SAFETY DATA SHEET
SPR - HEAVY DUTY FLUX REMOVER - SUPRCLEAN, AEROSOL

According to WHMIS 2015, in compliance with the Hazardous Product Act (HPA, as amended) and the requirements of the Hazardous Product Regulations (HPR)

1. Identification

Product identifier
Product name SPR - HEAVY DUTY FLUX REMOVER - SUPRCLEAN, AEROSOL
Product number MCC-SPR, MCC-SPR19A, MCC-SPR12Y
Synonyms; Common Names "SPR - SUPRCLEAN Nonflammable Flux Remover"

Recommended use of the chemical and restrictions on use
Restriction on use Cleaning agent.
Uses advised against No specific uses advised against are identified.

Details of the supplier of the safety data sheet
Supplier MICROCARE LLC
Tel: +1 860-827-0626
Manufacturer MICROCARE LLC
595 John Downey Drive
New Britain, CT 06051
United States of America
CAGE: OATV9
Tel: +1 800-638-0125, +1 860-827-0626
techsupport@microcare.com

Emergency telephone number
Emergency telephone INFOTRAC 1-800-535-5053 (CANADA and U.S.A.)
1-352-323-3500 (from anywhere in the world)

2. Hazard identification

Classification of the substance or mixture
WHMIS Regulatory Status This product has been classified according to the hazard criteria of the Hazardous Product Regulations and the SDS contains all required information.
Physical hazards Not Classified
Health hazards Eye Irrit. 2A - H319 Repr. 1A - H360 STOT SE 3 - H336
Environmental hazards Aquatic Chronic 3 - H412

Physicochemical Vapours are heavier than air and may travel along the floor and accumulate in the bottom of containers. Gas or vapour displaces oxygen available for breathing (asphyxiant).
### SPR - HEAVY DUTY FLUX REMOVER - SUPRCLEAN, AEROSOL

#### Hazard pictograms

| ![Hazard Pictogram 1] | ![Hazard Pictogram 2] |

#### Signal word

Danger

#### Hazard statements

- **H319** Causes serious eye irritation.
- **H360** May damage fertility or the unborn child.
- **H336** May cause drowsiness or dizziness.
- **H412** Harmful to aquatic life with long lasting effects.

#### Precautionary statements

- **P210** Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
- **P211** Do not spray on an open flame or other ignition source.
- **P251** Do not pierce or burn, even after use.
- **P261** Avoid breathing vapour/spray.
- **P280** Wear protective gloves/protective clothing/eye protection/face protection.
- **P314** Get medical advice/attention if you feel unwell.
- **P410+P412** Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F.
- **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

#### Other hazards

This product contains a substance classified as PBT.

### 3. Composition/information on ingredients

#### Mixtures

<table>
<thead>
<tr>
<th><strong>trans-1,2-DICHLOROETHYLENE</strong></th>
<th>60-80% Trade secret</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAS number: 156-60-5</td>
<td></td>
</tr>
</tbody>
</table>

**Classification**

- Flam. Liq. 2 - H225
- Acute Tox. 4 - H332
- Eye Irrit. 2A - H319
- STOT SE 3 - H336
- Aquatic Chronic 3 - H412

<table>
<thead>
<tr>
<th><strong>HFC-134a Tetrafluoroethane</strong></th>
<th>10-30%</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAS number: 811-97-2</td>
<td></td>
</tr>
</tbody>
</table>

**Classification**

- Press. Gas, Liquefied - H280
- Simple Asphyxiants - Category 1
SPR - HEAVY DUTY FLUX REMOVER - SUPRICLEAN, AEROSOL

1,1,1,2,2,3,4,5,5,5-decafluoropentane
CAS number: 138495-42-8

Classification
Aquatic Chronic 3 - H412

ETHANOL
CAS number: 64-17-5

Classification
Flam. Liq. 2 - H225

METHANOL
CAS number: 67-56-1

Classification
Flam. Liq. 2 - H225
Acute Tox. 3 - H301
Acute Tox. 3 - H311
Acute Tox. 3 - H331
Eye Irrit. 2A - H319
Repr. 1A - H360
STOT SE 1 - H370

