



SAFETY DATA SHEET

PFR POLAR FLUX REMOVER, Aerosol

According to Appendix D, OSHA Hazard Communication Standard 29 CFR §1910.1200

1. Identification

Product identifier

Product name PFR POLAR FLUX REMOVER, Aerosol

Product number MCC-PFR10A, MCC-PFR10Y

Recommended use of the chemical and restrictions on use

Application Cleaning agent.

Details of the supplier of the safety data sheet

Supplier MICROCARE LLC

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 (U.S.A. and CANADA)
1-352-323-3500 (from anywhere in the world)

2. Hazard(s) identification

Classification of the substance or mixture

OSHA Regulatory Status This Product is Hazardous under the OSHA Hazard Communication Standard.

Physical hazards Flam. Aerosol 1 - H222

Health hazards Skin Irrit. 2 - H315 Eye Irrit. 2A - H319 Repr. 1B - H360 STOT SE 3 - H336 STOT RE 2 - H373 Asp. Tox. 1 - H304

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.

Label elements

Hazard symbols



Signal word

Danger

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Hazard statements	<p>H222 Extremely flammable aerosol.</p> <p>H280 Contains gas under pressure; may explode if heated.</p> <p>H315 Causes skin irritation.</p> <p>H319 Causes serious eye irritation.</p> <p>H361f Suspected of damaging fertility.</p> <p>H360 May damage fertility or the unborn child.</p> <p>H336 May cause drowsiness or dizziness.</p> <p>H373 May cause damage to organs through prolonged or repeated exposure.</p> <p>H304 May be fatal if swallowed and enters airways.</p>
Precautionary statements	<p>P210 Keep away from heat, sparks, open flames and hot surfaces. No smoking.</p> <p>P211 Do not spray on an open flame or other ignition source.</p> <p>P251 Pressurized container: Do not pierce or burn, even after use</p> <p>P261 Avoid breathing vapor/ spray.</p> <p>P302+P352 If on skin: Wash with plenty of water.</p> <p>P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.</p> <p>P314 Get medical advice/ attention if you feel unwell.</p> <p>P332+P313 If skin irritation occurs: Get medical advice/ attention.</p> <p>P337+P313 If eye irritation persists: Get medical advice/ attention.</p> <p>P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50°C /122°F.</p> <p>P501 Dispose of contents/ container in accordance with national regulations.</p>
Supplemental label information	<p>EUH210 Safety data sheet available on request.</p> <p>RCH001b For use in industrial installations or professional treatment only.</p>
Contains	ACETONE, HEXANE-norm, METHANOL

Other hazards

This product contains a substance classified as PBT.

3. Composition/information on ingredients

Mixtures

ACETONE	60-100%
CAS number: 67-64-1	
Classification	
Flam. Liq. 2 - H225	
Eye Irrit. 2A - H319	
STOT SE 3 - H336	
HEXANE-norm	10-30%
CAS number: 110-54-3	
Classification	
Flam. Liq. 2 - H225	
Skin Irrit. 2 - H315	
Repr. 2 - H361f	
STOT SE 3 - H336	
STOT RE 2 - H373	
Asp. Tox. 1 - H304	
Not relevant.	

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TRANS-1,3,3,3-TETRAFLUOROPROP-1-ENE	10-30%
CAS number: 29118-24-9	
Classification Press. Gas, Liquefied - H280	
METHANOL	<1%
CAS number: 67-56-1	
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 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

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.

Indication of immediate medical attention and special treatment needed

Notes for the doctor No specific recommendations. If in doubt, get medical attention promptly.

5. Fire-fighting measures

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.

Advice for firefighters

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

6. Accidental release measures

7. Handling and storage

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 vapors. Use approved respirator if air contamination is above an acceptable level. Keep out of the reach of children.

8. Exposure controls/Personal protection

Control parameters

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Occupational exposure limits

ACETONE

Long-term exposure limit (8-hour TWA): ACGIH 250 ppm 594 mg/m³

Short-term exposure limit (15-minute): ACGIH 500 ppm 1187 mg/m³

A4

Long-term exposure limit (8-hour TWA): OSHA 1000 ppm 2400 mg/m³

HEXANE-norm

Long-term exposure limit (8-hour TWA): OSHA 500 ppm 1800 mg/m³

Long-term exposure limit (8-hour TWA): ACGIH 50 ppm 176 mg/m³

Sk

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

Long-term exposure limit (8-hour TWA): OSHA 200 ppm 260 mg/m³

ACGIH = American Conference of Governmental Industrial Hygienists.

OSHA = Occupational Safety and Health Administration.

A4 = Not Classifiable as a Human Carcinogen.

Sk = Danger of cutaneous absorption.

METHANOL (CAS: 67-56-1)

Biological limit values 15 mg/l

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.

9. Physical and chemical properties

Information on basic physical and chemical properties

Appearance	Liquid.
Color	Clear liquid. Colorless.
Odor	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.
Vapor pressure	Not determined.
Vapor density	Not determined.
Solubility(ies)	Not determined.

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Global Warming Potential (GWP)

Surface tension

Volatility 100%

Volatile organic compound No information available.

