

Product Information Bulletin

Safety Data Sheet (SDS)

Plasti-Fab® EPS Products for Construction Applications

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This SDS addresses Plasti-Fab® expanded polystyrene (EPS) products made from expandable polystyrene raw material containing a combustion modifier – i.e., fire retardant – per section 3.

Section 1: IDENTIFICATION:

TRADE NAME: PlastiSpan® insulation, DuroFoam® insulation, DuroSpan™ insulation, ENERGREEN® insulation, EnerSpan™ EPS insulation, FanFold Underlayment, GeoSpec® lightweight fill material, GeoSpan® compressible fill material, GeoVoid® compressible fill material, Radon Guard™ insulation and Advantage ICF System®.

OTHER MEANS OF IDENTIFICATION:

EPS Foam

RECOMMENDED USE:

Foam insulation and/or geotechnical fill

**MANUFACTURER:
(Corporate Office)**

Plasti-Fab Ltd.
#100, 2886 Sunridge Way N.E.
Calgary, Alberta T1Y 7H9

EMERGENCY PHONE NUMBER:

403-248-9306 (8:00 AM to 5:00 PM MT)

Section 2: HAZARDS IDENTIFICATION:

GHS CLASSIFICATION:

Non-hazardous as per GHS

GHS LABEL ELEMENTS:

None

SIGNAL WORD:

Not hazardous

HAZARD STATEMENTS:

Dust from mechanical fabrication may cause respiratory tract irritation or eye irritation. Fumes from heated cutting tools may cause respiratory tract irritation.

PRECAUTIONARY STATEMENTS:

Keep away from open flame, material can ignite if exposed to open flame. Wear NIOSH approved respiratory protection and eye protection when sawing and sanding.

Section 3: COMPOSITION / INFORMATION ON INGREDIENTS:

| <u>CAS Number</u> | <u>Content (W/W)</u> | <u>Chemical Name</u> |
|-------------------|----------------------|-------------------------------------|
| 9003-53-6 | 98-99% | Polystyrene |
| 109-66-0 | <1.5% | n-Pentane |
| 78-78-4 | <0.5% | Isopentane |
| 7782-42-5 | 0% or 1-5% | Graphite |
| 3194-55-6 | 0-1% | 1,2,5,6,9,10-Hexabromocyclododecane |
| or 1195978-93-8 | 0-1% | Brominated Polymer |

Note: n-Pentane and isopentane are residual blowing agents and not intended to be part of the product. Residual pentane rapidly decreases with age. Product will contain either hexabromocyclododecane or brominated polymer as a flame retardant. Only EnerSpan product will contain graphite

Section 4: FIRST AID MEASURES:

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| Eyes: | If dust or particles become lodged in eyes, rinse with clean water. Obtain medical attention if condition is painful. |
| Skin: | Contact is not expected to present a skin hazard. Wash exposed areas with mild soap and water. Consult physician if irritation persists. |
| Ingestion: | Product is not expected to present significant ingestion hazard. If it does occur, watch the person for several days to make sure obstruction does not occur. Do not induce vomiting unless directed to by physician. |
| Inhalation: | If excessive pentane vapours are inhaled, remove victim to fresh air. If symptoms persist provide oxygen and obtain medical attention. |

Section 5: FIREFIGHTING MEASURES:

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| Suitable extinguishing media: | <ul style="list-style-type: none"> • Water Fog • Foam • Dry Chemical • ABC type Extinguisher |
| Specific Hazards Arising from the Material: | Fire fighters should wear self-contained breathing apparatus (SCBA) and personal protective clothing (turn out gear) in a sustained fire. |
| Specific Protective Equipment and Precautions for Fire-fighters: | Burning may produce dense black smoke. Smoke consists of carbon monoxide, carbon dioxide, styrene, hydrogen halide, nuisance particulate, carbon (soot) and pentane. Other undetermined hydrocarbon fractions could be released in trace quantities. Dust generated by fabrication (i.e., sanding, sawing, etc.) will increase fire hazard and should be handled accordingly. |
| Hazardous Combustion Products: | CO, HBr, CO ₂ |
| Conditions of Flammability: | Pentane vapours may be emitted from freshly produced foam. Vapours can be ignited by heat, sparks, flames or other sources of ignition |
| Flash Point: | > 345 °C / 653 °F |
| Upper Explosive Limit: | N/A |
| Lower Explosive Limit: | N/A |
| Autoignition Temperature: | 440 °C / 824 °F |

Section 6: ACCIDENTAL RELEASE MEASURES:

Personal Precautions, Protective Equipment and Emergency Procedures: Good housekeeping practices should be observed. Material can be swept or picked up and placed in a suitable container for disposal.

Environmental Precautions: Small pieces, particles and dust can be blown by the wind and enter storm water systems and waterways. Although the product is not hazardous excess product can result in impairment of storm water systems and waterways. Prevent loss of material to the local environment through good housekeeping practices.

Methods and Materials for Containment and Cleaning Up: Good housekeeping practices should be observed. Material can be swept or picked up and placed in a suitable container for disposal.