ISOBUTYL METHYL KETONE
CAS number: 108-10-1

Classification
Flam. Liq. 2 - H225
Acute Tox. 4 - H332
Eye Irrit. 2 - H319
STOT SE 3 - H335

ETHYL ACETATE
CAS number: 141-78-6

Classification
Flam. Liq. 2 - H225
Eye Irrit. 2 - 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

Composition

4. First-aid measures

Description of first aid measures
**SPR - HEAVY DUTY FLUX REMOVER - SUPRICLEAN, AEROSOL**

### General information
If in doubt, get medical attention promptly. 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. Get medical advice/attention if you feel unwell. Do not induce vomiting unless under the direction of medical personnel.

### 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.

### 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: Headache. Exhaustion and weakness.

#### Ingestion
No specific symptoms known.

#### Skin contact
No specific symptoms known.

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

### Indication of any immediate medical attention and special treatment needed
Treat symptomatically.

### Notes for the doctor
Treat symptomatically.

### 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.

#### Specific hazards arising from the hazardous product

- **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.

#### Advice for firefighters
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.
SPR - HEAVY DUTY FLUX REMOVER - SUPRCLEAN, AEROSOL

Special protective equipment for firefighters
Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing. Firefighter's clothing that provides a basic level of protection during chemical incidents is defined by the Canada Occupational Health and Safety Regulations, by provincial guidelines on occupational health and safety or by NFPA standards if applicable.

6. Accidental release measures

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.

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

Methods and material for containment and cleaning up

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.

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.

7. Handling and storage

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. 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.

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.

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

8. Exposure controls/Personal protection
Control parameters

Occupational exposure limits

trans-1,2-DICHLOROETHYLENE
Long-term exposure limit (8-hour TWA): ACGIH 200 ppm 793 mg/m³

HFC-134a Tetrafluoroethane
Long-term exposure limit (8-hour TWA): OES 4240 mg/m³

ETHANOL
Short-term exposure limit (15-minute): ACGIH 1000 ppm 1880 mg/m³
A3

METHANOL
Long-term exposure limit (8-hour TWA): ACGIH 200 ppm 262 mg/m³
Short-term exposure limit (15-minute): ACGIH 250 ppm 328 mg/m³
Sk

ISOBUTYL METHYL KETONE
Long-term exposure limit (8-hour TWA): ACGIH 20 ppm 82 mg/m³
Short-term exposure limit (15-minute): ACGIH 75 ppm 307 mg/m³
A3

ETHYL ACETATE
Long-term exposure limit (8-hour TWA): ACGIH 400 ppm 1440 mg/m³
ACGIH = American Conference of Governmental Industrial Hygienists.

A3 = Confirmed Animal Carcinogen with Unknown Relevance to Humans.
Sk = Danger of cutaneous absorption.

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.
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Respiratory protection

Ensure all respiratory protective equipment is suitable for its intended use and is NIOSH approved. Check that the respirator fits tightly and the filter is changed regularly. Gas and combination filter cartridges should comply with the Canadian regulation on health and safety at work, SOR/86-304, Part XII (12.7), and any relevant provincial regulation relating to health and safety at work. Full face mask respirators with replaceable filter cartridges should comply with the Canadian regulation on health and safety at work, SOR/86-304, Part XII (12.7), and any relevant provincial regulation relating to health and safety at work. Half mask and quarter mask respirators with replaceable filter cartridges should comply with the Canadian regulation on health and safety at work, SOR/86-304, Part XII (12.7), and any relevant provincial regulation relating to health and safety at work.

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.

