td><strong>Serious eye damage/irritation</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Serious eye damage/irritation</strong></td>
<td>Based on available data the classification criteria are not met.</td>
</tr>
<tr>
<td><strong>Respiratory sensitisation</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Respiratory sensitisation</strong></td>
<td>Based on available data the classification criteria are not met.</td>
</tr>
<tr>
<td><strong>Skin sensitisation</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Skin sensitisation</strong></td>
<td>Based on available data the classification criteria are not met.</td>
</tr>
<tr>
<td><strong>Germ cell mutagenicity</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Genotoxicity - in vitro</strong></td>
<td>Based on available data the classification criteria are not met.</td>
</tr>
<tr>
<td><strong>Carcinogenicity</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Carcinogenicity</strong></td>
<td>Based on available data the classification criteria are not met.</td>
</tr>
<tr>
<td><strong>IARC carcinogeticity</strong></td>
<td>None of the ingredients are listed or exempt.</td>
</tr>
<tr>
<td><strong>Reproductive toxicity</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Reproductive toxicity - fertility</strong></td>
<td>Based on available data the classification criteria are not met.</td>
</tr>
<tr>
<td><strong>Reproductive toxicity - development</strong></td>
<td>Based on available data the classification criteria are not met.</td>
</tr>
<tr>
<td><strong>Specific target organ toxicity - single exposure</strong></td>
<td></td>
</tr>
<tr>
<td><strong>STOT - single exposure</strong></td>
<td>STOT SE 1 - H370 Causes damage to organs.</td>
</tr>
<tr>
<td><strong>Specific target organ toxicity - repeated exposure</strong></td>
<td></td>
</tr>
<tr>
<td><strong>STOT - repeated exposure</strong></td>
<td>Not classified as a specific target organ toxicant after repeated exposure.</td>
</tr>
<tr>
<td><strong>Aspiration hazard</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Aspiration hazard</strong></td>
<td>Based on available data the classification criteria are not met.</td>
</tr>
<tr>
<td><strong>General information</strong></td>
<td>The severity of the symptoms described will vary dependent on the concentration and the length of exposure.</td>
</tr>
</tbody>
</table>
MicroCare SMT Specialty Fluid

Inhalation  
A single exposure may cause the following adverse effects: Drowsiness, dizziness, disorientation, vertigo. Unconsciousness. High concentrations may be fatal.

Ingestion  
May cause stomach pain or vomiting. May cause severe internal injury.

Skin contact  
A single exposure may cause the following adverse effects: Pain.

Eye contact  
No specific symptoms known.

Route of exposure  
Ingestion Inhalation Skin and/or eye contact

Target organs  
No specific target organs known.

NITROMETHANE

Acute toxicity - oral
ATE oral (mg/kg)  500.0

Carcinogenicity
IARC carcinogenicity  IARC Group 2B  Possibly carcinogenic to humans.

SECTION 12: Ecological Information

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.

trans-1,2-DICHLOROETHYLENE

Ecotoxicity  
Low acute toxicity to aquatic organisms.

METHANOL

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

12.1. Toxicity

Toxicity  
Aquatic Chronic 3 - H412 Harmful to aquatic life with long lasting effects.

Ecological information on ingredients.

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

Acute aquatic toxicity

Acute toxicity - fish  
LC₅₀, 96 hours: 13.9 mg/l, Oncorhynchus 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

trans-1,2-DICHLOROETHYLENE

Acute aquatic toxicity

Acute toxicity - fish  
LC₅₀, 96 hours: 1350 mg/l, Fish
MicroCare SMT Specialty Fluid

**Acute toxicity - aquatic invertebrates**

EC₅₀, 48 hours: 220 mg/l, Daphnia magna

**METHANOL**

**Toxicity**

Based on available data the classification criteria are not met.

**Acute aquatic toxicity**

**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

**12.2. Persistence and degradability**

**Persistence and degradability**

The degradability of the product is not known.

**Ecological information on ingredients.**

**METHANOL**

**Persistence and degradability**

The degradability of the product is not known.

**12.3. Bioaccumulative potential**

**Bioaccumulative potential**

No data available on bioaccumulation.

**Ecological information on ingredients.**

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

**Bioaccumulative potential**

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

**Partition coefficient**

Pow: 2.7

**trans-1,2-DICHLOROETHYLENE**

**Bioaccumulative potential**

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

**METHANOL**

**Bioaccumulative potential**

No data available on bioaccumulation.

**Partition coefficient**

: -0.77

**12.4. Mobility in soil**

**Mobility**

No data available.

**Ecological information on ingredients.**

**trans-1,2-DICHLOROETHYLENE**

**Mobility**

The product has poor water-solubility.

**METHANOL**

**Mobility**

No data available.
MicroCare SMT Specialty Fluid

12.5. Results of PBT and vPvB assessment

12.6. Other adverse effects

Other adverse effects  None known.

Ecological information on ingredients.

METHANOL

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. When handling waste, the safety precautions applying to handling of the product should be considered. Care should be taken when handling emptied containers that have not been thoroughly cleaned or rinsed out. Empty containers or liners may retain some product residues and hence be potentially hazardous.

Disposal methods  Do not empty into drains. Dispose of surplus products and those that cannot be recycled via a licensed waste disposal contractor. Waste, residues, empty containers, discarded work clothes and contaminated cleaning materials should be collected in designated containers, labelled with their contents. Incineration or landfill should only be considered when recycling is not feasible.

SECTION 14: Transport information

General  The product is not covered by international regulations on the transport of dangerous goods (IMDG, IATA, ADR/RID).

14.1. UN number  Not applicable.

14.2. UN proper shipping name  Not applicable.

14.3. Transport hazard class(es)  No transport warning sign required.

14.4. Packing group  Not applicable.

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

14.6. Special precautions for user  Not applicable.

14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code  Not applicable.

Annex II of MARPOL 73/78 and the IBC Code

SECTION 15: Regulatory information
MicroCare SMT Specialty Fluid

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

National regulations
Health and Safety at Work etc. Act 1974 (as amended).
The Carriage of Dangerous Goods and Use of Transportable Pressure Equipment Regulations 2009 (SI 2009 No. 1348) (as amended) ["CDG 2009"].
EH40/2005 Workplace exposure limits.

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.

SECTION 16: Other information

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

Classification abbreviations and acronyms
Acute Tox. = Acute toxicity
STOT SE = Specific target organ toxicity-single exposure
Aquatic Chronic = Hazardous to the aquatic environment (chronic)

Classification procedures according to Regulation (EC) 1272/2008

Training advice
Only trained personnel should use this material.

Revision date
06/08/2018
Revision
28
Supersedes date
06/08/2018
SDS number
BULK - SMTR
MicroCare SMT Specialty Fluid

Hazard statements in full

H225 Highly flammable liquid and vapour.
H226 Flammable liquid and vapour.
H301 Toxic if swallowed.
H302 Harmful if swallowed.
H311 Toxic in contact with skin.
H331 Toxic if inhaled.
H332 Harmful if inhaled.
H351 Suspected of causing cancer.
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.