

Fomblin Z DOL

SOLVAY SOLEXIS, Inc.
10 Leonards Lane
Thorofare, NJ 08086
Main Number: 856-853-8119

Section 1 - Chemical product and Company information

Date Revised: February 5, 2004
Product Name: Fomblin Z DOL
Chemical Name: Dihydroxy derivative of perfluoropolyoxyalkane
Chemical Family: Perfluoropolyoxyalkane
Emergency Telephone: 800-424-9300 (CHEMTREC, 24 hours)
856-853-8119

Emergency Overview:

Clear, colorless liquid. Thermal decomposition will generate hydrogen fluoride (HF), which is corrosive.

Section 2 - Compositional information

Name:	CAS#	Approximate Weight (% wt.):
Derivative of perfluoropolyoxyalkane	88645-29-8	> 99+%
Hydrofluoric acid	7664-39-3	< 0.005%

Section 3 - Potential Health Effects

Effects of Overexposure:

Eye Contact
Eye contact may cause slight irritation.

Skin Contact
Skin contact may cause slight irritation.

Inhalation
Inhalation of vapors or mists may cause respiratory tract irritation.

Ingestion
Ingestion may cause nausea, and vomiting.

Section 4 - First Aid Measures

Eye Contact:

Flush eyes for 15 minutes with copious amounts of water, retracting eyelids often. Seek medical attention for persistent irritation.

Skin Contact:

Wash skin thoroughly with mild soap and water. Flush with lukewarm water for 15 minutes. Seek medical attention for persistent irritation.

Inhalation:

If symptoms of irritation, discomfort or overcome by exposure, remove affected person to fresh air. Give oxygen or artificial respiration as needed.

Ingestion:

If conscious, drink three to four 8 ounce glasses of water or milk. Induce vomiting. Immediately contact 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

Flash Point: Not Applicable

Lower Explosive Limit: Not Applicable

Upper Explosive Limit: Not Applicable

Autoignition Temperature: Not Applicable

Extinguishing Media: Water (spray or fog), foam, dry chemical or carbon dioxide (CO₂).

Unusual Fire Hazards:

Fluoropolymers will degrade upon prolonged heating or in a fire, liberating carbonyl fluoride and hydrogen fluoride (HF). This gas is toxic if inhaled or it comes into contact with moist skin. HF has an ACGIH TLV ceiling limit of 3 ppm (2.6 mg/m³) and an OSHA PEL TWA of 3 ppm. Carbonyl fluoride has an ACGIH TLV TWA and OSHA PEL TWA of 2 ppm (5 mg/m³).

Fire Fighting Procedures:

Use self contained breathing apparatus (SCBA) and full fire fighting turn out gear (Bunker Gear) for protection from acid gas exposure. Do not enter fire area without proper protection. Fight fire from safe distance. If possible, air monitoring should be performed.

Section 6 - Accidental Release Measures

Releases:

In case of a release or spill, absorb material onto vermiculite or similar inert absorbent. Use Perfluorosolv0 PFS-1 Solvent to clean any residual fluid. Place spilled material into covered container for disposal. Dispose of according to applicable local, state and federal regulations. Extinguish all ignition sources and evacuate the area. Exercise caution; spill area may be slippery.

Section 7 - Handling and Storage

Wash hands after use and before handling food or applying cosmetics. Do not use tobacco products in the immediate area. Avoid contact with skin and eyes. Wear the proper personal protective equipment. Avoid moisture in containers. Keep containers closed. Keep away from heat, sparks and flames. Do not store near combustible materials. Store in plastic or glass containers only.

Section 8 - Exposure Controls/Personal Protection

ACGIH Threshold Limit Value (8 hr. time weighted average)

Hydrogen fluoride, ceiling value: 3 ppm (2.6 mg/m³)

OSHA Permissible Exposure Limit Value (8 hr. time weighted average)

Hydrogen fluoride: 3 ppm

Engineering Controls:

Ventilation Requirements:

Local Exhaust: Vent vapors or mists generated by processing away from operating personnel. Local exhaust ventilation at a rate of 50 feet per minute.

Personal Protective Equipment:

Respiratory Protection:

No occupational exposure standards have been developed for this material. In situations where exposure to vapors or mists is likely, NIOSH/MSHA approved acid and organic vapor respirators are recommended. Respirator use limitations made by NIOSH/MSHA or the manufacturer must be observed. Respiratory protection programs must be in accordance with 29 CFR 1910.134.

Eye Protection:

Eye/Face Protection: ANSI Z87.1 approved safety glasses with side shields or equivalent, chemical safety goggles.

Skin Protection:

Rubber or neoprene gloves

Protective Clothing:

Work suit or rubber apron

Section 9 - Physical and Chemical Properties

Appearance: Liquid

Color: Clear, colorless

Odor: Odorless

Vapor Pressure: 2×10^{-5} mm Hg at 20°C (68 F)

Vapor Density (Air=1): Not Available

Boiling Point: Not Available

Melting Point: Not Available

Specific Gravity: 1.81
Solubility in Water: Insoluble
Solubility in Solvents Soluble in fluorinated solvents
Molecular Weight: 1900 - 2100

Section 10 - Stability and Reactivity

Stability:

This material is stable.

Reactivity:

This material is not reactive.

Conditions to Avoid:

Heat, sparks, flames, and other ignition sources; avoid heating above 200o C/392 F.

Materials to Avoid:

Strong alkaline compounds (alkaline hydroxides, ammonia, non-aqueous alkalis); Lewis acids (AlCl₃, SbF₅, C F₃) above 100 C (212 F); magnesium, aluminum, and their alloys above 100 C (212 F).

Hazardous Decomposition Products:

Thermal decomposition of this product will generate hydrogen fluoride (HF) and carbonyl fluoride, both of which are toxic. Hydrogen fluoride is corrosive, causing burns on contact with skin and other tissue.

Section 11 - Toxicological Information

Rat oral LD50: greater than 5 g/kg
Rabbit skin irritation: slightly irritating
Rabbit eye irritation: not irritating
Guinea pig sensitization: negative (not a sensitizer)
No other known effects.

Section 12 - Ecotoxicological Information

No ecotoxicological information is available for this material.

Section 13 - Disposal Considerations

Waste Disposal: Material, as supplied, is not a hazardous waste. Incinerate in a high-temperature incinerator designed to burn fluorine-containing materials, in accordance with current federal, state and local regulations. Processing, use or contamination may make this information inaccurate or incomplete.

Section 14 - Transportation information

Shipping Class: Not regulated by DOT.

Section 15 - Regulatory information

All components of this product are listed on the Toxic Substances Control Act (TSCA) Section 8(b) Chemical Inventory. This product is not a "hazardous substance" as defined by OSHA Hazard Communication Standard (29 CFR 1910.1200). This product is not a "controlled product" as defined by the Canadian Workplace Hazardous Materials Information System (WHMIS).

SARA Section 302 Extremely Hazardous Substances:
Not listed

SARA 311/312:
Acute: No
Chronic: No
Fire: No
Reactivity: No
Sudden Release of Pressure: No

SARA Section 313 Toxic Chemicals:
Not listed

Section 16 - Additional Information

NFPA Ratings (Scale of 0-4):

Health=1

Fire=0

Reactivity=0

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