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>Colour</td>
<td>Colourless.</td>
</tr>
<tr>
<td>Odour</td>
<td>Slight. Ether.</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.</td>
</tr>
<tr>
<td>Initial boiling point and range</td>
<td>41°C/106°F @ 101.3 kPa</td>
</tr>
<tr>
<td>Flash point</td>
<td>The product is not flammable.</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>No information available.</td>
</tr>
<tr>
<td>Evaporation factor</td>
<td>No information available.</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Upper/lower flammability or explosive limits</td>
<td>Upper flammable/explosive limit: 14.4 %(V) Lower flammable/explosive limit: 5.0 %(V)</td>
</tr>
<tr>
<td>Other flammability</td>
<td>The product is not flammable.</td>
</tr>
<tr>
<td>Vapour pressure</td>
<td>37.9 kPa @ 20°C</td>
</tr>
<tr>
<td>Vapour density</td>
<td>3.4</td>
</tr>
<tr>
<td>Relative density</td>
<td>1.26 g/cc</td>
</tr>
<tr>
<td>Bulk density</td>
<td>No information available.</td>
</tr>
<tr>
<td>Solubility(ies)</td>
<td>0.3 % water @ 20°C</td>
</tr>
<tr>
<td>Partition coefficient</td>
<td>No information available.</td>
</tr>
<tr>
<td>Auto-ignition temperature</td>
<td>No information available.</td>
</tr>
<tr>
<td>Decomposition Temperature</td>
<td>No information available.</td>
</tr>
<tr>
<td>Viscosity</td>
<td>0.48 cP @ 20°C</td>
</tr>
<tr>
<td>Explosive properties</td>
<td>No information available.</td>
</tr>
</tbody>
</table>
SPR - HEAVY DUTY FLUX REMOVER - SUPRCLEAN, AEROSOL

Oxidising properties  
Not known.

Global Warming Potential (GWP)

Surface tension

Refractive index  
No information available.

Particle size  
No information available.

Molecular weight  
Not applicable.

Vollatility  
100%

Saturation concentration  
No information available.

Critical temperature  
No information available.

Volatile organic compound  
This product contains a maximum VOC content of 1080 g/l.

Heat of vaporization (at boiling point), cal/g (Btu/lb)

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: Toxic gases or vapours.

11. Toxicological information

Information on toxicological effects

Acute toxicity - oral

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

ATE oral (mg/kg)  
62,912.87

Acute toxicity - dermal

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

ATE dermal (mg/kg)  
188,738.6

Acute toxicity - inhalation

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

ATE inhalation (vapours mg/l)  
21.41

ATE inhalation (dusts/mists mg/l)  
314.56
SPR - HEAVY DUTY FLUX REMOVER - SUPRCLEAN, AEROSOL

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/a group of substances which may cause cancer. IARC Group 1 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
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
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: Headache. Exhaustion and weakness.

Ingestion
No specific symptoms known.

Skin contact
No specific symptoms known.

