



# Igloo Foam HFO Safety Data Sheet

## 1. Identification of Substance

**Product Name:**

Igloo Foam HFO

**Product Use:**

Polyurethane Polyol Component

**Supplier Information:**

**Supplier Identification:**

Spray Foam Outlets, LLC

**Supplier Address:**

PO Box 1182

New Canaan, CT 06840

**Telephone:**

(855) 362-6863

**24-Hour Emergency Phone Number:**

CHEMTREC: (800) 424-9300

INTERNATIONAL: +1 (703) 527-3887

## 2. Hazards Identification

**GHS Ratings:**

Skin corrosive	2
Eye corrosive	2A
Reproductive toxin	1B
Organ toxin repeated exposure	2

**GHS Hazards:**

H315 Causes skin irritation

H319 Causes serious eye irritation

H360 May damage fertility or the unborn child

H373 May cause damage to organs through prolonged or repeated exposure

**GHS Precautions:**

P201 Obtain special instructions before use

P202 Do not handle until all safety precautions have been read and understood

P260 Do not breathe dust/fume/gas/mist/vapors/spray

P264 Wash hands thoroughly after handling

P280 Wear protective gloves/protective clothing/eye protection/face protection

P281 Use personal protective equipment as required

P314 Get Medical advice/attention if you feel unwell

P321 Specific treatment is urgent (see Section 4 First Aid measures)

P362 Take off contaminated clothing and wash before reuse

P302+P352 IF ON SKIN: Wash with soap and water

P305+P351+P338 IF IN EYES: Rinse continuously with water for several minutes.

Remove contact lenses if present and easy to do – continue rinsing

P308+P313 IF exposed or concerned: Get medical advice/attention

P332+P313 If skin irritation occurs: Get medical advice/attention

P337+P313 If eye irritation persists: Get medical advice/attention.

P405 Store locked up

P501 Dispose of contents/container in accordance with existing federal, state, and local environmental control laws.

**Signal Word(s):**

Danger

**Pictograms:**



### 3. Composition/Data on Components

<u>Chemical Name</u>	<u>Cas Number</u>	<u>% Concentration</u>
Polyester Polyol	Trade Secret	30-40%
Amine Polyol	940912-28-7	10-20%
tris(2-chloro-1 -methylethyl) phosphate	13674-84-5	5-10%
trans-1-Chloro-3,3,3-trifluoropropene	102687-65-0	5-10%
1,2-Dimethylimidazole	1739-84-0	5-10%
Ethane-1,2-diol; Ethylene Glycol	107-21-1	1-5%
1,1,3,3-Tetramethylguanidine	80-70-6	1-5%
2,2'-oxydiethanol; Diethylene Glycol	111-46-6	1-5%

#### 4. First Aid Measures

**After skin contact:**

Clean the affected area with soap and plenty of water.

**After eye contact:**

Rinse open eye(s) for at least 15 minutes under running water. Remove contact lenses if present and easy to do so, and continue rinsing. If irritation persists, contact the physician.

**After inhalation:**

If inhaled and symptoms ensue, move to fresh air. If breathing is difficult, give oxygen.

**After swallowing:**

Consult a physician.

#### 5. Fire Fighting Measures

**Suitable extinguishing agents:**

Water spray, CO<sub>2</sub>, Foam, Dry chemical.

**Special protective equipment for firefighters:**

Firefighters should wear a pressure demand self-contained breathing apparatus and protective clothing.

**Protection against explosions and fires:**

Keep away from flames and sources of heat. Closed containers may rupture when exposed to extreme heat.

**Dangerous products of decomposition:**

Oxides of carbon, oxides of nitrogen, oxides of phosphorus, hydrocarbons, traces of HCN, hydrogen chloride gas, hydrogen fluoride.

#### 6. Accidental Release Measures

**Personal safety precautions:**

Use appropriate personal protective equipment during clean up. Evacuate and keep unnecessary personnel away from the spill area. Avoid contact with skin and eyes.

**Measures for environmental protection:**

Cover and contain spill with absorbent material. Collect for proper disposal according to local, state, and federal regulations.

**Measures for cleaning/collecting:****Small spills:**



Absorb with earth, sand, or other absorbent material and transfer to containers for later disposal. Wipe up with absorbent material (e.g. cloth, fleece) clean surface thoroughly to remove residual contamination.

**Large spills:**

Stop the flow of material if safe to do so. Dike the spilled material where possible. Use an absorbent material like vermiculite, sand, or earth to soak up the product and place into a container for later disposal. Following product recovery, flush the area with water.

**7. Handling and Storage**

**Information for safe handling:**

Avoid contact with eyes, skin, or inhalation.

**Information for safe storage:**

Store in a dry, well-ventilated area. Keep containers tightly closed. Store between 50°F - 80°F. Material may settle. Refer to the Igloo Foam training manual.

**Regulatory Requirements:**

Obey all local, state, and federal requirements.

**8. Exposure Controls and Personal Protection**

<u>Chemical Name/ CAS</u>	<u>OSHA Exposure Limits</u>	<u>ACGIH Exposure Limits</u>	<u>Other Exposure Limits</u>
Polyester Polyol/Trade Secret	Not Established	Not Established	Not Established
Amine Polyol/940912-28-7	Not Established	Not Established	Not Established
tris(2-chloro-1 -methylethyl) phosphate/13674-84-5	Not Established	Not Established	Not Established
trans-1-Chloro-3,3,3- trifluoropropene/102687-65-0	Not Established	Not Established	Not Established
1,2-Dimethylimidazole/1739-84-0	Not Established	Not Established	Not Established
Ethane-1,2-diol; Ethylene Glycol/ 107-21-1	125 mg/m3 ceiling; 50 ppm ceiling	10 mg/m3 STEL (inhalable aerosol); 25 ppm TWA (vapor fraction); 50 ppm STEL (vapor fraction)	Not established



1,1,3,3-Tetramethylguanidine/ 80-70-6	Not Established	Not Established	Not Established
2,2'-oxydiethanol; Diethylene Glycol/ 111-46-6	Not Established	10 mg/m3 TWA	Not Established

**Engineering controls:**

No specific measures required if proper PPE precautions are followed.

