

# Galden Perfluorosolv PFS-2

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

## *Section 1 - Chemical product and Company information*

Date Revised: May 25, 2005  
Product Name: Galden Perfluorosolv PFS-2  
Chemical Name: Propene, 1,1,2,3,3,3-hexafluoro, oxidized, polymerized  
Chemical Family: Fluorocarbons, Perfluorinated polyethers  
Synonyms: None  
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*

<u>Name:</u>	<u>CAS#</u>	<u>Approximate Weight (% wt.):</u>
Propene, 1,1,2,3,3,3-hexafluoro, oxidized, polymerized	69991-67-9	100

## *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

Not an expected exposure route. 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 if irritation persists.

### **Skin Contact:**

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

### **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. 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**

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 (CO<sub>2</sub>).

**Unusual Fire Hazards:**

Fluoropolymers will degrade upon prolonged heating or in a fire, liberating hydrogen fluoride (HF) and carbonyl fluoride (COF<sub>2</sub>). This gas is toxic if inhaled or it comes into contact with moist skin. HF has an ACGIH PEL TLV (8hr TWA) of 0.5ppm and a ceiling limit of 2 ppm (1.7mg/m<sup>3</sup>). COF<sub>2</sub> has an ACGIH TLV of 2 ppm (5.4 mg/m<sup>3</sup>) and an OSHA PEL TWA of 2 ppm (5 mg/m<sup>3</sup>).

**Fire Fighting Procedures:**

Use self contained breathing apparatus (SCBA) and skin protection for 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 Perfluorosolv(TM) PFS-1 as an aid in cleaning. 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. Keep containers closed. Keep away from heat, sparks and flames. Do not store near combustible materials.

**Section 8 - Exposure Controls/Personal Protection****ACGIH Threshold Limit Value (8 hr. time weighted average)**

None established

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

None established

**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 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/Face Protection:**

ANSI Z87.1 approved safety glasses with side shields or equivalent.

**Skin Protection:**

Rubber or latex gloves recommended but not necessary.

***Section 9 - Physical and Chemical Properties***

Appearance:	Clear liquid
Color:	Colorless
Odor:	Odorless
Vapor Pressure:	228 mg Hg @ 25 C/77 F
Vapor Density (Air=1):	Not available
Boiling Point:	57 C/135 F
Melting Point:	Not available
Specific Gravity:	1.65
Solubility in Water:	Insoluble
% Volatile by Volume:	0

***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 290 C/554 F.

**Incompatibility/Materials to Avoid:**

Alkali metals and halogenated compounds. Strong or non-aqueous alkali and Lewis acids above 100 C/212 F.

**Hazardous Decomposition Products:**

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

***Section 11 - Toxicological Information***

Rat oral LD50: greater than 25.65 g/kg  
Rat intraperitoneal LD50: greater than 25 g/kg  
Rat dermal LD50: greater than 2 g/kg  
Rabbit skin irritation: not irritating  
Rabbit eye irritation: not irritating  
Guinea pig sensitization: not a sensitizer

Solvay Acceptable Exposure Limit 1000ppm

***Section 12 - Ecological Information***

No ecological 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. 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 and the Canadian Environmental Protection Act (CEPA) provisional domestic substances list (DSL). This product is not a "hazardous substance" as defined by the 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

Material Safety Data Sheets contain country-specific regulatory information; therefore, the MSDS's provided are for use only by customers of Solvay Solexis, Inc. in North America. If you are located in a country other than Canada, Mexico or the United States, please contact the Solvay Group company in your country for MSDS information applicable to your location.

The previous information is based upon our current knowledge and experience of our product and is not exhaustive. It applies to the product as defined by the specifications. In case of combinations or mixtures, one must confirm that no new hazards are likely to exist. In any case, the user is not exempt from observing all legal, administrative and regulatory procedures relating to the product, personal hygiene, and integrity of the work environment. (Unless noted to the contrary, the technical information applies only to pure product).

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