



MATERIAL SAFETY DATA SHEET

Foam-Control EPS, Foam-Control EPS with Perform Guard, and Foam-Control EPS with Perform Guard²

Section 1 - CHEMICAL PRODUCT/COMPANY IDENTIFICATION

Material Identification

CAS Number : 9003-53-6
CAS Name : POLYSTYRENE
Product Use : FOAMED POLYSTYRENE

Company Identification

MANUFACTURER

ACH Foam Technologies, LLC
www.achfoam.com

PHONE NUMBER

800-525-8697

Section 2 - HAZARDS IDENTIFICATION

*****EMERGENCY OVERVIEW*****
* Rigid foam blocks, boards and shapes. May evolve *
* irritating fumes on processing or overheating. *

Potential Health Effects:

EYE: May cause irritation.

SKIN: Unlikely to cause skin irritation.

INGESTION: Low oral toxicity.

INHALATION: Unlikely to be hazardous but dust or vapors may cause irritation.

CHRONIC (CANCER) INFORMATION: No information but adverse effects unlikely.
Potential degradation product, styrene, is a possible human carcinogen.

TERATOLOGY (BIRTH DEFECT) INFORMATION: No information but adverse effects unlikely.

REPRODUCTIVE INFORMATION: No information but adverse effects unlikely.

Section 3 - COMPOSITION/INFORMATION ON INGREDIENTS

Components		
Material	CAS Number	Percent
Polystyrene	9003-53-6	95-100
Pentane*	109-66-0	<2.0
(n-pentane, isopentane, cyclopentane)	78-78-4	
	287-92-3	
Hexabromocyclododecane	3194-55-6	<1.0
Disodium Octaborate Tetrahydrate	12280-03-4	<1.0
Styrene	100-42-5	<0.1

Ingredients not precisely identified are proprietary or nonhazardous.

*Flammable blowing agent that off-gases from product. Most of the pentane off-gases prior to shipment.

Section 4 - FIRST AID MEASURES

First Aid

Inhalation: Remove patient from exposure. Obtain medical attention if ill effects occur.

Skin Contact: Wash skin with soap and water.

Eye Contact: Remove particles by irrigating with eye wash solution or clean water, holding the eyelids apart. Obtain medical attention.

Ingestion: Ingestion of small quantities of this material under normal circumstances would not cause harmful effects.

Further Medical Treatment: Symptomatic treatment and supportive therapy as indicated.

Section 5 - FIRE FIGHTING MEASURES

Flash point: Not applicable

Auto ignition temperature: 850 deg F

Flash point: 610 deg F (ASTM D 1929)

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

Special fire fighting protective equipment: Self-contained breathing apparatus with full face piece and protective clothing.

Unusual fire and explosion hazards: Burning product may emit dense black smoke. Dust generated by fabrication, e.g. sanding, may present a fire hazard and should be handled accordingly.

Section 6 - ACCIDENTAL RELEASE MEASURES

Steps to be taken in case material is released or spilled: Sweep up and recover or shovel into a chemical waste container.

Section 7 - HANDLING AND STORAGE

STORAGE

Keep containers in a clean, cool and dry area away from heat sources. Natural ventilation is adequate. Storage Temperature: Ambient.

HANDLING

Process Hazards

All polymers degrade to some extent at their processing temperature, an effect which increases with increasing temperature. It is therefore impossible to be precise about which substances may be evolved. However, it is only the minor components which vary substantially. The major components are given in the "STABILITY AND REACTIVITY" section.

Section 8 - EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls

Ventilation:

Use ventilation adequate to maintain safe levels if overheating or dust occurs during processing.

Respiratory protection: Use MSHA-NIOSH approved respirator for organic vapors, dusts and mists.

Protective clothing: Impervious gloves and apron.

Eye protection: Safety glasses with side shields.

Other protective equipment: Eyewash station in work area.

Special precautions or other comments: Follow procedures specified in the National Fire Protection Association Codes and Standards for handling combustible dusts. Maintain good housekeeping to avoid dust buildup

Exposure Guidelines

Exposure Limits

PEL(OSHA) : Particulates (Not Otherwise Classified) 15 mg/m³, 8 Hr. TWA, total dust 5 mg/m³, 8 Hr. TWA, respirable dust
TLV ACGIH): None Established

Other Applicable Exposure Limits

STYRENE

PEL (OSHA): 100 ppm, 8 Hr. TWA 200 ppm, Ceiling 600 ppm - 5 Min. Max
TLV(ACGIH): 50 ppm, 213 mg/m³, 8 Hr. TWA, Skin STEL 100 ppm, 426 mg/m³

PENTANE

PEL (OSHA): 1,000 ppm

TLV (ACGIH): 600 ppm

Section 9 - PHYSICAL AND CHEMICAL PROPERTIES

Appearance and color: White, rigid cellular foam blocks, boards and shapes.