Section 7: HANDLING AND STORAGE:

Precautions for safe handling:

Avoid all sources of ignition, do not smoke in areas where product is being stored or used. Product will dissolve in hydrocarbons, esters, aldehydes and amines. Avoid contact with these materials.

CAUTION: THIS PRODUCT IS COMBUSTIBLE. A PROTECTIVE BARRIER OR THERMAL BARRIER IS REQUIRED AS SPECIFIED IN THE APPROPRIATE BUILDING CODE.

Conditions for safe storage: Store product away from open flame and other ignition sources. Store material in a dry place out of direct sunlight when possible.

Section 8: EXPOSURE CONTROLS / PERSONAL PROTECTION:

Control parameters:

| Chemical Name | ACGIH TLV | |
|---------------|----------------|----------------|
| | TWA | STEL |
| n-Pentane | 600 ppm | 750 ppm |
| Isopentane | 600 ppm | 750 ppm |
| Polystyrene | Not applicable | Not applicable |

Appropriate Engineering Controls:

Provide sufficient general and/or local exhaust ventilation to maintain exposure below permissible personal exposure limit (PEL) or threshold limit value (TLV) for combustion products from heated cutting tools. Use local exhaust, where possible, in confined or enclosed spaces. Wear approved safety glasses/goggles and dust mask if mechanical fabrication is to take place.

Individual Protection Measures:

RESPIRATORY PROTECTION: Use approved dust mask when sawing or sanding. Use approved NIOSH respirator when the PEL or TLV for combustion products from heated cutting tools, sawing or sanding may be exceeded

SKIN PROTECTION: Skin protection not normally required. Wear gloves and/or sleeves, if sensitivity noted.

EYE PROTECTION: Use approved safety glasses/goggles when sawing or sanding

Section 9: PHYSICAL AND CHEMICAL PROPERTIES:

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| Appearance: | rigid cellular foam blocks, boards and shapes |
| Odour: | Very slight hydrocarbon odour |
| Odour threshold: | N/A |
| pH: | N/A |
| Melting point: | Softening begins at temperatures > 85 °C (185 °F) |
| Boiling point: | N/A (decomposes) |
| Flash point: | > 345°C / 653 °F (ASTM D1929) |
| Evaporation rate: | N/A |
| Flammability: | Oxygen Index > 24% (ASTM D2863) |
| Upper/Lower Flammability or Explosive Limit: | N/A |
| Vapour pressure: | N/A |
| Vapour density: (air = 1) | N/A |
| Relative density: (water = 1) | 0.01 to 0.05 |
| Solubility: | Insoluble in water. Soluble in hydrocarbons, esters, aldehydes and amines. |
| Partition Coefficient, n-Octanol/Water (log K_{ow}) | N/A |
| Auto-ignition temperature: | 440 °C / 824 °F |
| Decomposition temperature: | > 300 °C / 572 °F |
| Viscosity: | N/A |
| Other information: | N/A |
| Physical state: | Solid |

Section 10: STABILITY AND REACTIVITY:

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| Reactivity: | Not reactive |
| Chemical Stability: | Normally stable |
| Possibility of Hazardous Reactions: | None expected |
| Conditions to Avoid: | Open flames, sparks, heat and other ignition sources |
| Incompatible Materials: | Product will dissolve in hydrocarbons, esters, aldehydes and amines. |
| Hazardous Decomposition Products: | Combustion products include carbon monoxide, carbon dioxide, styrene, hydrogen halide, nuisance particulates, carbon (soot) and pentane. Other undetermined hydrocarbon fractions could be released in trace quantities. |

Section 11: TOXICOLOGICAL INFORMATION:

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| Route of Entry: | Skin Contact, Eye Contact, Inhalation, Ingestion |
| Effects of Exposure: | Skin: Frequent and prolonged contact may cause mild skin irritation Eyes: Mild irritation of eyes and mucous membranes Inhalation: Exposure to high concentrations of vapour may include dizziness, nausea and headaches |
| Toxicity, LD50, LC50: | No information available |

Section 12: ECOLOGICAL INFORMATION:

This section is not required by WHMIS.

Section 13: DISPOSAL CONSIDERATIONS:

General Product Information: Material, if discarded, is not expected to be a characteristic hazardous waste.

Disposal Instructions: Dispose of waste material according to Local, State, Federal, and Provincial Environmental Regulations.

Section 14: TRANSPORT INFORMATION:

Not regulated under Canadian TDG Regulations. Not regulated under US DOT Regulations.

Section 15: REGULATORY INFORMATION:

All ingredients and components for this product are on the Domestic Substances List (DSL).

The product is classified as WHMIS as non-hazardous.

This product has been classified according to the GHS hazard criteria and the SDS contains all of the information required by the GHS.

Section 16: OTHER INFORMATION

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|-------------------|---|
| SDS prepared by: | Plasti-Fab Ltd Technical Centre 802 McCool Street Crossfield, Alberta, Canada |
| Preparation Date: | December 18, 2014 |
| Updated: | May 15, 2015 |