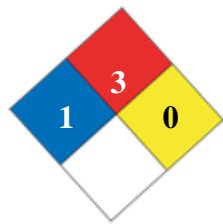


Uline

NFPA

HMIS

Foam Protectors



HEALTH	1
FIRE	3
REACTIVITY	0
PPE	

SECTION 1 : CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

MSDS Name: Foam Protectors

Distributor Name: Uline

Distributor Address:

2200 S. Lakeside Drive
Waukegan, IL 60085

TELEPHONE NUMBERS:

Distributor: (800) 295-5510
CHEMTREC: (800) 424-9300

Manufacturer Product Description:

Product Type: 3640, 5640, 7640, 5340S, 6340S, 7340S, 5340S-NS, 6340S-NS, 7340-NS, 3640-NS, 5640-NS, 7640-NS, 3640X, 5640X, 7640X

Health Phone: Medical Emergency: (409) 722-9673 (24 Hour)

Manufacturer MSDS Revision Date: 4/13/2000

Synonyms:

Modified EPS

Chemical Name and/or Family or Description: 3640, 5640, 7640, 5340S, 6340S, 7340S, 5340S-NS, 6340S-NS, 7340-NS, 3640-NS, 5640-NS, 7640-NS, 3640X, 5640X, 7640X

Chemical Name: Polystyrene thermoplastic polymer

Molecular Formula: (C₆H₈)_x

MATERIAL SAFETY DATA SHEET

READ AND UNDERSTAND MATERIAL SAFETY DATA SHEET BEFORE HANDLING OR DISPOSING OF PRODUCT

NFPA

Health: 1

Flammability: 3

Reactivity: 0

Other:

HMIS

Health Hazard: 1
Fire Hazard: 3
Reactivity: 0
Personal Protection:

Product Codes:
GRADE 40

SECTION 2 : COMPOSITION, INFORMATION ON INGREDIENTS

Chemical Name	CAS#	Percent	
Benzene, ethenyl-, homopolymer	9003-53-6	> = 92.5%	

Common name: Polystyrene

Chemical Name	CAS#	Percent	
Pentane	109-66-0	< = 7.0%	

OSHA PEL TWA: 1000 ppm

OSHA STEL/Ceiling: STEL: 750 ppm

ACGIH TLV TWA: 600 ppm

Composition/Information:

THE CRITERIA FOR LISTING COMPONENTS IN THE COMPOSITION SECTION ARE AS FOLLOWS: CARCINOGENS ARE LISTED WHEN PRESENT AT 0.1% OR GREATER; COMPONENTS WHICH ARE OTHERWISE HAZARDOUS ACCORDING TO OSHA ARE LISTED WHEN PRESENT AT 1.0% OR GREATER; NON-HAZARDOUS COMPONENTS ARE LISTED AT 3.0% OR GREATER. THIS IS NOT INTENDED TO BE COMPLETE COMPOSITIONAL DISCLOSURE. REFER TO SECTION 14 FOR APPLICABLE STATES RIGHT TO KNOW AND OTHER REGULATORY INFORMATION.

Product and/or Component(s) Carcinogenic According to: NONE

THIS PRODUCT IS CONSIDERED HAZARDOUS ACCORDING TO OSHA (1910.1200).

SECTION 3 : HAZARDS IDENTIFICATION

Emergency Overview:

WARNING STATEMENT:

DANGER!

EXTREMELY FLAMMABLE VAPOR.

VAPOR MAY CAUSE FLASH FIRE

VAPOR MAY CAUSE DIZZINESS AND DROWSINESS

VAPOR MAY CAUSE IRRITATION TO EYES AND RESPIRATORY TRACT

Physical State:

Solid beads (0.01 to 0.1 inches diameter)

Color: White

Odor: Slight hydrocarbon odor

Hazardous Material Information (United States):

Health: 1

Fire: 3

Reactivity: 0

National Fire Protection Association NFPA (United States):

Health: 1

Flammability: 3

Reactivity: 0

Applies to All Ingredients:

Route of Exposure:

Eye, Skin, Inhalation

Potential Health Effects:

Eye Contact:

Acute: Vapor may cause irritation, experienced as discomfort, with excess tear production and blinking, and seen as excess redness of the eye. Product may contain residual amounts of dust or small particulates which may cause eye irritation or abrasion experienced as mild discomfort and slight excess redness of the eye.