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

trans-1,2-DICHLOROETHYLENE

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

Acute toxicity - oral
### SPR - HEAVY DUTY FLUX REMOVER - SUPRICLEAN, AEROSOL

<table>
<thead>
<tr>
<th>Toxicity Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute toxicity oral (LD₅₀ mg/kg)</td>
<td>7,902.0</td>
</tr>
<tr>
<td>Species</td>
<td>Rat</td>
</tr>
<tr>
<td>ATE oral (mg/kg)</td>
<td>7,902.0</td>
</tr>
<tr>
<td>Acute toxicity dermal (LD₅₀ mg/kg)</td>
<td>5,000.0</td>
</tr>
<tr>
<td>Species</td>
<td>Rat</td>
</tr>
<tr>
<td>ATE dermal (mg/kg)</td>
<td>5,000.0</td>
</tr>
<tr>
<td>Acute toxicity inhalation (vapours mg/l)</td>
<td>11.0</td>
</tr>
<tr>
<td>Skin corrosion/irritation</td>
<td></td>
</tr>
<tr>
<td>Animal data</td>
<td>Slightly irritating. Rabbit</td>
</tr>
<tr>
<td>Serious eye damage/irritation</td>
<td></td>
</tr>
<tr>
<td>Supplier's information. Rabbit 500 mg 24 hours</td>
<td>Causes mild skin irritation.</td>
</tr>
<tr>
<td>Respiratory sensitization</td>
<td></td>
</tr>
<tr>
<td>No specific test data are available.</td>
<td></td>
</tr>
<tr>
<td>Skin sensitization</td>
<td></td>
</tr>
<tr>
<td>No specific test data are available.</td>
<td></td>
</tr>
<tr>
<td>Germ cell mutagenicity</td>
<td></td>
</tr>
<tr>
<td>Genotoxicity - in vitro</td>
<td></td>
</tr>
<tr>
<td>This substance has no evidence of mutagenic properties.</td>
<td></td>
</tr>
<tr>
<td>Genotoxicity - in vivo</td>
<td></td>
</tr>
<tr>
<td>This substance has no evidence of mutagenic properties.</td>
<td></td>
</tr>
<tr>
<td>Carcinogenicity</td>
<td></td>
</tr>
<tr>
<td>No specific test data are available.</td>
<td></td>
</tr>
<tr>
<td>Specific target organ toxicity - single exposure</td>
<td>NOAEL Not available.</td>
</tr>
<tr>
<td>STOT - single exposure</td>
<td>NOAEL Not available.</td>
</tr>
<tr>
<td>Specific target organ toxicity - repeated exposure</td>
<td></td>
</tr>
<tr>
<td>STOT - repeated exposure</td>
<td>NOAEL 16 mg/l, 90 days</td>
</tr>
<tr>
<td>Target organs</td>
<td>Endocrine system Liver Kidneys Bladder Respiratory tract</td>
</tr>
</tbody>
</table>

**HFC-134a Tetrafluoroethane**

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

| Acute toxicity inhalation (LC₅₀ gases ppmV) | 567,000.0 |


**SPR - HEAVY DUTY FLUX REMOVER - SUPRCLEAN, AEROSOL**

<table>
<thead>
<tr>
<th>Species</th>
<th>Rat</th>
</tr>
</thead>
<tbody>
<tr>
<td>ATE inhalation (gases ppmV)</td>
<td>567,000.0</td>
</tr>
</tbody>
</table>

**Inhalation**
Vapours irritate the respiratory system. May cause coughing and difficulties in breathing.

**Ingestion**
May cause stomach pain or vomiting. May cause nausea, headache, dizziness and intoxication.

**Skin contact**
May cause allergic contact eczema. Contact with liquid form may cause frostbite.

**Eye contact**
May cause temporary eye irritation.

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

<table>
<thead>
<tr>
<th>Acute toxicity - oral</th>
</tr>
</thead>
<tbody>
<tr>
<td>Species</td>
</tr>
<tr>
<td>ATE oral (mg/kg)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Acute toxicity - dermal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Species</td>
</tr>
<tr>
<td>ATE dermal (mg/kg)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Acute toxicity - inhalation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Species</td>
</tr>
<tr>
<td>ATE inhalation (vapours mg/l)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Skin corrosion/irritation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Animal data</td>
</tr>
<tr>
<td>Human skin model test</td>
</tr>
<tr>
<td>Extreme pH</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Serious eye damage/irritation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Serious eye damage/irritation</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Respiratory sensitization</th>
</tr>
</thead>
<tbody>
<tr>
<td>Respiratory sensitization</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Skin sensitization</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skin sensitization</td>
</tr>
</tbody>
</table>
SPR - HEAVY DUTY FLUX REMOVER - SUPRCLEAN, AEROSOL

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.

