



SAFETY DATA SHEET

ELFOAM P Series and U Series Foam Products

Effective: January 2017

1. Product and Company Identification

Product Name:
 Technical Description:
 Formula:
 Recommended Uses and Restrictions:

ELFOAM® “P Series” and “U Series” Foam Products
 Rigid Polyisocyanurate Polyurethane Cellular Polymer
 Proprietary
 Thermal insulation, core materials, and sculpting blanks in industrial and commercial applications. If intended use different than recommended use contact the customer service department.

Company:

Elliott Company of Indianapolis, Inc.
 9200 Zionsville Road Indianapolis, Indiana 46268 USA
 1-800-545-1213 or 1-317-291-1213
 elliott@elliottfoam.com

Telephone Number:
 Email Address:

2. Hazards Identification

Physical State:
 Emergency Overview:
 OSHA Regulatory Status:
 Label Requirements:
 Potential Health Effects
 Eye Contact:
 Skin Contact:
 Absorption:
 Ingestion:
 Inhalation:
 Chronic Effects:

Solid, rigid cellular plastic blocks, sheets and shapes of various colors.
 Low hazard for normal industrial and commercial handling. Toxic fumes may be released in fire situations.
 Not a “Hazardous Chemical” as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.
 None
 Solid or dust may cause irritation or corneal injury due to mechanical action.
 Essentially nonirritating to the skin, mechanical injury only.
 Unlikely due to physical properties.
 Unlikely due to physical state. May cause choking and digestive tract blockage. Very low toxicity and harmful effects in small amounts.
 Dust may cause irritation to upper respiratory tract. Fumes or dusts generated from cutting or grinding operations may cause irritation to upper respiratory tract and lungs.
 Frequent inhalation of dust over an extended period may increase the risk of developing lung complications.

3. Composition / Information on Ingredients

Ingredients
 Polyurethane modified Polyisocyanurate Cellular Polymer:
 Proprietary Hydrocarbon Blowing Agent Blend:

CAS Number	Amount
Not applicable	> 92%
Not applicable	< 8%

4. First Aid Measures

Eye Contact:
 Skin Contact:
 Ingestion:
 Inhalation:
 Notes for Physician:

Flush immediately with water. Remove contacts if applicable after initial flush and repeat. Mechanical effects only.
 Wash off with flowing water.
 Seek medical attention if ingested in large amounts. May cause digestive tract blockage. Do not take laxatives or induce vomiting unless instructed to do so by medical personnel.
 Move to fresh air. If effects occur consult a physician.
 No specific antidote. Treatment should be directed to control patient symptoms and clinical condition.

5. Fire Fighting Measures

Means of Extinguishing:

Water, Carbon Dioxide, Foam and/or Dry Chemical extinguishers.

Fire Fighting Procedures:

Keep people away. Isolate fire and deny unnecessary entry. Soak thoroughly with water to cool and prevent re-ignition. Cool surroundings with water to localize fire zone. Use carbon dioxide and/or dry chemical extinguishers for small fires.

Fire Fighting Equipment:

Positive-pressure self-contained breathing apparatus and protective firefighting clothing (includes firefighting helmet, coat, trousers, boots, and gloves). If protective equipment not available or not used, fight fire from a protected location or safe distance.

Special Fire and Explosion Hazards:

When product stored in a sealed container, a flammable atmosphere can develop. Cutting, grinding or sawing operations can create dust. To reduce dust explosion potential, minimize dust accumulation. Rapid bursting of a multitude of cells such as during waste disposal compaction will release a flammable blowing agent. To reduce related flammable atmosphere potential, adequately ventilate equipment. This product contains a flame retardant to inhibit accidental ignition from small fire sources. This product is combustible and should be protected from flames and other high heat sources. This product emits dense smoke when burned without sufficient oxygen.

