

SPI Supplies Division

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Manufacturer's CAGE: 1P573

Safety Data Sheet

Date Effective: March 20, 2013

SPI # 00015-AB, 00015A-AB
Fomblin® RT-15 High Vacuum Grease

Section 1: Identification

Chemical Name/Synonyms.....Mixture of propene, 1,1,2,3,3,3-hexafluoro, oxidized, polymerized, and polytetrafluoroethylene.

Chemical family.....Fluorocarbon

Emergencies

Contacting CHEMTREC:

24 Hour Emergency Use Only #'s...

Worldwide phone: 1-(703)-527-3887

Worldwide FAX: 1-(703)-741-6090

Toll-free phone: 1-(800)-424-9300 USA only

Product or Trade Name.....SPI # 00015-AB, 00015A-AB

CAS #'s.....69991-67-9, 9002-84-0

Chemical Formula..... Mixture

Use: Lubricant for industrial use only

Hazardous Material Information System USA

Health.....1

Fire Hazard.....0

Reactivity.....0

Personal Protection.....

NFPA Rating (estimated)

Health.....1

Flammability.....0

Reactivity.....0

GHS Classification(s):

Eye Irritant: Category 2B

Skin Irritant: Category 3

GHS Hazard Symbol(s)

None

Signal Word: Warning

Hazard Statement(s):

H316: Causes mild skin irritation

H320: Causes eye irritation.

H335: May cause respiratory irritation

Hazard Symbol(s)

[Xi] irritant

Precautionary Statement(s):

P302+352: IF ON SKIN: Wash with soap and water

P304+340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

P305+351+338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing

Risk Phrase(s):

R36/37/38: Irritating to eyes, respiratory system and skin [Xi]

Safety Phrase(s):

S2: Keep out of reach of children

S24/25: Avoid contact with skin and eyes

Section 2: Composition

Component Name	CAS #	Percent
Propene, 1,1,2,3,3,3-hexafluoro, oxidized, polymerized	69991-67-9	Proprietary
Polytetrafluoroethylene	9002-84-0	Proprietary

Section 3: Hazard Identification

Emergency overview: Routes of entry include eye contact, skin contact, and inhalation.

Appearance: White grease.

Flash Point: N/A

Warning!

Target Organs: Eyes, skin, mucous membranes, respiratory tract.

Potential Health Effects

Eye: Contact may cause slight irritation.

Skin: Contact may cause slight irritation.

Ingestion: May cause nausea or vomiting.

Inhalation: May irritate mucous membranes or respiratory tract.

Chronic: Analogous to acute hazards.

Section 4: First Aid Measures

Eye Contact: Flush eyes for 15 minutes with copious amounts of water, retracting eyelids often. Seek medical attention if irritation persists.

Skin Contact: Wash skin thoroughly with mild soap and water. Flush with lukewarm water for 15 minutes.

Inhalation: If symptoms of irritation or discomfort are experienced, or person is overcome by exposure, remove to fresh air. Give oxygen if breathing is difficult or artificial respiration if person is not breathing.

Ingestion: If conscious, drink three to four 8 ounce glasses of water or milk. Call a physician. If unconscious, immediately take affected person to a hospital. Do not give anything by mouth to an unconscious person.

Section 5: Fire Fighting Measures

Suitable extinguishing media: water, powder, foam, dry chemical, carbon dioxide (CO₂)

Extinguishing media which shall not be used for safety reasons: None.

Special exposure hazards in a fire: The product is not flammable or explosive.

Hazardous decomposition: Gaseous hydrogen fluoride (HF) and Fluorophosgene

Special protective equipment for fire-fighters: Wear self-contained breathing apparatus and protective suit. When intervention in close proximity wear acid resistant over suit.

Other information: Evacuate personnel to safe areas. Approach from upwind. Protect intervention team with a water spray as they approach the fire. Keep containers and surroundings cool with water spray. Keep product and empty container away from heat and sources of ignition.

Section 6: Accidental Release Measures

Spills/Leaks: Wear appropriate protective equipment. Contain the spill. Non-essential personnel should be evacuated. Eliminate all sources of ignition and keep area well ventilated. Soak up spill with vermiculate or other inert absorbent materials. Place in appropriate disposal container.

Disposal Procedure: According to local, state, and federal regulations.

Section 7: Handling and Storage

Handling:

Always use appropriate protective equipment
Do not use in areas without adequate ventilation.
Keep away from heat and sources of ignition.
To avoid thermal decomposition, do not overheat.

Storage:

No special storage conditions required.
Keep in properly labeled containers.
Keep away from heat and sources of ignition.
Keep away from combustible material.
Keep away from Incompatible products.

Specific use(s):

Lubricant for industrial use only

Packaging material:

Plastic material
Glass

Other information:

Provide tight electrical equipment well protected against corrosion.