ETHANOL

Acute toxicity - inhalation
Acute toxicity inhalation (LC₅₀ vapours mg/l) 20,000.0
ATE inhalation (vapours mg/l) 20,000.0

METHANOL

Acute toxicity - oral
Notes (oral LD₅₀) Acute Tox. 3 - H301 Toxic if swallowed.
ATE oral (mg/kg) 100.0

Acute toxicity - dermal
Notes (dermal LD₅₀) Acute Tox. 3 - H311 Toxic in contact with skin.
ATE dermal (mg/kg) 300.0

Acute toxicity - inhalation
Notes (inhalation LC₅₀) Acute Tox. 3 - H331 Toxic if inhaled.
ATE inhalation (vapours mg/l) 3.0
ATE inhalation (dusts/mists mg/l) 0.5

Skin corrosion/irritation
Animal data Based on available data the classification criteria are not met.
Serious eye damage/irritation
**SPR - HEAVY DUTY FLUX REMOVER - SUPRCLEAN, AEROSOL**

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

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

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

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

**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**
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**
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: 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.

**ISOBUTYL METHYL KETONE**

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

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12. Ecological information

Ecological information on ingredients

13/18
### SPR - HEAVY DUTY FLUX REMOVER - SUPRCLEAN, AEROSOL

**trans-1,2-DICHLOROETHYLENE**

**Ecotoxicity**
Harmful to aquatic life. May cause long lasting harmful effects to aquatic life.

**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.

**METHANOL**

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

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

### Ecological information on ingredients

**trans-1,2-DICHLOROETHYLENE**

**Acute aquatic toxicity**
- **Acute toxicity - fish**
  
  $L_{C50}$, 96 hours: 135 mg/l, Fish

- **Acute toxicity - aquatic invertebrates**
  
  $E_{C50}$, 48 hours: 220 mg/l, Daphnia magna

- **Acute toxicity - aquatic plants**
  
  $L_{C50}$, 72 hours: 36.36 mg/l, Pseudokirchneriella subcapitata

**Chronic aquatic toxicity**
- **Chronic toxicity - fish early life stage**
  
  NOEC, 48 hours: 110,000 mg/l, Daphnia magna

**HFC-134a Tetrafluoroethane**

**Acute aquatic toxicity**
- **Acute toxicity - fish**
  
  $L_{C50}$, 96 hours: 450 mg/l, Fish

- **Acute toxicity - aquatic invertebrates**
  
  $E_{C50}$, 48 hours: 980 mg/l, Daphnia magna

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

**Acute aquatic toxicity**
- **Acute toxicity - fish**
  
  $L_{C50}$, 96 hours: 13.9 mg/l, Oncorhynchus mykiss (Rainbow trout)

- **Acute toxicity - aquatic invertebrates**
  
  $L_{C50}$, 48 hours: 11.7 mg/l, Daphnia magna

- **Acute toxicity - aquatic plants**
  
  $E_{C50}$, 72 hours: >120 mg/l, Algae

**ETHANOL**

**Acute aquatic toxicity**
- **Acute toxicity - fish**
  
  $L_{C50}$, 96 hours: >10,000 mg/l, Fish
SPR - HEAVY DUTY FLUX REMOVER - SUPRCLEAN, AEROSOL

Acute toxicity - aquatic invertebrates
EC₅₀, 48 hours: 7,800 mg/l, Daphnia magna

Acute toxicity - aquatic plants
, 96 hours: 1000 mg/l, Freshwater algae

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

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

Ecological information on ingredients

trans-1,2-DICHLOROETHYLENE

Biodegradation
Not readily biodegradable.
Method: OECD Test Guideline 301D

ETHANOL

Persistence and degradability
The product is expected to be biodegradable.

METHANOL

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

Bioaccumulative potential
No data available on bioaccumulation.

Partition coefficient
No information available.

Ecological information on ingredients

trans-1,2-DICHLOROETHYLENE

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

Partition coefficient
log Pow: 2.06

HFC-134a Tetrafluoroethane

Partition coefficient
Pow: 1.06

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

Bioaccumulative potential
Bioaccumulation is unlikely to be significant because of the low water-solubility of this product.
SPR - HEAVY DUTY FLUX REMOVER - SUPRCLEAN, AEROSOL

Partition coefficient  Pow: 2.7

ETHANOL

Bioaccumulative potential  Bioaccumulation is unlikely.
Partition coefficient  No information available.