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

10. Stability and reactivity

Hazardous decomposition products Fire creates: Vapors/gases/fumes of: Carbon monoxide (CO). Carbon dioxide (CO₂). Hydrogen fluoride (HF).

11. Toxicological information

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

Acute toxicity inhalation (LC₅₀ vapours mg/l) 50,100.0

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

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ATE inhalation (dusts/mists mg/l)	0.5
<u>Skin corrosion/irritation</u>	
Animal data	Based on available data the classification criteria are not met.
<u>Serious eye damage/irritation</u>	
Serious eye damage/irritation	Based on available data the classification criteria are not met.
<u>Respiratory sensitization</u>	
Respiratory sensitization	Based on available data the classification criteria are not met.
<u>Skin sensitization</u>	
Skin sensitization	Based on available data the classification criteria are not met.
<u>Germ cell mutagenicity</u>	
Genotoxicity - in vitro	Based on available data the classification criteria are not met.
<u>Carcinogenicity</u>	
Carcinogenicity	Based on available data the classification criteria are not met.
IARC carcinogenicity	None of the ingredients are listed or exempt.
<u>Reproductive toxicity</u>	
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.
<u>Specific target organ toxicity - single exposure</u>	
STOT - single exposure	STOT SE 1 - H370 Causes damage to organs .
<u>Specific target organ toxicity - repeated exposure</u>	
STOT - repeated exposure	Not classified as a specific target organ toxicant after repeated exposure.
<u>Aspiration hazard</u>	
Aspiration hazard	Based on available data the classification criteria are not met.
<u>General information</u>	
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.

12. Ecological information

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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.

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

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.

Bioaccumulative potential

Ecological information on ingredients.

ACETONE

Bio-Accumulative Potential No information available.

Partition coefficient log Pow: -0.024

METHANOL

Bio-Accumulative Potential No data available on bioaccumulation.

Partition coefficient : -0.77

Mobility in soil

Ecological information on ingredients.

METHANOL

Mobility

No data available.

Other adverse effects

Ecological information on ingredients.

METHANOL

Other adverse effects

None known.

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13. Disposal considerations

Waste treatment methods

General information Reuse or recycle products wherever possible.

14. Transport information

UN Number

UN No. (TDG)	UN1950
UN No. (IMDG)	UN1950
UN No. (ICAO)	UN1950
UN No. (DOT)	UN1950

UN proper shipping name

Proper shipping name (IMDG) UN1950, AEROSOLS, FLAMMABLE, 2.1, LIMITED QUANTITY

Proper shipping name (ICAO) UN1950, AEROSOLS, FLAMMABLE, 2.1, LIMITED QUANTITY

Transport hazard class(es)

IMDG Class	2.1
ICAO class/division	2.1

Packing group

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



Special precautions for user

EmS F-D, S-U

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

15. Regulatory information

US Federal Regulations

SARA Section 302 Extremely Hazardous Substances Tier II Threshold Planning Quantities
Not listed.

CERCLA/Superfund, Hazardous Substances/Reportable Quantities (EPA)

ACETONE

Final CERCLA RQ: 5000(2270) pounds (Kilograms)

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HEXANE-norm

Final CERCLA RQ: 5000(2270) pounds (Kilograms)

METHANOL

Final CERCLA RQ: 5000(2270) pounds (Kilograms)

SARA Extremely Hazardous Substances EPCRA Reportable Quantities

Not listed.

SARA 313 Emission Reporting

HEXANE-norm

1.0 %

METHANOL

1.0 %

CAA Accidental Release Prevention

Not listed.

SARA (311/312) Hazard Categories

Acute
Chronic
Fire

OSHA Highly Hazardous Chemicals

Not listed.

US State Regulations

California Proposition 65 Carcinogens and Reproductive Toxins

METHANOL

Developmental toxin.

California Air Toxics "Hot Spots" (A-I)

HEXANE-norm

Present.

METHANOL

Present.

California Air Toxics "Hot Spots" (A-II)

Not listed.

California Directors List of Hazardous Substances

ACETONE

Present.

METHANOL

Present.

Massachusetts "Right To Know" List

ACETONE

Present.

HEXANE-norm

Present.

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METHANOL

Present.

Rhode Island "Right To Know" List

ACETONE

Present.

HEXANE-norm

Present.

METHANOL

Present.

Minnesota "Right To Know" List

ACETONE

Present.

HEXANE-norm

Present.

METHANOL

Present.

New Jersey "Right To Know" List

ACETONE

Present.

HEXANE-norm

Present.

METHANOL

Present.

Pennsylvania "Right To Know" List

ACETONE

Present.

HEXANE-norm

Present.

METHANOL

Present.

Inventories

Canada - DSL/NDSL

Yes

US - TSCA

Yes

US - TSCA 12(b) Export Notification

Not listed.

16. Other information

Revision comments

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

Revision date

6/1/2021

PFR POLAR FLUX REMOVER, Aerosol

Revision	36
Supersedes date	12/6/2019
SDS No.	AEROSOL - PFR
Hazard statements in full	H222 Extremely flammable aerosol. H225 Highly flammable liquid and vapor. H280 Contains gas under pressure; may explode 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. H360 May damage fertility or the unborn child. H361f Suspected of damaging fertility. H370 Causes damage to organs . H373 May cause damage to organs through prolonged or repeated exposure.