Hazardous Combustion Products:

During a fire, smoke may contain combustion products of varying composition which may be toxic and/or irritating. In smoldering or flaming conditions, carbon monoxide, carbon dioxide and carbon are generated. Combustion products may include and are not limited to nitrogen oxides and trace amounts of hydrogen cyanide, hydrogen halides and aromatic hydrocarbons.

6. Accidental Release Measures

Personal Precautions:

Use appropriate safety equipment. See also Section 8, Exposure Controls and Personal Protection.

Environmental Precautions:

Prevent from entering into soil, ditches, sewers, waterways and/or groundwater. See also Section 12, Ecological Information.

Cleanup Restoration Methods:

Recover spilled material if possible in suitable and properly labeled containers. See also Section 13, Disposal Considerations.

7. Handling and Storage

Handling Procedures:

Product is combustible and should not be exposed to flame or other ignition sources. See also Section 8, Exposure Controls and Personal Protection. No smoking, open flames or other ignition source should be allowed in handling or storage areas. Cutting, grinding or sawing this product will release flammable blowing agent(s). Provide adequate ventilation to maintain localized concentrations in release areas below lower flammability limit.

Storage Procedures:

Keep in a cool, well-ventilated place with adequate aisle ways to permit access to all areas. Minimize ignition sources such as static build-up, heat, spark or flame. Flammable vapors may accumulate in some storage situations. During shipment, storage, installation and use, this material should not be exposed to flame or other ignition sources

General Procedures:

Good housekeeping and minimal dust accumulation should also be maintained.

8. Exposure Controls / Personal Protection

Exposure Limits:

<u>Component (CAS Number)</u>	<u>List</u>	<u>Type</u>	<u>Value</u>
Cyclopentane (287-92-3)	ACGIH	TWA	600 ppm
Isopentane (78-78-4)	ACGIH	TWA	600 ppm
n-Pentane (109-66-0))	ACGIH	TWA	600 ppm

Engineering Controls:

Provide general, local exhaust ventilation to control airborne levels below exposure guidelines.

Personal Protective Equipment

Eye/Face Protection:

None required but safety glasses recommended.

Skin Protection:

None required but gloves recommended.

Inhalation Protection:

Maintain airborne levels below exposure guidelines. When respiratory protection is required, use an approved air-purifying respirator or particulate filter respirator.

Ingestion Protection:

None required.

9. Physical and Chemical Properties

Physical State:

Solid, rigid cellular plastic blocks, sheets and shapes.

Density:

1.6 – 6.0 lb/ft³ (25.6 – 96.1 kg/m³)

Color:

Varies by density.

Odor / Odor Threshold:

Odorless / Not applicable.

Specific Gravity:

0.02 - 0.10 (estimated).

Vapor Pressure / Vapor Density:

Not applicable.

Freezing Point /Melting Point / Boiling Point:

Not applicable.

Flash Point - Closed Cup:

Not applicable.

Flammable Limits in Air - Lower / Upper:

Not applicable.

Auto-Ignition Temperature:

600°F – 800°F (316°C – 427°C)

pH:

Not applicable.

Solubility:

Insoluble in water.

10. Stability and Reactivity

Instability (conditions to avoid):

Exposure to elevated temperatures can cause product to decompose. Avoid temperatures above 350°F (176°C). Exposure to ultraviolet light can cause surface photodegradation.

Incompatibility (materials to avoid):

Avoid contact with oxidizing materials, strong acids and strong alkalis.

Hazardous Polymerization:

Will not occur.

Thermal Decomposition Products:

Depends on temperature, air supply and the presence of other materials. Toxic gases may be released during decomposition.

11. Toxicological Information

Irritancy:

Dust may cause eye irritation or corneal injury due to mechanical action.

Sensitization:

None anticipated.

Acute Exposure Effects:

None anticipated.

Chronic Exposure Effects:

Dust not anticipated to result in systemic toxicity or permanent lung injury; however, excessive exposures may cause less severe respiratory effects.

12. Ecological Information

Ecotoxicity:

Not classified as environmentally hazardous to fish, plants, birds and aquatic microorganisms.

