

SAFETY DATA SHEET

HUNTSMAN

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Revision Number 1

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product identifier

Product Name FLUOROLUBE® Oil - All Grades

Other means of identification

Product Code(s) FLUOROLUBE® OIL

Synonyms None

Recommended use of the chemical and restrictions on use

Recommended Use Lubricant

Uses advised against No information available

Details of the supplier of the safety data sheet

Supplier Address

Gabriel Performance Products
725 State Road
Ashtabula, Ohio 44004

Manufacturer Address

Gabriel Performance Products
725 State Road
Ashtabula, Ohio 44004
Contact Name: Regulatory Manager
Tel: 866-800-2436 (CHEM)
regulatory@gabrielchem.com
www.gabrielchem.com

Emergency telephone number

Emergency Telephone Chemtrec 1-800-424-9300 Outside U.S. 1-703-527-3887 (COLLECT)

2. HAZARDS IDENTIFICATION

Classification

This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Label elements

Appearance - **Physical state** Liquid **Odor** -

Hazards not otherwise classified (HNOC)

Not applicable

Other Information

Not applicable

Unknown acute toxicity 0 % of the mixture consists of ingredient(s) of unknown toxicity**3. COMPOSITION/INFORMATION ON INGREDIENTS****Substance**

| Chemical name | CAS No. | Weight-% | Trade secret |
|--|-----------|----------|--------------|
| Ethene, 1-chloro-1,2,2-trifluoro-, homopolymer | 9002-83-9 | 100 | * |

*Not trade secret.

4. FIRST AID MEASURES**Description of first aid measures**

| | |
|---------------------|--|
| Inhalation | Remove to fresh air. Get medical attention if symptoms occur. |
| Eye contact | In case of eye contact, remove contact lens and rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get immediate medical advice/attention. |
| Skin contact | Wash off immediately with soap and plenty of water. Wash contaminated clothing before reuse. If skin irritation or rash occurs: Get medical advice/attention. |
| Ingestion | No effect expected. If large quantities of this material are swallowed, call a physician immediately. |

Most important symptoms and effects, both acute and delayed**Symptoms** No information available.**Indication of any immediate medical attention and special treatment needed**

Note to physicians Material from high-pressure equipment, pinhole leaks, or high-pressure line failure can penetrate the skin and, if not properly treated, can cause severe injury, including disfigurement, loss of function, or even require amputation of the affected area. To prevent such serious injury, immediate medical attention should be sought even if the injection injury appears to be minor.

5. FIRE-FIGHTING MEASURES

| | |
|---|--|
| Suitable Extinguishing Media | Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. |
| Unsuitable extinguishing media | CAUTION: Use of water spray when fighting fire may be inefficient. |
| Specific hazards arising from the chemical | Fluorolubes decompose and depolymerize above 500°F. Decomposition products may be toxic and hazardous. Avoid friction or galling in contact with aluminum or magnesium parts. Friction or galling can cause localized areas of instantaneously high pressure and temperature which may result in localized detonation. See Stability and Reactivity (Section 10) of the SDS. |
| Explosion data | |
| Sensitivity to Mechanical Impact | Not sensitive. |
| Sensitivity to Static Discharge | Not sensitive. |

Special protective equipment for fire-fighters Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions Ensure adequate ventilation.

Environmental precautions

Environmental precautions Prevent entry into waterways, sewers, basements or confined areas.

Methods and material for containment and cleaning up

Methods for containment Dike to collect large liquid spills.

Methods for cleaning up Dike to collect large liquid spills. Soak up with inert absorbent material. For large spills: Clean with vacuum truck.

Prevention of secondary hazards Clean contaminated objects and areas thoroughly observing environmental regulations.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling Wash thoroughly after handling. Do not reuse container.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep containers tightly closed in a dry, cool and well-ventilated place. Keep in properly labeled containers.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Limits This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

Appropriate engineering controls

Engineering controls Showers
Eyewash stations
Ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/face protection Wear safety glasses with side shields (or goggles).

Hand Protection Chemical resistant protective gloves.

Skin and body protection Wear suitable protective clothing.

Respiratory protection No protective equipment is needed under normal use conditions. If exposure limits are

exceeded or irritation is experienced, ventilation and evacuation may be required.