**General protective and hygienic measures:**

Usual precautionary measures should be adhered to when handling chemicals.

**Respiratory protection:**

In spray applications, an organic vapor/particulate respirator or air supplied unit is necessary. Refer to Igloo Foam safety training manual.

**Protection of Hands:**

Protective chemical resistant gloves. Refer to Igloo Foam safety training manual.

**Eye Protection:**

Chemical resistant goggles must be worn. Refer to Igloo Foam safety training manual.

**Body Protection:**

Protective work clothing where the full body should be covered. Launder separately. Refer to Igloo Foam safety training manual.

**Contaminated Gear:**

Observe local requirements. Dispose of in accordance with local/state/federal regulations.

**9. Physical and Chemical Properties**

**Appearance:** Amber liquid

**Odor:** Amine odor

**Vapor Pressure:** N/A

**Odor threshold:** N/A

**Vapor Density:** N/A

**pH:** N/A

**Specific Gravity/Relative Density:** 1.21

**Melting point:** N/A

**Freezing point:** N/A

**Solubility:** N/A

**Boiling range:** 66 - 647°F



**Flash point:** 289°F  
**Evaporation rate:** N/A  
**Flammability:** N/A  
**Explosive limits:** N/A  
**Partition coefficient:** N/A  
**Autoignition temperature:** 444°F  
**Decomposition temperature:** N/A

## 10. Stability and Reactivity

### **Chemical Incompatible Materials:**

Avoid contact with isocyanates and strong oxidizing agents.

### **Hazardous Polymerization:**

Not expected to occur.

### **Dangerous Products of Decomposition:**

Oxides of carbon, oxides of nitrogen, oxides of phosphorus, hydrocarbons, traces of HCN, hydrogen chloride gas, hydrogen fluoride.

## 11. Toxicological Information

### **Mixture Toxicity**

**Oral toxicity LD50:** 2,817mg/kg

**Inhalation toxicity LC50:** 24mg/L

### **Acute Toxicity:**

**Eyes:** Irritating to eyes.

**Skin:** Irritating to skin.

**Inhalation:** Not expected to be a route of exposure.

**Ingestion:** Harmful if swallowed. Consult a physician.

**Reproductive toxicity:** May damage fertility or the unborn child

**Chronic Effects:** Possible harmful target organ effects.

**Routes of Entry:** Ingestion, skin contact, eye contact.

**Target Organs:** Skin, eyes, reproductive system, kidneys

**Chemicals with Known or Possible Carcinogenic Effects:** None

## 12. Ecological Information

### **General Information:**

No adverse effects are to be expected if correct disposal procedures have been followed as indicated in section 13.



### 13. Disposal Considerations

**Recommendation:**  
Observe local requirements. Dispose of in accordance with local/state/federal environmental control laws.

**Empty Container Precautions:**  
Empty containers retain product residue; observe all precautions for the product. Do not heat or cut empty containers with an electric or gas torch because highly toxic vapors and gasses are formed. Do not reuse without thorough commercial cleaning and reconditioning. If a container is to be disposed of, ensure all product residues are removed and the container is empty prior to disposal. Contact the Reusable Industrial Packaging Association (RIPA) at 301-577-3786 to find a drum reconditioner in North America ([www.reusablepackaging.org](http://www.reusablepackaging.org)).

### 14. Transport Information

**DOT Regulated Components:**  
This product is not regarded as a dangerous good according to the national and international regulations on the transport of dangerous goods.

### 15. Regulatory Information

**OSHA HAZARD COMMUNICATION STANDARD:**  
This material is classified as hazardous in accordance with OSHA 29 CFR 1910.1200.

**SARA 302 Extremely Hazardous Substances:**  
None

**SARA 311/312 Hazard Categories:**  
Acute health hazard, chronic health hazard.

**Chemicals subject to SARA 313 Reporting:**  
Ethylene glycol            107-21-1            1 to 5 %            Emissions

**Massachusetts Right To Know List:**  
Ethylene glycol            107-21-1            1 to 5 %

**New Jersey Right To Know List:**  
Ethylene glycol            107-21-1            1 to 5 %

(E)-1-Chloro-3,3,3-trifluoroprop-1-ene            102687-65-0            5 to 10 %



**Pennsylvania Right To Know List:**

Diethylene glycol	111-46-6	1 to 5%
Ethylene glycol	107-21-1	1 to 5 %
(E)-1-Chloro-3,3,3-trifluoroprop-1-ene	102687-65-0	5 to 10 %

<u>Country</u>	<u>Regulation</u>	<u>All Components Listed</u>
Canada	Canada DSL	Yes
US	Toxic Substances Control Act	Yes

**16. Other Information**

*This information is furnished without warranty, expressed or implied, except that it is accurate to the best knowledge of Spray Foam Outlets. The data on these sheets relates only to the specific material designated herein. Spray Foam Outlets assumes no legal responsibility for use or reliance upon this data. It is the user's responsibility to ensure that their activities comply with federal, state, or local laws.*

Date Prepared: 10/23/2023