Skin Contact:

Acute: Product may contain residual amounts of dust or small particulates that may cause skin irritation or abrasion experienced as local redness with possible mild discomfort.

Inhalation:

Acute: Vapors or mist may cause irritation of the nose and throat. Inhalation may cause dizziness, drowsiness, euphoria, loss of coordination, disorientation, headache, nausea, and vomiting. In poorly ventilated areas or confined spaces, unconsciousness and asphyxiation may result. Prolonged or repeated overexposure may result in the absorption of potentially harmful amounts of material.

Dust may cause irritation of the nose and throat. Overexposure to high concentrations of dust may cause respiratory irritation, experienced as coughing and difficulty breathing.

Ingestion:

Acute: If more than several mouthfuls are swallowed, abdominal discomfort, nausea, and diarrhea may occur.

Chronic Health Effects:

Prolonged or repeated inhalation of dust or particulates may impair lung function or cause lung damage.

Sensitizer Information:

Sensitization Properties: Unknown

Aggravation of Pre-Existing Conditions:

Overexposure to vapor, dust or mist may aggravate existing respiratory conditions, such as asthma, bronchitis, and inflammatory or fibrotic respiratory disease.

Other Remarks:

None

SECTION 4 : FIRST AID MEASURES

Eye Contact:

Flush eyes with plenty of water for several minutes. Remove larger particulates from the eye as one would any foreign object. Get medical attention if eye irritation persists or particulates are difficult to remove from the eye.

Skin Contact:

Wash skin with plenty of soap and water for several minutes. Get medical attention if skin irritation develops or persists.

Inhalation:

If inhaled, remove to fresh air. If not breathing, clear person's airway and give artificial respiration. If breathing is difficult, qualified medical personnel may administer oxygen. Get medical attention immediately.

Ingestion:

If more than several mouthfuls of this material are swallowed, give two glasses of water (16 oz.). Get medical attention.

Other Instructions:

None

SECTION 5 : FIRE FIGHTING MEASURES

Flash Point:

-40 deg C (-40 deg F) for Pentane

Flash Point Method:

CC for Pentane

Upper Flammable or Explosive Limit:

7.8 for Pentane

Lower Flammable or Explosive Limit:

1.5 for Pentane

Extinguishing Media:

Recommended: Water may be ineffective on flames but should be used to cool fire-exposed containers and provide protection for persons attempting to stop the leak. Use water spray, dry chemical, foam or carbon dioxide to extinguish flames.

Fire Fighting Instructions:

Special Procedures: Water may be ineffective on flames but should be used to cool fire-exposed containers and provide protection for persons attempting to stop the leak. Use water spray, dry chemical, foam or carbon dioxide to extinguish flames.

Protective Equipment:

For Firefighters: Wear full protective clothing and positive pressure breathing apparatus.

Unusual Fire Hazards:

Danger! Extremely flammable materials may release vapors that travel long distances, ignite, and flash back. Containers may explode in a fire. Do not expose to heat, sparks, flame, static, or other sources of ignition. When handling, use non-

sparkling tool, ground and bond all containers.

Explosive air-vapor mixtures may form. Fire gives off dense black smoke and acid gasses. Electrostatic discharge can be a source of ignition due to accumulated pentane vapors exceeding the L.E.L. (lower explosive limit) of 1.5% (15,000 ppm). Pentane vapors may be emitted from newly opened containers or when the product is heated. If ignited, there could be a very high rate of flame propagation.

"NO SMOKING - NO MATCHES - NO LIGHTERS - NO WELDING" rules should be enforced.

Ignition Temperature - AIT:

260 deg C (500 deg F) for Pentane

471 deg C (880 deg F) by ASTM D-1929 Expanded polystyrene

SECTION 6 : ACCIDENTAL RELEASE MEASURES

Spill Cleanup Measures:

Procedures in Case of Accidental Release, Breakage or Leakage:

Avoid the generation of dust clouds. Place in appropriate containers for disposal or recycle. Avoid breathing dust. Pressure demand air supplied respirators should always be worn when the airborne concentration of the contaminant or oxygen is unknown. Otherwise, wear respiratory protection and other personal protective equipment as appropriate for the potential exposure hazard. Wear gloves, goggles, and protective clothing to avoid contact with eyes, skin, or clothing. Use vacuuming or sweeping compound for clean up. Do not dry sweep or use methods which increase dusting. Prevent entry into sewers and waterways.

