



Harbor Foam Inc.  
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## Material Safety Data Sheet

**Date Issued: March 11, 2009**

### **#1 PRODUCT INFORMATION**

**Product Name:**

Harbor Foam Expanded Polystyrene (EPS)

**Manufacturer:**

Harbor Foam Inc.  
2950 Prairie SW Suite 300  
Grandville, MI 49418  
Phone: (616) 855-8150  
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### **#2 INGREDIENT INFORMATION**

<b>Common Name</b>	<b>Chemical Name</b>	<b>CAS No.</b>	<b>Wt. %</b>
Polystyrene Foam	Ethenylbenzene homopolymer	9003-53-6	94%
Pentanes* (isomers)	n-pentane	109-66-0	3.9%
	Isopentane	78-78-4	1.0%
	Cyclopentane	287-92-3	1.0%
Styrene (residual)	Vinyl Benzene	100-42-5	0.1%

*\*Pentane is a flammable blowing agent that begins to off-gasses from the product after the initial molding process. The majority of pentane dissipates prior to shipment. However, residual blowing agent may gradually off-gas from the foam during storage or use.*

### #3 HAZARD RATING

	<u>NFRA Rating</u>	<u>HMIS Rating</u>	
Health	1	1	0 - <i>Minimal</i>
Fire	2	2	1 - <i>Slight</i>
			2 - <i>Moderate</i>
			3 - <i>Serious</i>
			4 - <i>Severe</i>

### #4 FIRST AID MEASURES

**Inhalation:** Move person to fresh air. If irritation persists, seek medical attention.

**Skin:** Wash with mild soap and running water. Remove and launder contaminated clothing before reuse. If irritation develops, seek medical attention.

**Eyes:** Flush eyes with running water for at least 15 minutes. Seek medical attention if irritation develops.

**Ingestion:** Ingestion of this material is unlikely. If it does occur, do not induce vomiting; seek medical attention.

**Fire:** Move to fresh air. Administer oxygen and seek medical attention.

### #5 FIRE & EXPLOSION DATA

**Flash Point and Method:** 610°F min. (ASTM D1929)

**Upper Flammable Limit (UFL):** Not applicable

**Lower Flammable Limit (LFL):** Not applicable

**Auto Ignition:** 850°F (ASTM D-1929)

**Extinguishing Method:** Use water spray, water fog, fire-fighting foam or dry chemical or CO<sub>2</sub> extinguishing media.

**Unusual Fire and Explosion Hazards:** If ignited, there may be a very high rate of flame propagation and/or an associated explosion. Assure proper ventilation of storage or shipping containers to prevent accumulation of hazardous concentrations of off-gassed pentane.

**Hazardous Combustion Products:** Burning foam emits a dense, black, irritating smoke with acid gases. Primary combustion products are carbon monoxide, carbon dioxide, and styrene. Other undetermined hydrocarbon fraction could be released in small quantities.

### #6 SPILL OR LEAK PROCEDURES

**Land Spill:** Scoop up material and put into suitable container for recycling or disposal as a non-hazardous waste in an appropriate recycling or disposal facility.

**Water Spill:** This material will float and disperse with wind and current. Contain the material with brooms, pick up or remove with a vacuum truck.

**Air Release:** This material will settle out of the air. If concentrated on land, it can then be scooped up for recycling or disposal as a non-hazardous waste.

## **#7 HANDLING AND STORAGE**

**Storage Temperature:** Below 170° F.

**Storage Pressure:** Not applicable.

**General Storage:** Store in a well-ventilated area. Assure storage containers or areas and shipping containers are adequately ventilated. The flammable vapors of pentane (blowing agent) are heavier than air and may accumulate in low places. “No Smoking – No Matches – No Lighters – No Welding” rules should be enforced.

## **#8 EXPOSURE CONTROLS / PERSONAL PROTECTION**

**Eye Contact:** Eye exposure to dust or particles from this product may cause mechanical irritation and/or injury.

**Inhalation:** Breathing dust may cause temporary mechanical irritation and coughing. Overexposure to extremely high concentrations of pentane can cause narcotic effects. Signs and symptoms of overexposure to pentane include headache, nausea, dizziness, difficulty walking or sleepiness. Fumes from hot wire cutting can also cause upper respiratory irritation.

**Skin Contact:** Direct contact with rough cut foam can cause mechanical abrasion to exposed skin.

**Ingestion:** Biological inert material. May cause an obstruction if swallowed.

**Carcinogenicity:** None.

**Safety Precautions:** Use positive ventilation when mechanically fabricating, sanding, routing, etc. The use of safety glasses or goggles and dust masks is required.

**Eye Protection:** ANSI – approved safety glasses with side shields, when fabricating with saw or grinding equipment.

**Respiratory Protection:** Use NIOSH approved dusk mask if required during machining. Use positive ventilation when fabricating with hot wire equipment.

**Skin Protection:** Wear canvas gloves as standard handling procedure.

## **#9 PHYSICAL AND CHEMICAL PROPERTIES**

**Form:** Solid blocks, sheets, panels or forms

**Color:** White

**Odor:** Slight hydrocarbon odor

**Physical State:** Solid

**pH:** Not applicable

**Viscosity:** Not applicable

**Boiling Point:** Not applicable

**Freezing Point:** Not applicable

**Melting Point:** Not determined (softening begins at 160°F)

**Vapor Density (Air=1):** Not applicable

**Vapor Pressure:** Not applicable

**Specific Gravity (Water=1):** <1

**Solubility in Water:** Insoluble

## **#10 STABILITY AND REACTIVITY**

**Stability (Conditions to Avoid):** This is a stable material; avoid fire and high temperatures.

**Incompatibility (Materials to Avoid):** Reactive with oxidizing agents. Organic solvents, esters, amine and aldehydes will dissolve product.

**Hazardous Decomposition:** CO, CO<sup>2</sup>, H<sup>2</sup>O and Hydrogen Bromides.

**Hazardous Polymerization:** None.

## **#11 TOXICOLOGICAL INFORMATION**

**LD50 (oral):** Not available.

**LD50 (dermal):** Not available.

**LD50 (inhalation):** Not available.

**CARCINOGENICITY:** No component listed under IARC, NTP, or OSHA.

## **#12 ECOLOGICAL INFORMATION**

This material is not expected to cause harm to animals, plants or fish. It is not expected to harm ecosystems through its applied use.

### **#13 WASTE DISPOSAL PROCEDURES**

**RCRA Hazard Class:** Non-hazardous

**Waste Disposal:** Incinerate, recycle or dispose in a licensed facility. Do not discharge into waterways or sewer systems without proper authority.

### **#14 TRANSPORTATION INFORMATION**

**US DOT Information:** For domestic transportation purposes, this product is not regulated as a hazardous material by the US Department of Transportation (DOT) under Title 49 of the Code of Federal Regulations.

***The information contained herein is provided as a general reference only. Harbor Foam Inc. believes the data set forth herein to be accurate and provided in good faith. Harbor Foam Inc. makes no guarantee or warranty and does not assume any liability with respect to the accuracy or completion of such information or of the product results in any specific instance, and hereby expressly disclaims any implied warranties of merchantability or fitness for a particular purpose, or any other warranties or representations whatsoever, expressed or implied.***

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