METHANOL

Bioaccumulative potential  No data available on bioaccumulation.
Partition coefficient  : -0.77

Mobility in soil
Mobility  No data available.

Ecological information on ingredients

trans-1,2-DICHLOROETHYLENE

Mobility  The product has poor water-solubility.

ETHANOL

Mobility  The product is soluble in water.

METHANOL

Mobility  No data available.

Other adverse effects
Other adverse effects  None known.

Ecological information on ingredients

METHANOL

Other adverse effects  None known.

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. 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, labeled with their contents. Incineration or landfill should only be considered when recycling is not feasible.

14. Transport information

UN number
SPR - HEAVY DUTY FLUX REMOVER - SUPRICLEAN, AEROSOL

UN No. (IMDG) 1950
UN No. (ICAO) 1950

UN proper shipping name

Proper shipping name (TDG) LIMITED QUANTITY
Proper shipping name (IMDG) UN1950 AEROSOLS, NON-FLAMMABLE, 2.2, LIMITED QUANTITY
Proper shipping name (ICAO) UN1950 AEROSOLS, NON-FLAMMABLE, 2.2, LIMITED QUANTITY

Proper shipping name (DOT) LIMITED QUANTITY

Transport hazard class(es)

IMDG class 2.2 LIMITED QUANTITY
ICAO class/division 2.2 LIMITED QUANTITY
ICAO subsidiary risk N/A

Packing group

Packing group (International) No information required.
TDG packing group N/A
IMDG packing group N/A
ICAO packing group N/A
DOT packing group N/A

Environmental hazards

Environmentally hazardous substance/marine pollutant No.

Special precautions for user

Not applicable. No information required.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable. No information required.

15. Regulatory information

Inventories

Canada – DSL/NDSL
All the ingredients are listed or exempt.
DSL
ETHANOL
DSL
trans-1,2-DICHLOROETHYLENE
DSL
1,1,1,2,2,3,4,5,5,5-decafluoropentane
DSL

US - TSCA
Present.
### 16. Other information

<table>
<thead>
<tr>
<th>Classification abbreviations and acronyms</th>
<th>Acute Tox. = Acute toxicity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Training advice</td>
<td>Only trained personnel should use this material.</td>
</tr>
<tr>
<td>Revision date</td>
<td>2021-05-25</td>
</tr>
<tr>
<td>Revision</td>
<td>64</td>
</tr>
<tr>
<td>Supersedes date</td>
<td>2021-05-25</td>
</tr>
<tr>
<td>SDS number</td>
<td>AEROSOL - SPR</td>
</tr>
<tr>
<td>Hazard statements in full</td>
<td>H225 Highly flammable liquid and vapour.</td>
</tr>
<tr>
<td></td>
<td>H280 Contains gas under pressure; may explode if heated.</td>
</tr>
<tr>
<td></td>
<td>H301 Toxic if swallowed.</td>
</tr>
<tr>
<td></td>
<td>H311 Toxic in contact with skin.</td>
</tr>
<tr>
<td></td>
<td>H319 Causes serious eye irritation.</td>
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<tr>
<td></td>
<td>H331 Toxic if inhaled.</td>
</tr>
<tr>
<td></td>
<td>H332 Harmful if inhaled.</td>
</tr>
<tr>
<td></td>
<td>H335 May cause respiratory irritation.</td>
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<tr>
<td></td>
<td>H336 May cause drowsiness or dizziness.</td>
</tr>
<tr>
<td></td>
<td>H360 May damage fertility or the unborn child.</td>
</tr>
<tr>
<td></td>
<td>H370 Causes damage to organs .</td>
</tr>
<tr>
<td></td>
<td>H412 Harmful to aquatic life with long lasting effects.</td>
</tr>
<tr>
<td></td>
<td>May displace oxygen and cause rapid suffocation.</td>
</tr>
</tbody>
</table>

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.