



Safety Data Sheet

Material Name: H-Shield F®

Section 1 - PRODUCT AND COMPANY IDENTIFICATION

Material Name

H-Shield F®

Synonyms

Polyiso foam with Aluminum Foil Facer

Chemical Family

POLYISOCYANURATE Foam

Product Description

This product is as an article in accordance with 29 CFR 1910.1200.

Product Use

Thermal Insulation foams

Manufacturer Information

Hunter Panels LLC,
15 Franklin Street
Portland, ME 04101
www.hunterpanels.com
Emergency Phone Number: CHEMTREC (USA) 800-424-9300

Section 2 - HAZARDS IDENTIFICATION

Component Related Regulatory Information

The components listed above are part of a product that is considered an “article” as defined in the OSHA Hazard Communication Standard, 29 CFR 1910.1200 and are considered “manufactured articles” as defined by the Canadian Hazardous Products Act (R.S.C., 1985, c. H-3) and as such are exempt from the requirement for an SDS. Under normal conditions of use, these components do not pose a hazard in the workplace or to the building occupants. Since this “article” poses no health hazard under normal conditions of use, there is no requirement for an SDS. In addition, “articles” are not included in the scope of the Globally Harmonized System (GHS). For that reason, the GHS labeling elements are not included on this SDS. Although these products are not subject to the OSHA or Canadian standards or GHS labelling elements, Hunter Panels would like to disclose as much health and safety information as possible to ensure that these products are handled and used properly. This SDS contains information critical to the safe handling and proper use of the products. It is recommended that this SDS should be retained and made available to the users of these products. In addition, the recommendations for handling and use of these products should be included in worker training programs.

GHS Label Elements

Symbol(s)

None needed according to classification criteria



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Signal Word

None needed according to classification criteria

Hazard Statement(s)

None needed according to classification criteria

Precautionary Statement(s)

Prevention

None needed according to classification criteria

Response

None needed according to classification criteria

Storage

None needed according to classification criteria

Disposal

Dispose of contents/container in accordance with local/regional/national/international regulations

Other Hazards

No additional information available.

Section 3 - COMPOSITION / INFORMATION ON INGREDIENTS

| CAS | Component Name | Percent by weight |
|---------------|-----------------------|-------------------|
| Not Available | Polyisocyanurate Foam | 75-85 |
| 109-66-0 | Pentane | < 10 |
| Not available | Foil Facer | 5-15 |

Section 4 - FIRST AID MEASURES

Description of Necessary Measures

Get medical advice/attention if you feel unwell.

Inhalation

If dust is inhaled, remove person to fresh air and keep comfortable for breathing. If experiencing respiratory symptoms: Get medical advice/attention if you feel unwell.

Skin

If skin irritation or rash occurs: Wash with plenty of soap and water. Get medical attention if irritation develops or persists.



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Eyes

Rinse cautiously with water for at least 15 minutes. Remove contact lenses, if present and easy to do, prior to rinsing. If eye irritation persists, get medical advice/attention.

Ingestion

Do NOT induce vomiting. Rinse mouth thoroughly with water. Get medical advice/attention if you feel unwell.

Indication of any immediate medical attention and special treatment needed

Treat symptomatically and supportively.

Most Important Symptoms/Effects

Acute

Direct contact with dust may cause mechanical irritation of the eyes, skin, respiratory tract. May cause allergic skin reaction. May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Delayed

No information on significant adverse effects.

Section 5 - FIRE FIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media

Regular dry chemical, carbon dioxide, foam, water fog

Unsuitable Extinguishing Media

None known.

Special Hazards Arising from the Chemical

Fumes from heating may cause irritation, allergic reactions.

Hazardous Combustion Products

Oxides of carbon

Special Protective Equipment and Precautions for Firefighters

Wear full protective fire fighting gear including self contained breathing apparatus (SCBA) for protection against possible exposure.

Section 6 - ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures

Wear personal protective clothing and equipment, see Section 8.

Methods and Materials for Containment and Cleaning Up

Avoid generating dust in the air.

Environmental Precautions

Prevent environmental discharge consistent with regulatory requirements.



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Section 7 - HANDLING AND STORAGE

Precautions for Safe Handling

Minimize dust generation and accumulation. Eliminate all sources of ignition. Do not breathe dust. Do not eat, drink or smoke when using this product. Do not get foam dust in eyes. Wear protective gloves and eye/face protection. Wash hands thoroughly after handling. Use only outdoors or in a well-ventilated area. Refer to handling and storage guidelines provided by the manufacturer.

Conditions for Safe Storage, Including any Incompatibilities

None needed according to classification criteria. Store on flat foundation. Elevate 3-4" above foundation to prevent contact with moisture. Keep only in original packaging. If packaging is opened, place waterproof but breathable tarp on product. Refer to handling and storage guidelines provided by the manufacturer.

