SAFETY DATA SHEET
PFR POLAR FLUX REMOVER, AEROSOL

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

1.1. Product identifier
Product name PFR POLAR FLUX REMOVER, AEROSOL
Product number MCC-PFR10A, MCC-PFR107, MCC-PFR10Y

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
Phone +32.2.251.95.05
Fax +32.2.400.96.39
EuroSales@MicroCare.com

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
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 Skin Irrit. 2 - H315 Eye Irrit. 2 - H319 Repir. 2 - H361f STOT SE 3 - H336 STOT RE 2 - H373
Environmental hazards Aquatic Chronic 3 - H412

Human health Splashes in the eyes may cause redness and irritation. Keep out of the reach of children. See Section 11 for additional information on health hazards.

Physicochemical Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C. Do not pierce or burn, even after use.

2.2. Label elements
PFR POLAR FLUX REMOVER, AEROSOL

**Pictogram**

![Pictogram]

**Signal word**

Warning

**Hazard statements**

H315 Causes skin irritation.
H319 Causes serious eye irritation.
H361f Suspected of damaging fertility.
H336 May cause drowsiness or dizziness.
H373 May cause damage to organs through prolonged or repeated exposure.
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.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F.

**Supplemental label information**

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

**Contains**

ACETONE, HEXANE-norm

**Supplementary precautionary statements**

P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P260 Do not breathe spray.
P264 Wash contaminated skin thoroughly after handling.
P273 Avoid release to the environment.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
P302+P352 IF ON SKIN: Wash with plenty of water.
P308+P313 IF exposed or concerned: Get medical advice/ attention.
P314 Get medical advice/ attention if you feel unwell.
P321 Specific treatment (see medical advice on this label).
P332+P313 If skin irritation occurs: Get medical advice/ attention.
P337+P313 If eye irritation persists: Get medical advice/ attention.
P362+P364 Take off contaminated clothing and wash it before reuse.
P405 Store locked up.
P501 Dispose of contents/ container in accordance with national regulations.

### 2.3. Other hazards

This product contains a substance classified as PBT.

### SECTION 3: Composition/information on ingredients

#### 3.2. Mixtures
# PFR POLAR FLUX REMOVER, AEROSOL

## ACETONE

<table>
<thead>
<tr>
<th>CAS number: 67-64-1</th>
<th>EC number: 200-662-2</th>
</tr>
</thead>
</table>

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

### HEXANE-norm

<table>
<thead>
<tr>
<th>CAS number: 110-54-3</th>
<th>EC number: 203-777-6</th>
</tr>
</thead>
</table>

### Classification
- Flam. Liq. 2 - H225
- Skin Irrit. 2 - H315
- Repr. 2 - H361f
- STOT SE 3 - H336
- STOT RE 2 - H373
- Asp. Tox. 1 - H304
- Aquatic Chronic 2 - H411

### METHANOL

<table>
<thead>
<tr>
<th>CAS number: 67-56-1</th>
<th>EC number: 200-659-6</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

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.

## Composition

### 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.
PFR POLAR FLUX REMOVER, AEROSOL

Skin contact
Rinse with water.

Eye contact
Rinse with water. Do not rub eye. Remove any contact lenses and open eyelids wide apart. 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: Headache. Nausea, vomiting. Central nervous system depression. Drowsiness, dizziness, disorientation, vertigo. Narcotic effect.

Ingestion
Due to the physical nature of this product, it is unlikely that ingestion will occur.

Skin contact
Redness. Irritating to skin.

Eye contact
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. Bursting aerosol containers may be propelled from a fire at high speed. If aerosol cans are ruptured, care should be taken due to the rapid escape of the pressurised contents and propellant.

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. 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
PFR POLAR FLUX REMOVER, AEROSOL

**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.

**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**
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. Eliminate all ignition sources if safe to do so. No smoking, sparks, flames or other sources of ignition near spillage. Under normal conditions of handling and storage, spillages from aerosol containers are unlikely. If aerosol cans are ruptured, care should be taken due to the rapid escape of the pressurised contents and propellant. Small Spillages: Wipe up with an absorbent cloth and dispose of waste safely. Large Spillages: If the product is soluble in water, dilute the spillage with water and mop it up. Alternatively, or if it is not water-soluble, absorb the spillage with an inert, dry material and place it in a suitable waste disposal container. 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. Avoid exposing aerosol containers to high temperatures or direct sunlight. Suspected of damaging fertility. 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. Do not spray on an open flame or other ignition source. Do not pierce or burn, even after use. Spray will evaporate and cool rapidly and may cause frostbite or cold burns if in contact with skin. Avoid contact with eyes. Avoid inhalation of vapours and spray/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). Keep only in the original container. Keep container tightly closed, in a cool, well ventilated place. Keep containers upright. Protect containers from damage. Protect from sunlight. Do not store near heat sources or expose to high temperatures. Do not expose to temperatures exceeding 50°C/122°F.

