SAFETY DATA SHEET
PFR POLAR FLUX REMOVER

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

1.1. Product identifier
Product name: PFR POLAR FLUX REMOVER
Product number: MCC - PFR107

1.2. Relevant identified uses of the substance or mixture and uses advised against
Identified uses: Cleaning agent.

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 EUROPE, BVBA
Havendoklaan 13 D
1804 Cargovil - Vilvoorde
Belgium
Tel: +32 2 251 95 05

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: Aerosol 1 - H222, H229
Health hazards: Skin Irrit. 2 - H315 Eye Irrit. 2 - H319 Repr. 2 - H361f STOT SE 3 - H336 STOT RE 2 - H373
Asp. Tox. 1 - H304

Environmental hazards: Aquatic Chronic 2 - H411

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

Pictogram

Signal word

Danger

Hazard statements
H222 Extremely flammable aerosol.
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H361f Suspected of damaging fertility.
H336 May cause drowsiness or dizziness.
H411 Toxic to aquatic life with long lasting effects.
H304 May be fatal if swallowed and enters airways.

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.
P314 Get medical advice/attention if you feel unwell.
P370+P378 In case of fire: Use foam, carbon dioxide, dry powder or water fog to extinguish.
P410 Protect from sunlight.
P412 Do not expose to temperatures exceeding 50°C/122°F.
P501 Dispose of contents/container in accordance with local regulations.

Supplemental label information

EUH210 Safety data sheet available on request.
RCH001a For use in industrial installations only.
Contains ACETONE, HEXANE-norm

2.3. Other hazards
This product contains a substance classified as PBT.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

<table>
<thead>
<tr>
<th>ACETONE</th>
<th>60-100%</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAS number: 67-64-1</td>
<td>EC number: 200-662-2</td>
</tr>
</tbody>
</table>

Classification
Flam. Liq. 2 - H225
Eye Irrit. 2 - H319
STOT SE 3 - H336
PFR POLAR FLUX REMOVER

**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

**PETROLEUM GASES, LIQUEFIED; PETROLEUM GAS**

<table>
<thead>
<tr>
<th>CAS number: 68476-85-7</th>
<th>EC number: 270-704-2</th>
</tr>
</thead>
</table>

**Classification**

- Flam. Gas 1 - H220

**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.

**SECTION 4: First aid measures**

4.1. Description of first aid measures

**General information**

Promptly remove any clothing that becomes wet or contaminated. Move affected person to fresh air at once. Get medical attention if any discomfort continues.

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

4.3. Indication of any immediate medical attention and special treatment needed

Notes for the doctor

No specific recommendations. If in doubt, get medical attention promptly.

**SECTION 5: Firefighting measures**

5.1. Extinguishing media

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.

Oxides of carbon. Protection against nuisance dust must be used when the airborne concentration exceeds 10 mg/m³.

5.3. Advice for firefighters


PFR POLAR FLUX REMOVER

Special protective equipment for firefighters

Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.2. Environmental precautions

6.3. Methods and material for containment and cleaning up

6.4. Reference to other sections

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Usage precautions

Keep away from heat, sparks and open flame. Avoid spilling. Avoid contact with skin and eyes. Provide adequate ventilation. Avoid inhalation of vapours. Use approved respirator if air contamination is above an acceptable level. Keep out of the reach of children.

7.2. Conditions for safe storage, including any incompatibilities

7.3. Specific end use(s)

SECTION 8: Exposure controls/Personal protection

8.1. Control parameters

Occupational exposure limits

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

PETROLEUM GASES, LIQUEFIED; PETROLEUM GAS

Long-term exposure limit (8-hour TWA): WEL 1000 ppm 1750 mg/m³
Short-term exposure limit (15-minute): WEL 1250 ppm 2180 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.

8.2. Exposure controls

Protective equipment

Eye/face protection

Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible. Unless the assessment indicates a higher degree of protection is required, the following protection should be worn: Tight-fitting safety glasses.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance

Liquid.

Colour

Clear liquid. Colourless.
PFR POLAR FLUX REMOVER

Odour
Acetone.

Initial boiling point and range
Not determined.

Flash point
~ -20°C / -4°F Method: Closed cup.

Flammability (solid, gas)
No information available.

Upper/lower flammability or explosive limits
Not determined.

Vapour pressure
Not determined.

Vapour density
Not determined.

Solubility(ies)
Not determined.

Global Warming Potential (GWP)

9.2. Other information

Volutility
100%

Volatile organic compound
No information available.

SECTION 10: Stability and reactivity

10.1. Reactivity

10.2. Chemical stability

10.3. Possibility of hazardous reactions

10.4. Conditions to avoid

10.5. Incompatible materials

10.6. Hazardous decomposition products

Hazardous decomposition products

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity - oral
ATE oral (mg/kg) 12,345.68

Acute toxicity - dermal
ATE dermal (mg/kg) 37,037.04

Acute toxicity - inhalation
ATE inhalation (vapours mg/l) 370.37
ATE Inhalation (dusts/mists mg/l) 61.73

Toxicological information on ingredients.

ACETONE

Acute toxicity - inhalation
(LC₅₀ vapours mg/l) 50,100.0
PFR POLAR FLUX REMOVER

ATE inhalation (vapours mg/l)  50,100.0

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

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

Skin sensitisation
Skin sensitisation  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
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.
PFR POLAR FLUX REMOVER

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

Ecological information on ingredients.

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

Ecological information on ingredients.

ACETONE

Persistence and degradability
The product is readily biodegradable.

METHANOL

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

12.3. Bioaccumulative potential

Ecological information on ingredients.

ACETONE
PFR POLAR FLUX REMOVER

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
Ecological information on ingredients.

METHANOL

Mobility
No data available.

12.5. Results of PBT and vPvB assessment

12.6. Other adverse effects
Ecological information on ingredients.

METHANOL

Other adverse effects
None known.

SECTION 13: Disposal considerations

13.1. Waste treatment methods
General information
Reuse or recycle products wherever possible.

SECTION 14: Transport information

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

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 class F1
IMDG class 2.1
ICAO class/division 2.1

14.4. Packing group
ADR/RID packing group N/A
PFR POLAR FLUX REMOVER

IMDG packing group N/A
ICAO packing group N/A
ADN packing group N/A

14.5. Environmental hazards
Environmentally hazardous substance/marine pollutant

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

14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable.

SECTION 15: Regulatory information

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


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
US - TSCA 12(b) Export Notification Not listed.

SECTION 16: Other information

Revision comments NOTE: Lines within the margin indicate significant changes from the previous revision.
Revision date 02/12/2019
Revision 30
PFR POLAR FLUX REMOVER

**Supersedes date** 13/08/2019

**SDS number** AEROSOL - PFR

**Hazard statements in full**
- H220 Extremely flammable gas.
- H222 Extremely flammable aerosol.
- H225 Highly flammable liquid and vapour.
- H229 Pressurised container: may burst if heated.
- 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.