Transportation Spills: CHEMTREC (800) 424-9300

SECTION 7 : HANDLING and STORAGE

Handling:

Use spark-proof tools. Material may be at elevated temperatures and/or pressures. Exercise care when opening bleeders and sampling ports.

Storage:

Ground and bond shipping container, transfer line, and receiving container. Keep away from heat, sparks, flame and other sources of ignition.

SECTION 8 : EXPOSURE CONTROLS, PERSONAL PROTECTION

Ventilation System:

Use explosion-proof equipment to maintain adequate ventilation to meet occupational exposure limits, if applicable (see below), prevent accumulation of explosive air-gas mixtures, and avoid significant oxygen displacement. Oxygen levels should be at least 19.5% in confined spaces or other work areas (OSHA value).

Skin Protection Description:

Type: Workers should wash exposed skin several times daily with soap and water. Soiled work clothing should be laundered or dry-cleaned.

Eye/Face Protection:

Type: Avoid eye contact. Chemical type goggles should be worn. Do not wear contact lenses.

Respiratory Protection:

Type: Airborne concentrations should be kept to lowest levels possible. If vapor, mist or dust is generated and the occupational exposure limit of the product, or any component of the product, is exceeded, use appropriate NIOSH or MSHA approved air purifying or air supplied respirator after determining the airborne concentration of the containment. Air supplied respirators should always be worn when airborne concentration of the contaminant or oxygen content is unknown.

Exposure Limits:

Exposure Limit for the Total Product:

None established for product; refer to Section 2 for component exposure limits.

SECTION 9 : PHYSICAL AND CHEMICAL PROPERTIES

Physical State/Appearance:

Solid, beads (0.01 to 0.1 inches diameter)

Color:

White

Odor:

Slight hydrocarbon odor

pH:

Not applicable.

Vapor Pressure:

Negligible

Vapor Density:

(Air=1): > 1

Boiling Point:

Deg C: Not applicable

Freezing Point:

Softens and expands at 93.3-101.7 deg C (200-215 deg F)

Melting Point:

Softens and expands at 93.3-101.7 deg C (200-215 deg F)

Solubility:

In Water (%): < 0.1

Specific Gravity:

(Water=1): 1.14-1.18

Volatile Organic Compound Content:

Not determined.

Viscosity:

Not applicable

Flashpoint:

-40 deg C (-40 deg F) for Pentane

Upper Flammable Explosive Limit:

7.8 for Pentane

Lower Flammable Explosive Limit:

1.5 for Pentane

Other:

None

SECTION 10 : STABILITY AND REACTIVITY

Reactivity:

This Material Reacts Violently With: Heat, Strong Oxidizers

Hazardous Polymerization:

DO NOT OCCUR

Comments:

None

Products Evolved When Subjected to Heat or Combustion:

Toxic levels of carbon monoxide, carbon dioxide, irritating aldehydes and ketones.

SECTION 11 : TOXICOLOGICAL INFORMATION

Applies to All Ingredients:

Skin Effects:

ANIMAL TOXICITY DATA:

Dermal: LD50 Believed to be > 2.00 g/kg (rabbit) practically non-toxic

Ingestion Effects:

ANIMAL TOXICITY DATA:

Oral: LD50 Believed to be > 5.00 g/kg (rat) practically non-toxic

Inhalation Effects:

ANIMAL TOXICITY DATA: Not determined.

Sensitization:

Not determined.

Irritation:

Skin: (Draize) Believed to be > .50 - 3.00/8.0 (rabbit) slightly irritating

Eyes: (Draize) Believed to be > 15.00 - 25.00/110 (rabbit) slightly irritating

Other Toxicological Information:

Product may contain dust or particulates that may cause eye irritation or abrasion.

SECTION 12 : ECOLOGICAL INFORMATION

Bioaccumulation:

Potential to Bioaccumulate: Not applicable.

Effect of Material On Aquatic Life:

Aquatic Toxicity: Not applicable.