Melting point: Softens at 175 to 220 deg. F.

Solubility in water: Insoluble

Odor: Very slight hydrocarbon.

Density: 0.6 to 3.0 pounds per cubic foot

Section 10 - STABILITY AND REACTIVITY

Stability: Stable under normal conditions.

Decomposition occurs at temperatures above 500 deg F (260 deg C).

Incompatibility: Oxidizing agents, organic solvents.

Hazardous decomposition products:

Combustion products: Carbon dioxide, carbon monoxide, styrene and other organic vapors.

Hazardous polymerization: Will not occur.

Section 11 - TOXICOLOGICAL INFORMATION

General: No toxicity information is available on this specific preparation; this health hazard assessment is based on information that is available on the properties of its components.

Ingestion: The acute oral LD50 in rat is probably above 15,000 mg/kg.

Relative to other materials, this material is classified as "relatively harmless" by ingestion.

Eye contact: Irritation may develop following contact with human eyes. Dusts may cause mechanical irritation.

Skin contact: No irritation is likely to develop following contact with human skin.

Skin absorption: This product will probably not be absorbed through human skin.

Inhalation: No toxic effects are known to be associated with inhalation of dust from this material. Mechanical irritation may result from inhalation of dust from this material.

Other effects of overexposure: No other adverse clinical effects have been associated with exposures to this material.

Carcinogenicity Information

The following degradation component is listed by IARC, NTP, OSHA or ACGIH as a carcinogen.

Material	IARC	NTP	OSHA	ACGIH
STYRENE				X

Section 12 - ECOLOGICAL INFORMATION

Solid with low volatility. The product is essentially insoluble in water. The product has low potential for bioaccumulation. The product is predicted to have low mobility in soil.

Persistence and Degradation: The product is non-biodegradable in soil. There is no evidence of degradation in soil and water.

Toxicity: The product is predicted to have low toxicity to aquatic organisms.

Effect on Effluent Treatment: The product is anticipated to be poorly removed in effluent treatment.

Section 13 - DISPOSAL CONSIDERATIONS

Waste Disposal

Treatment, storage, transportation, and disposal must be in accordance with applicable Federal, State/Provincial, and Local regulations. Incinerate material in accordance with Federal, State/Provincial and Local requirements. Do not incinerate in closed containers.

Discarded product is not a RCRA hazardous waste.

Section 14 - TRANSPORTATION INFORMATION

DOT: Not regulated

Section 15 - REGULATORY INFORMATION

Not classified as hazardous to users or for transport. U.S. Federal Regulations

TSCA Inventory Status: Reported/Included.

SECTION 313 SUPPLIER NOTIFICATION

This product contains no known toxic chemicals subject to the reporting requirements of section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 and of 40 CFR 372.

Canadian Regulations:
DSL regulatory status: Included.

European Regulations:
EINECS: Included.

Section 16 - OTHER INFORMATION

HMIS Rating

Health : 1
Flammability : 2
Reactivity : 0

Personal Protection rating to be supplied by user depending on use conditions

STATE RIGHT-TO-KNOW LAWS

No substances on the state hazardous substances list, for the states indicated below, are used in the manufacture of products on this Material Safety Data Sheet, with the exceptions indicated. While we do not specifically analyze these products, or the raw materials used in their manufacture, for substances on various state hazardous substances lists, to the best of our knowledge the products on this Material Safety Data Sheet contain no such substances except for those specifically listed below:

WARNING: SUBSTANCES KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER:
NONE KNOWN.

WARNING: SUBSTANCES KNOWN TO THE STATE OF CALIFORNIA TO CAUSE BIRTH DEFECTS OR OTHER REPRODUCTIVE HARM:
NONE KNOWN.

The information herein is given in good faith but no warranty, expressed or implied, is made. The manufacturer assumes no responsibility for personal injury or property damage that may arise from use of this material. Vendees or users assume all risks associated with the use of this material.