Section 8: Exposure Controls and Personal Protection

Remarks:

- Threshold limit values of by-products from thermal decomposition

Hydrogen fluoride anhydrous

UK. EH40 Workplace Exposure Limits (WELs) 2005

Time weighted average = 1.8 ppm

Time weighted average = 1.5 mg/m³

Remarks: as F

UK. EH40 Workplace Exposure Limits (WELs) 2005

Short term exposure limit = 3 ppm

Short term exposure limit = 2.5 mg/m³

Remarks: as F

US. ACGIH Threshold Limit Values 2007

Time weighted average = 0.5 ppm

Remarks: as F

US. ACGIH Threshold Limit Values 2007

Ceiling Limit Value = 2 ppm

Remarks: as F

EU. Indicative Exposure and Directives relating to the protection of risks related to work exposure to chemical, physical, and biological agents. 02 2006

Time weighted average = 1.8 ppm

Time weighted average = 1.5 mg/m³

EU. Indicative Exposure and Directives relating to the protection of risks related to work exposure to chemical, physical, and biological agents. 02 2006

Short term exposure limit = 3 ppm

Short term exposure limit = 2.5 mg/m³

Carbonyl difluoride

US. ACGIH Threshold Limit Values 01 2006

Time weighted average = 2 ppm

US. ACGIH Threshold Limit Values 01 2006

Short term exposure limit = 5 ppm

UK. EH40 Workplace Exposure Limits (WELs) 2005

Time weighted average = 2.5 mg/m³

Remarks: as F

EU. Indicative Exposure and Directives relating to the protection of risks related to work exposure to chemical, physical, and biological agents. 02 2006

Time weighted average = 2.5 mg/m³

Engineering Controls:

If exposure limit is exceeded, use a NIOSH approved respirator. Local exhaust should be available at points of emission (50 ft/min). Safety shower and eye wash stations should be readily accessible in work area.

Occupational exposure controls

Respiratory protection

No personal respiratory protective equipment normally required.

Wear self-contained breathing apparatus in confined spaces, in cases where the oxygen level is depleted, or in case of significant emissions.

Use only respiratory protection that conforms to international/ national standards.

Hand protection

Rubber or plastic gloves

Latex gloves

Take note of the information given by the producer concerning permeability and break through times, and of special workplace conditions (mechanical strain, duration of contact).

Eye protection

Tightly fitting safety goggles

Skin and body protection

Rubber apron

Long sleeved clothing

Hygiene measures

Ensure that eyewash stations and safety showers are close to the workstation location.

When using do not eat, drink or smoke.

Wash hands and face before breaks and immediately after handling the product.

Handle in accordance with good industrial hygiene and safety practice for diagnostics.

Environmental exposure controls

Dispose of rinse water in accordance with local and national regulations.

Section 9: Physical and Chemical Properties

Appearance: Greases

Color: white

Odor: odorless

Boiling point/boiling range: no data available

Flash point: The product is not flammable.

Flammability: The product is not flammable.

Explosive properties: Not explosive

Oxidizing properties: Non oxidizer

Relative density / Density: 1.9 g/cm³ Temperature: 20 °C

Solubility: Water: insoluble

Fluorinated solvents: soluble

Melting point/range: not applicable

Decomposition temperature: > 290 °C

Section 10: Stability and Reactivity

Stability: Stable under recommended storage conditions. Metals promote and lower decomposition temperature

Conditions to avoid: To avoid thermal decomposition, do not overheat. Keep away from flames and sparks.

Materials to avoid: Flammable materials, Combustible material, non-aqueous alkalis, Lewis acids (Friedel-Crafts) above 100°C, Aluminum and magnesium in powder form above 200°C

Hazardous decomposition products: Gaseous hydrogen fluoride (HF). Fluorophosgene

Section 11: Toxicological Information

Toxicological data

Possible hazards (summary)

Description of possible hazardous to health effects is based on experience and/or toxicological characteristics of several components.

The preparation is based on an inert polymer.

Health effects:

Main effects

Thermal decomposition can lead to release of toxic and corrosive gases.

Exposure to decomposition products

Causes severe irritation of eyes, skin and mucous membranes.

Inhalation:

No known effect.

Eye contact:

Contact with eyes may cause irritation.

Redness

Burn

Skin contact:

Redness

Irritation

Ingestion:

Ingestion may provoke the following symptoms:

Symptoms: Nausea, Vomiting

Section 12: Ecological Information

Ecological injuries are not know or expected under normal use.

Section 13: Disposal Considerations

Waste Disposal: In accordance with local and federal regulations. This product may be incinerated in a high-temperature incinerator designed to burn fluorinated compounds. Do not dump into any sewers on the ground, or into any body of water.

Section 14: Transport Information

US DOT Hazard Class: Not regulated.

IATA (for international shipments): Not regulated.

Section 15: Regulatory Information

United States

TSCA: All ingredients in this product are listed on the TSCA inventory.

SARA Section 302; Extremely Hazardous Substances: Not listed.

SARA Hazard Categories Sections 311/312:

Immediate (Acute) Health Hazard: No.

Delayed (Chronic) Health Hazard: No.

Fire Hazard: No.

Sudden Release of Pressure: No.

Reactive: No.

SARA Section 313: None.

State (Individual states in the USA)

Pennsylvania Hazardous Substances List: Polytetrafluoroethylene

European/International Regulations Safety Phrases:

S2 Keep out of the reach of children.

S16 Keep away from sources of ignition - No smoking.

S24/25 Avoid contact with skin and eyes.

Canada WHMIS: This product is not a "controlled product" as defined by WHMIS.

DSL Status: All components of this product appear on the DSL.

Section 16: Other Information

Disclaimer of Liability:

Caution! Do not use SPI Supplies products or materials in applications involving implantation within the body; direct or indirect contact with the blood pathway; contact with bone, tissue, tissue fluid, or blood; or prolonged contact with mucous membranes. Products offered by SPI Supplies are not designed or manufactured for use in implantation in the human body or in contact with internal body fluids or tissues. SPI Supplies will not provide to customers making devices for such applications any notice, certification, or information necessary for such medical device use required by US FDA (Food and Drug Administration) regulation or any other statute. SPI Supplies and Structure Probe, Inc. make no representation, promise, express warranty or implied warranty concerning the suitability of these materials for use in implantation in the human body or in contact with internal body tissues of fluids.

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