Mobility:

Not applicable.

Persistence and Biodegradability: This product is expected to persist in the environment.

Remarks: Sewer/waterways obstruction; fish may eat beads and obstruct their digestive tract.

SECTION 13 : DISPOSAL CONSIDERATIONS

Waste Disposal:

This material should be disposed of in accordance with local, state and federal regulations.

Remarks:

Do not allow to enter drains or sewers.

SECTION 14 : TRANSPORT INFORMATION

DOT Shipping Name:

Polymeric beads, expandable

DOT Hazard Class: 9

DOT Identification Number: UN 2211

DOT Packing Group: III

DOT Subpart E Labeling Requirement: Class 9

Canadian Shipping Name: Polymeric beads, expandable

Canadian Hazard Class: 9

Canadian UN Number: UN 2211

Maritime Transportation CGVS/GGVE/IMDG: Proper Shipping Name: Polymeric beads, expandable

CGVS/GGVE/IMDG UN or NA Identification Number: UN 2211

CGVS/GGVE/IMDG Class: 9

CGVS/GGVE/IMDG Packaging Group: III

IMDG:

Label Required: Class 9 (See Section 16 for additional information)

ICAO:

Proper Shipping Name: Polymeric beads, expandable

Hazard Class: 9

Identification Number: UN 2211

Packing Group: III

Label Required: Class 9 (See Section 16 for additional information)

TDG:

Label Required: Class 9 (per UN recommendations, black vertical stripes)

SECTION 15 : REGULATORY INFORMATION

Applies to All Ingredients:

TSCA 8(b): Inventory Status

This product, or its components, are listed on, or are exempt from the Toxic Substance Control Act (TSCA) Chemical Substance Inventory.

CERCLA Section 103:

CERCLA 102(a)/DOT Hazardous Substances:
Chemical Name: None.

SARA:

SARA Title III:

Section 302:

Section 302 Extremely Hazardous Substances:
Chemical Name: None.

Section 304:

Section 302 Extremely Hazardous Substances:
Chemical Name: None.

Section 312 Hazard Category:

Section 311 Hazardous Categorization:

Acute: Yes

Chronic: Yes

Fire: Yes

Section 313 Toxic Release Form:

Section 313 Toxic Chemical:
Chemical Name: None.

OSHA 29 CFR 1200:

THIS PRODUCT IS CONSIDERED HAZARDOUS ACCORDING TO OSHA (1910.1200).

State:

California Prop. 65:

The following detectable components of this product are substances, or belong to classes of substances, known to the State of California to cause cancer and/or reproductive toxicity.

Chemical Name: None.

Canada WHMIS:

WHMIS Classification: Not determined.

Canadian Inventory Status:

This product, or its components, are listed on or are exempt from the European Inventory of Existing Chemical Substances (EINECS) or the European List of Notified Chemical Substances (ELINCS).

European Community Chemical Inventory Status:

EINECS Inventory Status: This product, or its components, are listed on or are exempt from the European Inventory of Existing Chemical Substances (EINECS) or the European List of Notified Chemical Substances (ELINCS).

Japan MITI:

This product, or its components, are listed on or are exempt from the Japanese Ministry of International Trade and Industry (MITI) inventory.

Australia Chemical Inventory Status:

This product, or its components, are listed on or are exempt from the Australian Inventory of Chemical Substances (AICS).

Pentane:

State:

States Right-to-Know Regulations:

Chemical Name: Pentane

States Right-to-Know: FL, MA, MN, NJ, PA, RI

State list: CT (Connecticut), FL (Florida), IL (Illinois), MI (Michigan), LA (Louisiana), MA (Massachusetts), NJ (New Jersey), PA (Pennsylvania), RI (Rhode Island)

SECTION 16 : ADDITIONAL INFORMATION

HMIS:

Health Hazard: 1

Fire Hazard: 3

Reactivity: 0

NFPA:

Fire Hazard: 3

Health: 1

Reactivity: 0

Label Hazard Warning:

European, ADR regulations require additional marking (see item 2912) "Keep Away From Any Source of Ignition." Vessel carriers request marking warning "No Smoking or Open Flame" on box doors.

MSDS Revision Date:

4/13/2000

Disclaimer:

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