

# MATERIAL SAFETY DATA SHEET



**Thermacor Process Inc.**  
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P.O. Box 79670  
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**24 HOUR EMERGENCY ASSISTANCE**  
CALL CHEMTREC: (800) 424-9300

**GENERAL ASSISTANCE**  
Information Phone: (817) 847-7300  
8am to 5pm M- F

## 1. Company Identification and Chemical Product Composition

**Trade Name:** "B" Component  
**Distributor:** Thermacor Process Inc.  
**Product Class:** HFC- 245fa Blown Polyol

<u>Ingredient Name</u>	<u>CAS Number</u>	<u>Percent</u>
Polyester polyol	Confidential	30 - 60 %
_1, 1, 1, 3, 3- Pentafluoropropane	460- 73- 1	6 - 13 %
_Trans, 1-2 dichloroethylene	156- 60- 5	1 - 5 %

## 2. Hazards Identification

### Emergency Overview

Clear liquid

May cause irritation to the eyes, skin, and respiratory system. May be harmful by inhalation.

### Health Effects: Eyes

This product may cause irritation to the Eyes.

### Health Effects: Skin

This product may cause irritation of the skin.

### Health Effects: Inhalation

Inhalation of vapors or mists of the product may be irritating to the respiratory system. High vapor concentrations may cause central nervous system effects. Effects may include headaches, dizziness, drowsiness, anesthetic and may have other central nervous system effects.

### Health Effects: Ingestion

Ingestion of large amounts may produce gastrointestinal disturbances including irritation, nausea, and diarrhea.

## 3. First Aid Measures

### Eyes

Immediately flush eyes with water for at least 15 minutes while holding eyelids open. If irritation persists, get medical attention.

**Skin**

For skin contact, flush with large amounts of water. If irritation persists, get medical attention. Immediately take off all contaminated clothing before reuse.

**Inhalation**

If symptoms are experienced, remove source of contamination or move victim to fresh air. If symptoms persist, get medical attention. If breathing is difficult, give oxygen. If the affected person is not breathing, apply artificial respiration. Seek medical attention.

**Ingestion**

If ingestion of a large amount does occur, seek medical attention. Do not induce vomiting.

**Notes to Physician**

At high levels of exposure, cardiac arrhythmia may occur. DO NOT give epinephrine (adrenaline). DO NOT give stimulants.

**4. Fire Fighting Measures**

**Flash Point** (> 93.9 °C), > 201 °F PMCC  
**OSHA Flammability Classification** Combustible IIIB

**Fire and Explosion Hazards**

During a fire, irritating vapors and highly toxic gases may be generated by thermal decomposition or combustion.

**Extinguishing Media**

Dry chemical, foam, carbon dioxide, water fog.

**Fire Fighting Equipment/ Instructions**

Firefighters should wear full fire-fighting turn-out gear (full bunker gear) including NIOSH-approved self-contained breathing apparatus with full facepiece operated in the pressure demand or other positive pressure mode.

**5. Accidental Release Measures****Spill and Leak Procedures**

Emergency Action:

Isolate spill or leak area immediately. Keep unauthorized personnel away. Stay upwind. Keep out of low areas. Ventilate enclosed areas.

Do not touch or walk through spilled material. Wear appropriate personal protective equipment during cleanup.

**Small Spills:** Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal.

**Large Spills:** Dike ahead of liquid spill for later disposal. Prevent entry into waterways, sewers, basements or confined areas. Surfaces may become slippery after spillage.

## 6. Handling and Storage

### Handling Procedures

Avoid contact with skin and eyes. Do not breathe gas/ fumes/ vapor/ spray. Wash thoroughly after handling. As with all chemicals, good industrial hygiene practices should be followed when handling this material.

### Storage Procedures

Material should be stored at or below 60 °F (15.5 °C). Store in a cool, dry, well-ventilated area. Vent container carefully, as needed to relieve pressure. Avoid freezing or excessive heat.

## 7. Exposure Controls/ Personal Protection

### Engineering Controls

Use local exhaust ventilation at potential points of emission during polyol blend manufacture and foam manufacture, including transfer to and discharge from mixing vessels.

### Personal Protective Equipment: Eyes/ Face

Wear chemical goggles; face shield (if splashing is possible).

### Personal Protective Equipment: Skin

Wear suitable protective clothing. Use impervious gloves.

### Personal Protective Equipment: Respiratory

If exposure limits are exceeded or if irritation is experienced, NIOSH approved respiratory protection should be worn.

### Personal Protective Equipment: General

Eye wash fountain and emergency showers are recommended.

**\_1, 1, 1, 3, 3- Pentafluoropropane 460-73-1**

AIHA (American Industrial Hygiene Association)- 300 ppm TWA; 1644 mg/m<sup>3</sup> TWA WEEL- TWAs

## 8. Physical & Chemical Properties

<b>Flash Point:</b>	(> 93.9 °C), >201 °F PMCC
<b>Boiling Point:</b>	(14.4 °C), 58 °F
<b>Specific Gravity:</b>	(1.264 g/ml), 10.52 lb/gal
<b>Percent Volatile:</b>	10 - 15% (w/w)
<b>Vapor Density:</b>	Estimated heavier than air.
<b>Viscosity:</b>	1960 cps @ 60 °F
<b>Evaporation Rate:</b>	Estimated slower than ethyl ether.
<b>RVOC:</b>	HFC- 245fa is non- VOC accrd. to 40 CFR 51.100
<b>pH Value:</b>	Not determined
<b>Appearance/ Odor:</b>	Clear liquid

## 9. Stability & Reactivity

### Chemical Stability

Stable under normal conditions.

**Conditions to Avoid**

Avoid strong oxidizing agents.

**Incompatibility**

This product is incompatible with strong metals, alkalies, strong acids, and oxidizing agents.

**Hazardous Decomposition**

Decomposition may yield toxic fluorides and chlorides.

**Hazardous Polymerization**

Will not occur.

**10. Toxicological Information****Carcinogenicity**

Not listed as carcinogenic according to IARC, NTP or OSHA.

**11. Ecological Information****Ecotoxicity**

No data available on finished product.

**Environmental Fate**

This product is biodegradable.

**12. Disposal Considerations****Disposal Instructions**

Treatment, storage, transportation and disposal must be in accordance with applicable Federal, State/ Provincial and Local regulations. Regulations may vary in different locations. Characterization and compliance with applicable laws are the responsibility solely of the generator.

**13. Transport Information****DOT Proper Shipping Name**

Refer to bill of lading or container label for DOT or other transportation hazard classification, if any.

**14. Regulatory Information****U.S. Federal Regulations**

Contains HFC- 245fa, a greenhouse gas, a substance which may contribute to global warming regulated under Section 612 (SNAP) of the Clean Air Act and 40 CFR Part 82, subpart G.

**U.S. Federal Regulations**

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## Inventories

All components of this product are listed on the following inventories: U.S.A. (TSCA). There is no calculable reportable quantity (RQ) for this product.

## 15. Other Information

### Disclaimer

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<u>Hazard Ratings</u>	<u>HMIS</u>	<u>NFPA</u>
Health	1	1
Flammability	1	1
Reactivity	0	0
PPE	X	

The method of hazard communication is comprised of Product Labels and Material Safety Data Sheets. HMIS and NFPA ratings are provided as a customer service.

**Contact Person:** Thermacor Process Inc.  
**Telephone:** (817) 847- 7300  
**Version Date:** 3/ 31/ 2007

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