

# Material Safety Data Sheet

## I. PRODUCT INFORMATION *Effective date: May 1 / 2009*

<b>Product :</b> Thermal 3Ht	<b>Hazard Rating</b> 0 = Minimal    3 = Serious 1 = Slight     4 = Severe 2 = Moderate	<b>Health</b>	0
<b>Synonyms :</b> Molded Expanded Polystyrene (MEPS)		<b>Fire</b>	2
<b>Product Grades :</b> Type I, VIII, II, and IX (modified)		<b>Reactivity</b>	0
<b>Chemical Family :</b> Polystyrene Thermoplastic			
<b>CAS Registry No. :</b> 9003536			
<b>CAS Name :</b> Benzene, Ethenyl, Homopolymer			
<b>Formula :</b> (C <sub>8</sub> H <sub>8</sub> ) n			
<b>TSCA Inventory Status :</b> Listed			
		<b>Thermal Building Concepts</b> 1366 Elon Drive, Waukon, IA 52172 (563) 535-7100 Toll Free 1-877-703-2323	

## II. INGREDIENTS

<b>Hazardous Components:</b>	<b>CAS Registry No.:</b>	<b>Approx. Weight Percentage:</b>
Pentane	109660	<2%
Bromine Flame Retardant Polymeric Film	3194-55-6	<1% 1-3%
<b>Non-Hazardous Components:</b>	<b>CAS Registry No.:</b>	<b>Approx. Weight Percentage:</b>
Polystyrene	9003536	>92%

## III. PHYSICAL DATA

<b>Form :</b> Rigid cellular foam blocks, boards and shapes	<b>Specific Gravity (Water = 1) :</b> <1
<b>Color :</b> White	<b>Volatile by Volume :</b> <1.8% (Pentane & Water)
<b>Odor :</b> Very slight pentane	<b>Vapor Pressure :</b> N/A
<b>Boiling Point :</b> N/A	<b>Vapor Density (Air = 1) :</b> N/A
<b>Melting Point :</b> N/A (Softening begins @ 160° F)	<b>Evaporation Rate:</b> None
	<b>Solubility in Water :</b> Insoluble
	<b>Density :</b> 0.6 pcf to 3.0 pcf

## IV. FIRE & EXPLOSION DATA

<b>Flash Pt. and Method Used :</b>	610° F min. (ASTM D1929)
<b>Special Fire Fighting Instructions :</b>	Use approved self-contained breathing apparatus respirator and personal protective clothing (Turn out gear.)
<b>Extinguishing Media :</b>	Water fog, carbon dioxide, dry chemical, foam
<b>Autoignition Temperature :</b>	850° F min.
<b>Unusual Fire &amp; Explosion Hazards :</b>	If exposed to fire, high heat will develop and may produce dense black smoke. Dust generated by fabrication i.e. sanding, sawing, etc., will increase fire hazard and should be handled accordingly.

## V. REACTIVITY DATA

<b>Stability (Conditions to Avoid) :</b>	Stable. Avoid fire and high temperatures.
<b>Incompatibility (Materials to Avoid) :</b>	Will dissolve in most organic solvents, and some insecticides, aldehydes, and amines.
<b>Hazardous Decomposition :</b>	CO, CO <sub>2</sub> , H <sub>2</sub> O and Hydrogen Bromides
<b>Hazardous Polymerization :</b>	None.

<u><b>Principal Health Hazards and Signs &amp; Symptoms of Exposure</b></u>	<u><b>First Aid</b></u>
<p><b>Eye Contact :</b> Dust or particles may cause mechanical eye irritation and/or injury</p> <p><b>Inhalation :</b> Dust from mechanical fabrication may cause upper respiratory irritation. Fumes from hot wire cutting can also cause upper respiratory irritation.</p> <p><b>Skin Contact :</b> None. May produce slight skin irritation in a few individuals.</p> <p><b>Ingestion :</b> Biological inert. May act as an obstruction if swallowed.</p> <p><b>Carcinogenicity :</b> None.</p> <p><b>Safety Precautions:</b> Use positive ventilation. Mechanical fabrication, sanding, etc. requires the use of safety glasses or goggles and dust mask.</p>	<p><b>Eyes :</b> Rinse with clean water. Remove foreign particles with clean, lint-free cloth. Obtain medical treatment if pain, blinking, tears, or redness persists.</p> <p><b>Inhalation :</b> If overcome by exposure, remove to fresh air. Provide oxygen and artificial respiration. Get medical attention.</p> <p><b>Skin :</b> Not expected to present skin hazard. Wash exposed areas with mild soap and water. Consult physician if irritation persists.</p> <p><b>Ingestion :</b> Not expected to present significant ingestion hazard. Consult physician if swallowed.</p>

## **VII. EMPLOYEE PROTECTION**

<b>Personal Protection Equipment</b>	
<b>Respiratory Protection :</b>	Use approved dust mask when sawing or sanding.
<b>Skin Protection :</b>	Wear gloves and/or sleeves, if sensitivity noted.
<b>Eye Protection :</b>	Use approved safety glasses/goggles when sawing or sanding.
<b>General Control Measures :</b>	Use positive ventilation. Wear safety glasses/goggles and dust mask if mechanical fabrication is to take place.

## **VIII. SPILL OR LEAK PROCEDURE**

<b>Spill, Leak, or Release Procedures :</b>	Normal good housekeeping should be observed. Material can be swept or picked up and placed into a suitable container for disposal.
<b>Reportable Quantity :</b>	None.
<b>Disposal Method :</b>	Recycle, incinerate (WTE), or land fill per local and state regulations.

## **IX. SPECIAL PRECAUTIONS**

<b>Storage and Handling :</b>	Expanded Polystyrene is considered to be combustible, and adequate protection from sources of ignition should be taken.
<b>Transportation Requirements :</b>	Not a D.O.T. "Hazardous Material".

**MSDS 085**

**Emergency Telephone Number CHEMTREC 1-800-424-9300 (This number is available days, nights, weekends & holidays.)**

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