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
PFR POLAR FLUX REMOVER, AEROSOL

ACETONE
Long-term exposure limit (8-hour TWA): WEL 500 ppm 1210 mg/m³
Short-term exposure limit (15-minute): WEL 1500 ppm 3620 mg/m³

HEXANE-norm
Long-term exposure limit (8-hour TWA): WEL 20 ppm 72 mg/m³

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
Sk
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
Wear tight-fitting, chemical splash goggles or face shield. If inhalation hazards exist, a full-face respirator may be required instead.

Hand protection
Wear protective gloves. The most suitable glove should be chosen in consultation with the glove supplier/manufacturer, who can provide information about the breakthrough time of the glove material. To protect hands from chemicals, gloves should comply with European Standard EN374. Considering the data specified by the glove manufacturer, check during use that the gloves are retaining their protective properties and change them as soon as any deterioration is detected. Frequent changes are recommended.

Other skin and body protection
Wear appropriate clothing to prevent any possibility of 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
PFR POLAR FLUX REMOVER, AEROSOL

**Appearance**
Liquid.

**Colour**
Clear liquid. Colourless.

**Odour**
Acetone.

**Initial boiling point and range**
55°C/131°F @ 101.3 kPa

**Flash point**
Not determined.

**Upper/lower flammability or explosive limits**
Not determined.

**Vapour pressure**
Not determined.

**Vapour density**
Not determined.

**Relative density**
0.75

**Solubility(ies)**
Not determined.

**9.2. Other information**

**Volutility**
100%

**Volatile organic compound**
This product contains a maximum VOC content of 190 g/l.

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**SECTION 10: Stability and reactivity**

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

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

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

**10.4. Conditions to avoid**
Avoid exposing aerosol containers to high temperatures or direct sunlight. Pressurised container: may burst if heated.

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

**10.6. 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.

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**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)**
14,814.81

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7/14
## PFR POLAR FLUX REMOVER, AEROSOL

<table>
<thead>
<tr>
<th>Notes (dermal LD₅₀)</th>
<th>Based on available data the classification criteria are not met.</th>
</tr>
</thead>
<tbody>
<tr>
<td>ATE dermal (mg/kg)</td>
<td>44,444.44</td>
</tr>
<tr>
<td><strong>Acute toxicity - inhalation</strong></td>
<td></td>
</tr>
<tr>
<td>Notes (Inhalation LC₅₀)</td>
<td>Based on available data the classification criteria are not met.</td>
</tr>
<tr>
<td>ATE inhalation (vapours mg/l)</td>
<td>444.44</td>
</tr>
<tr>
<td>ATE inhalation (dusts/mists mg/l)</td>
<td>74.07</td>
</tr>
<tr>
<td>Skin corrosion/irritation</td>
<td></td>
</tr>
<tr>
<td>Animal data</td>
<td>Irritating.</td>
</tr>
<tr>
<td>Serious eye damage/irritation</td>
<td>Causes serious eye irritation.</td>
</tr>
<tr>
<td>Respiratory sensitisation</td>
<td>Based on available data the classification criteria are not met.</td>
</tr>
<tr>
<td>Skin sensitisation</td>
<td>Based on available data the classification criteria are not met.</td>
</tr>
<tr>
<td>Germ cell mutagenicity</td>
<td></td>
</tr>
<tr>
<td>Genotoxicity - in vitro</td>
<td>Based on available data the classification criteria are not met.</td>
</tr>
<tr>
<td>Carcinogenicity</td>
<td>Based on available data the classification criteria are not met.</td>
</tr>
<tr>
<td>IARC carcinogenicity</td>
<td>None of the ingredients are listed or exempt.</td>
</tr>
<tr>
<td>Reproductive toxicity</td>
<td></td>
</tr>
<tr>
<td>Reproductive toxicity - fertility</td>
<td>Suspected of damaging fertility.</td>
</tr>
<tr>
<td>Reproductive toxicity - development</td>
<td>Based on available data the classification criteria are not met.</td>
</tr>
</tbody>
</table>

### Specific target organ toxicity - single exposure

- **STOT - single exposure**: STOT SE 3 - H336 May cause drowsiness or dizziness.

### Target organs

- Central nervous system

### Specific target organ toxicity - repeated exposure

- **STOT - repeated exposure**: STOT RE 2 - H373 May cause damage to organs through prolonged or repeated exposure.

### Aspiration hazard

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

### General information

- May damage fertility. 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. Nausea, vomiting. Central nervous system depression. Drowsiness, dizziness, disorientation, vertigo. Narcotic effect.

### Ingestion

- Due to the physical nature of this product, it is unlikely that ingestion will occur.

### Skin contact

- Redness. Irritating to skin.

### Eye contact

- Irritating to eyes.
PFR POLAR FLUX REMOVER, AEROSOL

Route of exposure
Ingestion Inhalation Skin and/or eye contact

Target organs
Central nervous system

Toxicological information on ingredients.