Incompatible Materials

Acetone, methyl ethyl ketone, tetrahydrofuran, chlorine, chloroform, hydrogen peroxide, ethylene dichloride, dimethyl sulfoxide, dimethyl formamide

Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

Component Exposure Limits

| | |
|------------|--|
| Pentane | 109-66-0 |
| OSHA (US): | This component has exposure limits. However, this component is present in what is considered an "article" as defined in the OSHA Hazard Communication Standard, 29 CFR 1910.1200 and a "manufactured article" as defined by the Canadian Hazardous Products Act (R.S.C., 1985, c. H-3). Therefore, the exposure limits for this component are unnecessary to provide safe exposure controls. This component will not be released from the product under normal working conditions. |

Biological limit value

There are no biological limit values for any of this product's components.

Engineering Controls

Provide local exhaust ventilation where dust may be generated. Ventilation equipment should be explosion-resistant if explosive concentrations of material are present. Ensure that dust-handling systems (such as exhaust ducts, dust collectors, vessels, and processing equipment) are designed in a manner to prevent the escape of dust into the work area (i.e., there is no leakage from the equipment). Ensure compliance with applicable exposure limits.

Individual Protection Measures, such as Personal Protective Equipment

Eye/face protection

Safety glasses or goggles are recommended when there is a potential for eye contact.

Skin Protection

Work clothes with long sleeves and pants are recommended, but not required.



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Respiratory Protection

If respirable dusts are generated, respiratory protection may be needed. Consult with a health and safety professional for specific respirators appropriate for your use.

Glove Recommendations

Protective gloves are not required, but recommended.

Protective Materials

Recommended equipment: Provide emergency eye wash supplies in the immediate work area.

Section 9 - PHYSICAL AND CHEMICAL PROPERTIES

| | | | |
|------------------------------|-------------------------------|---|------------------|
| Appearance | light yellow foam | Physical State | solid |
| Odor | odorless to slight odor | Color | light yellow |
| Odor Threshold | Not available | pH | Not available |
| Melting Point | Not available | Boiling Point | Not applicable |
| Freezing point | Not applicable | Evaporation Rate | Not applicable |
| Boiling Point Range | Not applicable | Flammability (solid, gas) | Not available |
| Autoignition | Not available | Flash Point | Not applicable |
| Lower Explosive Limit | Not applicable | Decomposition | Not available |
| Upper Explosive Limit | Not applicable | Vapor Pressure | Not applicable |
| Vapor Density (air=1) | Not applicable | Specific Gravity (water=1) | 1.5 - 2.5 |
| Water Solubility | Insoluble | Partition coefficient: n-octanol/water | Not applicable |
| Viscosity | Not applicable | Solubility (Other) | Not available |
| Density | 1.5 - 2.5 lbs/ft ³ | VOC | contains Pentane |

Other Information

No additional information available.

Section 10 - STABILITY AND REACTIVITY



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Reactivity

No reactivity hazard is expected.

Chemical Stability

Stable under normal conditions of use.

Possibility of Hazardous Reactions

Hazardous polymerization will not occur.

Conditions to Avoid

Avoid dust generation and accumulation. Avoid heat, flames, sparks and other sources of ignition. Avoid contact with water or incompatible materials.

Incompatible Materials

Acetone, methyl ethyl ketone, tetrahydrofuran, chlorine, chloroform, hydrogen peroxide, ethylene dichloride, dimethyl sulfoxide, dimethyl formamide

Hazardous decomposition products

Oxides of carbon

Section 11 - TOXICOLOGICAL INFORMATION

Information on Likely Routes of Exposure

Inhalation

Dust may cause irritation of the nose, throat and upper respiratory tract. May cause allergy or asthma symptoms or breathing difficulties if foam dust is inhaled.

Skin Contact

Dust may cause mechanical irritation. May cause allergic skin reaction.

Eye Contact

Direct contact with dust may cause mechanical irritation of the eyes.

Ingestion

No information on significant adverse effects.

Acute and Chronic Toxicity

Component Analysis - LD50/LC50

The components of this material have been reviewed in various sources and the following selected endpoints are published:

Pentane (109-66-0)

Non-hazardous acute toxicity values

Immediate Effects

Direct contact with dust may cause mechanical irritation of the eyes, skin, respiratory tract. May cause allergic skin reaction. May cause allergy or asthma symptoms or breathing difficulties if foam dust is inhaled.

Delayed Effects

No information on significant adverse effects.



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Irritation/Corrosivity Data

Direct contact with dust may cause mechanical irritation of the eyes, skin, respiratory tract.

Respiratory Sensitization

May cause allergy or asthma symptoms or breathing difficulties if foam dust is inhaled.

Dermal Sensitization

May cause allergic skin reaction.