General hygiene considerations Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

| | |
|----------------|-------------|
| Physical state | Liquid |
| Appearance | - |
| Odor | - |
| Color | Translucent |
| Odor threshold | - |

| <u>Property</u> | <u>Values</u> | <u>Remarks • Method</u> |
|--------------------------------|-------------------|-------------------------|
| pH | 6 to 7.5 | |
| Melting point / freezing point | -67.8 to 18.3 °C | |
| Boiling point / boiling range | - | |
| Flash point | - | |
| Evaporation rate | - | |
| Flammability (solid, gas) | - | |
| Flammability Limit in Air | | |
| Upper flammability limit: | - | |
| Lower flammability limit: | - | |
| Vapor pressure | 0.0093 to 0.29 | |
| Vapor density | - | |
| Relative density | 1.87 to 1.96 | |
| Water solubility | No data available | |
| Solubility in other solvents | - | |
| Partition coefficient | - | |
| Autoignition temperature | - | |
| Decomposition temperature | >260°C | |
| Kinematic viscosity | - | |
| Dynamic viscosity | - | |
| Explosive properties | - | |
| Oxidizing properties | - | |
| <u>Other Information</u> | | |
| Softening point | - | |
| Molecular weight | - | |
| VOC Content (%) | - | |
| Liquid Density | - | |
| Bulk density | - | |

10. STABILITY AND REACTIVITY

| | |
|---|--|
| Reactivity | No information available. |
| Chemical stability | Stable under normal conditions. |
| Possibility of hazardous reactions | None under normal processing. |
| Conditions to avoid | Do not use on aluminum or magnesium parts when heavy friction or galling can occur. Detonation can occur when FLUOROLUBE® is allowed to contact aluminum or magnesium, free of its oxide coating, in confined spaces and under heavy loads or high pressure. |
| Incompatible materials | None known based on information supplied. |
| Hazardous decomposition products | Decomposes when heated above 500°F releasing hazardous decomposition products including hydrogen fluoride, hydrogen chloride, chlorotrifluoroethylene and other toxic organic fluorine compounds. |

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

- Inhalation** Specific test data for the substance or mixture is not available.
- Eye contact** Specific test data for the substance or mixture is not available.
- Skin contact** Specific test data for the substance or mixture is not available.
- Ingestion** Specific test data for the substance or mixture is not available.

Information on toxicological effects

Symptoms No information available.

Numerical measures of toxicity

Acute toxicity

The following values are calculated based on chapter 3.1 of the GHS document .

ATEmix (oral) 9,209.20

Unknown acute toxicity 0 % of the mixture consists of ingredient(s) of unknown toxicity

| Chemical name | Oral LD50 | Dermal LD50 | Inhalation LC50 |
|---|----------------------|-------------|-----------------|
| Ethene, 1-chloro-1,2,2-trifluoro-, homopolymer 9002-83-9 | > 9200 mg/kg (Rat) | - | - |

Delayed and immediate effects as well as chronic effects from short and long-term exposure

- Skin corrosion/irritation** No information available.
- Serious eye damage/eye irritation** No information available.
- Respiratory or skin sensitization** No information available.
- Germ cell mutagenicity** No information available.
- Carcinogenicity** No information available.
- Reproductive toxicity** No information available.
- STOT - single exposure** No information available.
- STOT - repeated exposure** No information available.
- Aspiration hazard** No information available.

12. ECOLOGICAL INFORMATION

- Ecotoxicity** The environmental impact of this product has not been fully investigated.
- Persistence and degradability** No information available.
- Bioaccumulation** No information available.

Other adverse effects No information available.

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Waste from residues/unused products Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.

Contaminated packaging Do not reuse empty containers.

14. TRANSPORT INFORMATION

DOT Not regulated

TDG Not regulated

MEX Not regulated

ICAO (air) Not regulated

IATA Not regulated

IMDG Not regulated

RID Not regulated

ADR Not regulated

ADN Not regulated

15. REGULATORY INFORMATION

International Inventories

TSCA Complies

DSL/NDSL Complies

EINECS/ELINCS Does not comply

ENCS Complies

IECSC Complies

KECL Complies

PICCS Complies

AICS Complies

NZICS Complies

TCSI Complies

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

NZICS - New Zealand Inventory of Chemicals

TCSI - Taiwan Chemical Substance Inventory

US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

SARA 311/312 Hazard Categories

| | |
|--|----|
| Acute health hazard | No |
| Chronic Health Hazard | No |
| Fire hazard | No |
| Sudden release of pressure hazard | No |
| Reactive Hazard | No |

CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

US State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

Canada

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR

| | |
|-----------------|----------------------------|
| Canadian NPRI | Not Listed |
| WHIMIS (Canada) | Not controlled under WHMIS |

16. OTHER INFORMATION, INCLUDING DATE OF PREPARATION OF THE LAST REVISION

| | | | | |
|----------------------|---------------------------|-----------------------|---------------------------|---|
| <u>NFPA</u> | Health hazards 0 | Flammability 0 | Instability 1 | Physical and chemical properties - |
| <u>HMIS</u> | Health hazards 0 | Flammability 0 | Physical hazards 1 | Personal protection X |
| Revision Date | 25-Oct-2016 | | | |
| Revision Note | No information available. | | | |

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The 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, unless specified in the text.

End of Safety Data Sheet