**ACETONE**

Acute toxicity - inhalation

Acute toxicity inhalation (LC$_{50}$ vapours mg/l)
50,100.0

ATE inhalation (vapours mg/l)
50,100.0

**TRANS-1,3,3,3-TETRAFLUOROPROP-1-ENE**

Acute toxicity - inhalation

Acute toxicity inhalation (LC$_{50}$ vapours mg/l)
965.0

Species
Rat

ATE inhalation (vapours mg/l)
965.0

**METHANOL**

Acute toxicity - oral

Notes (oral LD$_{50}$)
Acute Tox. 3 - H301 Toxic if swallowed.

ATE oral (mg/kg)
100.0

Acute toxicity - dermal

Notes (dermal LD$_{50}$)
Acute Tox. 3 - H311 Toxic in contact with skin.

ATE dermal (mg/kg)
300.0

Acute toxicity - inhalation

Notes (inhalation LC$_{50}$)
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

Based on available data the classification criteria are not met.

Respiratory sensitisation

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.

Skin sensitisation
PFR POLAR FLUX REMOVER, AEROSOL

Germ cell mutagenicity
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 None of the ingredients are listed or exempt.
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: 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.

SECTION 12: Ecological information

Ecological information on ingredients.

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.

TRANS-1,3,3,3-TETRAFLUOROPROP-1-ENE

Acute aquatic toxicity
PFR POLAR FLUX REMOVER, AEROSOL

Acute toxicity - aquatic invertebrates

EC₅₀, 48 hours: >160 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.

ACETONE

Persistence and degradability

The product is readily biodegradable.

TRANS-1,3,3,3-TETRAFLUOROPROP-1-ENE

Persistence and degradability

The product is not readily biodegradable.

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.

ACETONE

Bioaccumulative potential

No information available.

Partition coefficient

log Pow: -0.024

METHANOL

Bioaccumulative potential

No data available on bioaccumulation.

Partition coefficient

: -0.77

12.4. Mobility in soil

Mobility

The product contains volatile organic compounds (VOCs) which will evaporate easily from all surfaces.

Ecological information on ingredients.

METHANOL

Mobility

No data available.
PFR POLAR FLUX REMOVER, AEROSOL

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. Empty containers must not be punctured or incinerated because of the risk of an explosion. 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.

SECTION 14: Transport information

14.1. UN number

UN No. (ADR/RID) NA
UN No. (IMDG) UN1950
UN No. (ICAO) UN1950
UN No. (ADN) NA

14.2. UN proper shipping name

Proper shipping name (ADR/RID) LIMITED QUANTITY
Proper shipping name (IMDG) UN1950, AEROSOLS, FLAMMABLE, 2.1, LIMITED QUANTITY
Proper shipping name (ICAO) UN1950, AEROSOLS, FLAMMABLE, 2.1, LIMITED QUANTITY
Proper shipping name (ADN) LIMITED QUANTITY

14.3. Transport hazard class(es)

ADR/RID classification code F1
IMDG class 2.1 LIMITED QUANTITY
ICAO class/division 2.1 LIMITED QUANTITY

14.4. Packing group

ADR/RID packing group N/A
IMDG packing group N/A
ICAO packing group N/A
PFR POLAR FLUX REMOVER, AEROSOL

ADN packing group N/A

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

14.6. Special precautions for user
EmS F-D, S-U
ADR transport category 2
Emergency Action Code •3YE
Hazard Identification Number 23
(ADR/RID)

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 Not applicable.
and the IBC Code

SECTION 15: Regulatory information

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.

December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of
Chemicals (REACH) (as amended).
December 2008 on classification, labelling and packaging of substances and mixtures (as
amended).
relating to aerosol dispensers (75/324/EEC) (as amended).

Restrictions (Title VIII Regulation 1907/2006) No specific restrictions on use are known for this product.

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
PFR POLAR FLUX REMOVER, AEROSOL

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

Aerosol = Aerosol
Eye Irrit. = Eye irritation
Repr. = Reproductive toxicity
Skin Irrit. = Skin irritation
STOT RE = Specific target organ toxicity-repeated exposure
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 comments

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

Revision date
30/01/2019

Revision
53

Supersedes date
30/01/2019

SDS number
AEROSOL - PFR

Hazard statements in full

H225 Highly flammable liquid and vapour.
H301 Toxic if swallowed.
H304 May be fatal if swallowed and enters airways.
H311 Toxic in contact with skin.
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H331 Toxic if inhaled.
H336 May cause drowsiness or dizziness.
H361f Suspected of damaging fertility.
H370 Causes damage to organs.
H373 May cause damage to organs through prolonged or repeated exposure.
H411 Toxic to aquatic life with long lasting effects.
H412 Harmful to aquatic life with long lasting effects.

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