Persistence:

No biodegradation is anticipated. Surface photodegradation is expected upon exposure to ultraviolet rays.

Bioaccumulation:

No bioaccumulation expected due to molecular weight greater than 1,000.

Mobility:

In the terrestrial environment material is expected to remain in the soil. In an aquatic environment material is expected to float.

13. Disposal Considerations

Waste Disposal:

Should be done according to good industrial practice and environmental protection regulations. Incinerate or landfill according to local, State or Provincial, and Federal regulations at a licensed and permitted facility. Waste characterization and compliance are the sole responsibility of the waste generator.

14. Transport Information

DOT, IATA/ICAO, IMDG, TDG:

Not regulated. Compliance with all applicable transportation laws, regulations and rules are the responsibility of the transporting organization.

15. Regulatory Information***United States Federal Regulations***

OSHA Hazard Communication Standard:

Not a “Hazardous Chemical” as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

Emergency Planning and Community Right-to-Know Act of 1986

SARA Title III; Sections 311 and 312

Immediate / Delayed Health Hazard: No

Fire Hazard: No

Reactive Hazard: No

Sudden Release of Pressure Hazard: No

SARA Title III; Section 313:

Toxic Substances Control Act (TSCA):

Does not contain reportable levels of any product component. All product components are on the TSCA Inventory or are exempt from Inventory requirements under 40 CFR 720.30.

United States State Regulations

California Proposition 65

Safe Drinking Water and Toxic Enforcement Act of 1986:

Does not contain substances known to the State of California to cause cancer, birth defects or other reproductive harm at levels which would require a warning under the statute.

Canadian Federal Regulations

Workplace Hazardous Materials Information System (WHMIS)

Hazard Communication Standard:

Not a Controlled Product.

Canadian Environmental Protection Act (CEPA) of 1999

Domestic Substances List (DSL):

All product components are listed on the DSL or are not required to be listed.

Non-Domestic Substances List (NDSL):

No product components are required to be listed on the NDSL.

European Union Regulations

Restriction of Hazardous Substances (RoHS) Directive:

No product components are listed on the RoHS.

Regulatory requirements are subject to change and may differ from one location to another; it is the buyer’s/user’s responsibility to insure its activities comply with local, State or Provincial, and Federal laws. The above specific information is made for the purpose of complying with numerous local, State or Provincial, and Federal laws and regulations.

16. Other Information

Hazard Ratings

National Fire Protection Association (NFPA):

Health 1, Flammability 1, Reactivity 0

Hazardous Materials Identification System (HMIS):

Health 1, Flammability 1, Reactivity 0

Legend:

ACGIH – American Conference of Governmental Industrial Hygienists

ICAO – International Civil Aviation Organization

CAS – Chemical Abstract Service

IMDG – International Maritime Dangerous Goods

CFR – Code of Federal Regulations

OSHA – Occupational Health and Safety Administration

DOT – United States Department of Transportation

SARA – Superfund Amendments and Reauthorization Act

IATA – International Air Transport Association

TDG – Transportation of Dangerous Goods

TWA – Time Weighted Average

Elliott Company of Indianapolis, Inc. urges each customer or recipient of this MSDS to review it carefully and consult appropriate expertise to become aware of and understand the data contained in this MSDS and any hazards associated with the product.

The information presented herein is offered in good faith as accurate, but without warranty, expressed or implied, regarding the accuracy or correctness.

Conditions for use and suitability of the product for particular uses are beyond the control of Elliott Company of Indianapolis Inc.; all risks in the use of this product are therefore assumed by the user.

Elliott Company of Indianapolis, Inc. is not and cannot be responsible for MSDSs obtained from any source other than ourselves. If you have obtained an MSDS from another source or if you are unsure if the MSDS you have is current, please contact the customer service department for the most current version.

For additional information about ELFOAM® “P Series” and “U Series” Foams please contact the Elliott Company of Indianapolis, Inc. customer service department.