

Section 1 : Product and company identification

Substance name : Modified expanded polystyrene

Product Grades : 1.0, 1.25, 1.5, 2.0, 2.5, 3.0 pound densities

Intended use of product: Construction and Packaging .

Chemical Family: Polystyrene thermoplastic polymer

Cas No. : 9003-53-6

Cas Name: Benzene, Ethenyl, Homopolymer

Formula : (C8 H8)x

Synonyms: Modified EPS, EPS, Expanded PS; Foam Polystyrene

TSCA inventory status: Listed

Contact : Houston Foam Plastics, INC.
2019 Brooks St.
Houston, TX 77026-7297

Section 2 : Hazard identification

Classification:

Eye effects: Category 2B **TOST:** Single Exposure, category 3 **Carcinogenicity:** Category 2

Hazard Symbol:



Hazard Statements:

Freshly expanded or heated foam may off-gas pentane which can accumulate at hazardous concentrations above the Lower Explosion Limit (LEL) if stored in closed containers or confined areas.

No unusual conditions are expected from this product after it is aged.

Precautionary Statements

To prevent ignition, avoid smoking, keep from open flames and high temperatures. If heated above decomposition temperature or burned, product can emit an irritating dense black smoke. Grinding, sawing or fabrication activities can produce dust particles which under certain conditions may ignite or form explosive dust atmospheres.

Appearance and Odor

White or gray solid blocks, sheets, panels or forms with slight hydrocarbon odor.

Potential Health Effects Summary: Inhalation or eye exposure to dust from this product may cause temporary irritation. Skin exposure to the product may cause irritation to cuts or punctures.

Routes of Entry: Inhalation, skin and eye contact, and ingestion.

Acute 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.

Chronic Inhalation: None identified.

Section 2 : Hazard identification (continued)

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

Chronic Skin Contact: None identified.

Acute Eye Contact: Eye contact may cause mild mechanical irritation, redness, tearing and blurred vision.

Chronic Eye Contact: None identified.

Acute Ingestion: Ingestion of this material is unlikely if used as intended. However, ingestion of this product may produce gastrointestinal irritation and disturbances.

Chronic Ingestion: None identified.

Medical Conditions Aggravated by Exposure: Treat symptomatically. Specific data that address medical conditions that are generally recognized as being aggravated by exposure to this product are not available. However, chronic respiratory or eye conditions may worsen from exposure to these products.

Section 3 : Composition/Information on Ingredients

Hazardous components	Cas registry no	Approx. Weight%:
Pentanes	109-66-0	2.0% Max
Flame retardants as halogenated organics	N/A	0.9 % Max
NON hazardous components	Cas registry no	Approx. Weight%:
Polystyrene	9003-53-6	95.5 % Min
Plasticizers	N/A	.4 % Max
External & Internal Lubricants	N/A	0.3 % Max

Section 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

Section 5 : Fire Fighting Measures

Flash pt. & Method used: 675°F (ASTM D-1929)

Special Fire Fighting Instructions: Use approved self-contained breathing apparatus respirator and approved personal protective clothing.

Extinguishing media: Water fog, carbon dioxide, foam, and dry chemical

Auto ignition temperature: 880° f

Unusual Fire & Explosion Hazards: Fire gives off dense black smoke.

Section 6 : Accidental Release Measures

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.

Section 7 : Handling & 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.

Section 8 : Exposure Controls

Respiratory protection: Dust mask needed when fabricating with saws or grinding equipment.

Skin protection: None under normal conditions

Eye protection: Ansi approved safety glasses with side shields, when fabricating with saw or grinding equipment.

General control measures: Use positive ventilation when fabricating with hotwire equipment.

INGREDIENT	OSHA PEL	ACGIH TLV	NIOSH REL
Expanded Polystyrene			
PNOOC:			
Inhalable	-	10 mg/m ³	-
Respirable	5 mg/m ³	3mg/m ³	-
Total Particulate	15 mg/m ³	-	-
Pentanes			
Pentane	1000 ppm	600 ppm	120 ppm 610 (Ceiling)
Cyclopentane	-	600 ppm	600ppm
Styrene	100 ppm 200 ppm (Ceiling) 600 ppm (5 minute peak)	20 ppm 40 ppm (STEL)	50 ppm 100 ppm (STEL)

Additional Information: Products listed in this SDS do not contain any form of Asbestos.

Section 9 : Physical & Chemical

Form: Rigid board

Color: White

Odor: None

Boiling point: N/A

Melting point: Softens and expands at 200° f to 215° f

Specific gravity: Apparent density 1.0-3.0 pof

Vapor Pressure: N/A

Volatiles by Volume: 2.0% Max

Vapor density (air=1): N/A

Evaporation rate: None

Solubility in water: Insoluble

Section 10 : Stability & Reactivity

Stability: This is a stable material; avoid sources of ignition.

Incompatible Materials and Conditions to Avoid: Organic solvents, esters, amine and aldehydes will dissolve product. High temperature, poor ventilation combined with freshly expanded product may create hazardous, explosive or fire conditions.

Hazardous Decomposition Products: May decompose in a fire. See Section 5 of SDS for combustion products statement.

Hazardous Polymerization: Will not occur.

Section 11 : Toxicological Information

This product has not been tested as a separate entity. Therefore, the hazards must be evaluated on the basis of the individual ingredients, and those hazards must be assumed to be additive in the absence of complete information. The hazards described in this document have been evaluated on a threshold of 1.0% for all hazardous ingredients and 0.1% for all carcinogens.

Possible routes of exposure: Section 2

Acute Effects: Acute health effects from this product are unlikely when used as intended.

Chronic Effects: Chronic health effects from this product are unlikely when used as intended.

Section 12 : Ecological Information

Material is not expected to cause harm to animals, plants or fish. Fish or animals may eat product and obstruct their digestive tract. It is not expected to harm ecosystems through its applied use.

Section 13 : Ecological Information

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.

Section 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.

Section 15 : Regulatory Information

Clean Air Act

This product contains styrene, which is listed as a hazardous air pollutant

SARA Title III Regulations This product contains pentane and residual styrene monomer, which OSHA defines as a hazardous chemical. This product may be portable under SARA sections 311 and 312, depending on the maximum on-site storage volumes.

This product does not contain any substance(s) subject to the reporting requirements (i.e., at or above de minimis quantities) of sections 302 and 304 of Title III of the Superfund Amendments and Reauthorization Act (SARA-40 CFR 355).

This product does not contain any substance(s) subject to reporting requirements (i.e., at or above de minimis quantities) of sections 302 and 304 of Title III of the Superfund Amendments and Reauthorization Act (SARA-40 CFR 372).

Toxic Substance Control Act (TSCA)

All ingredients are listed on the TSCA inventory.

Section 16 : Other Information

Other Information

Reasonable care has been taken in the preparation of this information, but the manufacturer makes no warranty of merchantability or any other warranty, expressed or implied, with respect to this information. The manufacturer makes no representations and assumes no liability for any direct, incidental or consequential damages resulting from its use.