Component Carcinogenicity

Germ Cell Mutagenicity

No data available.

Tumorigenic Data

No data available

Reproductive Toxicity

No data available.

Specific Target Organ Toxicity - Single Exposure

No target organs identified.

Specific Target Organ Toxicity - Repeated Exposure

No target organs identified.

Aspiration hazard

No data available.

Medical Conditions Aggravated by Exposure

May cause allergic reactions.

Section 12 - ECOLOGICAL INFORMATION

Component Analysis - Aquatic Toxicity

No LOLI ecotoxicity data are available for this product's components

Persistence and Degradability

No studies have been established for this product.

Bioaccumulative Potential

No studies have been established for this product.

Mobility

No studies have been established for this product.

Other Toxicity

No additional information available.

Section 13 - DISPOSAL CONSIDERATIONS



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Disposal Methods

Product is not an EPA hazardous waste. Dispose of contents/container in accordance with local/regional/national/international regulations.

Section 14 - TRANSPORT INFORMATION

US DOT Information:

UN/NA #: Not regulated

IATA Information:

UN#: Not regulated

IMDG Information:

UN#: Not regulated

TDG Information:

UN#: Not regulated

Section 15 - REGULATORY INFORMATION

U.S. Federal Regulations

None of this products components are listed under SARA Sections 302/304 (40 CFR 355 Appendix A), SARA Section 313 (40 CFR 372.65), CERCLA (40 CFR 302.4), TSCA 12(b), or require an OSHA process safety plan.

U.S. State Regulations

The following components appear on one or more of the following state hazardous substances lists:

| Component | CAS | CA | MA | MN | NJ | PA |
|-----------|----------|-----|-----|-----|-----|-----|
| Pentane | 109-66-0 | Yes | Yes | Yes | Yes | Yes |

The following statement(s) are provided under the California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65):

WARNING! This product contains a chemical known to the state of California to cause cancer

Canadian WHMIS Ingredient Disclosure List (IDL)

Components of this material have been checked against the Canadian WHMIS Ingredients Disclosure List. The List is composed of chemicals which must be identified on MSDSs if they are included in products which meet WHMIS criteria specified in the Controlled Products Regulations and are present above the threshold limits listed on the IDL

| | |
|---------|----------|
| Pentane | 109-66-0 |
| | 1 % |



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Component Analysis - Inventory

Pentane (109-66-0)

| | |
|----|-----|
| US | Yes |
|----|-----|

Cellulose pulp (65996-61-4)

| | |
|----|-----|
| US | Yes |
|----|-----|

Section 16 - OTHER INFORMATION

Summary of Changes

Revision Date: February 17, 2020

Revision Note: General Update

Key / Legend

ACGIH - American Conference of Governmental Industrial Hygienists; BOD - Biochemical Oxygen Demand; C - Celsius; CAS - Chemical Abstracts Service; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CLP - Classification, Labelling, and Packaging; CPR - Controlled Products Regulations; DOT - Department of Transportation; DSD - Dangerous Substance Directive; DSL - Domestic Substances List; EPA - Environmental Protection Agency; EU - European Union; F - Fahrenheit; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; ICAO - International Civil Aviation Organization; IDL - Ingredient Disclosure List; IDLH - Immediately Dangerous to Life and Health; IMDG - International Maritime Dangerous Goods; Kow - Octanol/water partition coefficient; LEL - Lower Explosive Limit; LLV - Level Limit Value; LOLI - List Of LIsts™ - ChemADVISOR's Regulatory Database; MAK - Maximum Concentration Value in the Workplace; MEL - Maximum Exposure Limits; NFPA - National Fire Protection Agency; NIOSH - National Institute for Occupational Safety and Health; NJTSR - New Jersey Trade Secret Registry; NTP - National Toxicology Program; OSHA - Occupational Safety and Health Administration; RCRA - Resource Conservation and Recovery Act; REACH- Registration, Evaluation, Authorisation, and restriction of Chemicals; SARA - Superfund Amendments and Reauthorization Act; STEL - Short-term Exposure Limit; TDG - Transportation of Dangerous Goods; TSCA - Toxic Substances Control Act; TWA - Time Weighted Average; UEL - Upper Explosive Limit; US - United States.

Other Information

Disclaimer:

The information contained herein is based upon data and information available to us, and reflects our best professional judgment. This product may be formulated in part with components purchased from other companies. No warranty of merchantability, fitness for any use, or any other warranty is expressed or implied regarding the accuracy of such data or information. The results to be obtained from the use thereof, or that any such use does not infringe any patent, since the information contained herein may be applied under conditions of use beyond our control and with which we may be unfamiliar, we do not assume responsibility for the results of such application. This information is furnished upon the condition that the person receiving it shall make his own determination of the suitability of the material for his particular use.



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