



## HT-450

### Material Safety Data Sheet

#### I. PRODUCT IDENTIFICATION

**PRODUCT:** HT-450 Rigid Foam Insulation (All Densities)

**MANUFACTURER:** HiTHERM, LLC.  
14056 Artesia Blvd.  
Cerritos, CA 90703

**TEL/FAX:** (562) 483-1555/ (562) 483-1554

**TRADE NAME:** High Temperature Rigid Polyisocyanurate Foam Insulation (All Densities)

**CHEMICAL NAME:** Not Applicable  
**CHEMICAL FAMILY:** Polyisocyanurate Foam

**DATE REVISED:** November 5, 2007

#### II. HAZARDOUS INGREDIENTS

COMPONENT	CAS NO.	% PEL/TLV-SOURCE
Polymerized Modified Polyisocyanurate Rigid Cellular Plastic Foam	None Assigned	90-93/ None

#### III. PHYSICAL DATA

**Boiling Point:** Not Applicable  
**Specific Gravity or Bulk Density (H<sub>2</sub>O=1):** Not Applicable

**Vapor Density:** Not Applicable  
**Vapor Pressure, mm Hg @ 20° C:** Not Applicable  
**Solubility in Water:** Not Applicable

**Appearance:** Tan in Color

#### **IV. FIRE AND EXPLOSION HAZARD DATA**

**Flash Point (test Method) :** Not Applicable  
**Flammability Limits in Air (%by Volume):** Lower: N/A Upper: N/A  
**Extinguishing Media:** CO2, Dry Chemical, Foam, Water Fog.

#### **SPECIAL FIRE FIGHTING PROCEDURES:**

Fire fighters must be equipped with self-contained breathing apparatus and turnout gear.

No unusual fire and explosion hazards are known. However, rigid polyurethane and polyisocyanurate foams, like other common organic materials, such as paper, wood, etc., can represent unreasonable fire risk when exposed to ignition sources in the air. Upon ignition, such fires can burn rapidly, producing intense heat, dense smoke and irritating or toxic gases. Rigid polyurethane foams auto ignite at about 800° F and rigid polyisocyanurate foams at about 1000° F.

Under fire conditions, carbon dioxide, carbon monoxide and possible traces of hydrogen cyanide, halogen acids and nitrogen oxides may evolve.

Even though the probability of dust explosion is very low, do not smoke, use naked lights, open flames or other ignition sources near rigid foam fabricating or storage areas. Install foam only after all welding, cutting or other hot work has been completed.

**Emergency Numbers:** INFOTRAC 1-800-535-5053, 24 hrs. per day, 7 days per week  
HiTherm: (562) 483-1555

#### **V. HEALTH HAZARD DATA**

**Eye Contact:** Dust may cause irritation or corneal injury due to mechanic reaction.  
**Skin:** Non-irritating to skin. Mechanical injury only.  
**Ingestion:** Unlikely due to physical state. May cause choking if swallowed.  
**Inhalation:** Dust may cause irritation to the upper respiratory tract.

#### **Emergency and First Aid Procedures:**

**Eyes:** Flush immediately with copious amounts of running water for at least 15 minutes holding eyelids open. Consult Physician, if necessary.  
**Skin:** Wash affected area with soap and water.  
**Ingestion:** No adverse effects anticipated.  
**Inhalation:** Remove to fresh air; aid in breathing, administer oxygen or artificial respirator if necessary.

#### **VI. REACTIVITY DATA**

**Stability:** Stable  
**Hazardous Decomposition Products:** CO, CO2, possible traces of HCN, Halogen Acids and oxides of Nitrogen under fire conditions.  
**Incompatibility (chemicals to avoid):** None Known  
**Hazardous Polymerization:** Does not occur.

## **VII. SAFE HANDLING AND USE INFORMATION**

<b>Exposure Guideline:</b>	Although some of the additives used in this product may have exposure guidelines, these additives are encapsulated under normal handling conditions. For particulates which have no specific guidelines, the ACGIH/TLV is 10 mg/m <sup>3</sup> and the OSHA Pel is 15 mg/m <sup>3</sup> .
<b>Respiratory Protection:</b>	Atmospheric levels should be maintained below PEL and TLV. If needed, use an approved air-purifying respirator.
<b>Protective Clothing:</b>	None needed.
<b>Eye Protection:</b>	If needed, wear safety glasses.
<b>Other Protective Equipment:</b>	No special requirements.

## **VIII. ENVIRONMENTAL DATA**

<b>Spill and Leak Procedures:</b>	Not Applicable. This is a solid product.
<b>Disposal Method:</b>	Incinerate or bury in approved landfill according to Local, State and Federal regulations.

## **IX. ADDITIONAL INFORMATION**

### **Special precautions To Be Taken During Handling and Storage:**

Potential risks associated with rigid polyisocyanurate foams arise from dust, fire and toxic decomposition (thermal) products as a result of improper storage, disposal and application or inadequate ventilation.

**Dust:** The probability of explosion from polyisocyanurate is very low. As any nuisance dust, fine polyisocyanurate dust can cause eye, nose and throat irritation. Keep work area (sawing, fly cutting, routing etc.) free from dust. Remove dust by vacuuming instead of blowing.

**Fire:** Polyisocyanurate foams used as wall or ceiling, insulation must not be left exposed but, covered as soon as possible. If covering is not immediately available, post signs that fire risk exists due to exposed foam. Do not install foam in flue like configurations and do not allow combustible scraps to accumulate on the job site.

### **REGULATORY INFORMATION: (SELECTED REGULATIONS PRESENTED)**

<b>SARA 313 Information:</b>	This product does not contain any substance subject to the reporting requirements of Section 313 of Title III of the SARA of 1986 and 40 CFR, Part 372.
<b>SARA Hazard Category:</b>	This product has been reviewed according to the EPA "Hazard Categories" promulgated under Sections 311 and 312 of the Superfund Amendment and Re-Authorization Act of 1986 (SARA Title III) and is considered under applicable definitions to meet the following categories:

### **"Not To Have Any Hazard Category"**

We believe that the information contained in this MSDS is current. Since the use of this information and the condition of use of this product are not within our control, it is the users obligation to determine the conditions of safe use of this product. The information herein is given in good faith, but no warranty, expressed or implied, is made.