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# **Technical Bulletin**

# BULLETIN NO. 110-02 ISSUED: August 12, 2013 REPLACES: August 10, 2010

Material Safety Data Sheet (MSDS)

Plasti-Fab<sup>®</sup> EPS Products for Construction Applications

Page 1 of 4

This MSDS addresses Plasti-Fab<sup>®</sup> expanded polystyrene (EPS) products for construction applications made from raw materials containing a combustion modifier.

# Section 1: Product Information & Company Identification

**Products:** PlastiSpan<sup>®</sup> insulation, PlastiSpan EFS insulation, PlastiSpan HD insulation, PlastiSpan 20 insulation, PlastiSpan 25 insulation, PlastiSpan 30 insulation, PlastiSpan 40 insulation, PlastiSpan M30 insulation, PlastiSpan M40 insulation, GeoDrain<sup>®</sup> foundation insulation, DuroFoam<sup>®</sup> insulation, DuroFoam HD insulation, FanFold Underlayment, Advantage ICF System<sup>®</sup>, GeoSpec lightweight fill material, GeoSpan<sup>®</sup> compressible fill material and GeoVoid<sup>®</sup> compressible fill material.

Synonyms: Expanded Polystyrene (EPS) foam plastic.

**Product Grades:** CAN/ULC-S701 (Types 1, 2 and 3) and ASTM C578 (Types I, VIII, II, IX and XIV) insulation and GeoSpec lightweight fill material (Types EPS15, EPS22, EPS24, EPS29 and EPS39).

Chemical Family: Ethenylbenzene Homopolymer

Formula: (C<sub>8</sub>H<sub>8</sub>)<sub>n</sub>

TSCA Chemical Substance Inventory Status: Listed

# Supplier Corporate Office:

Plasti-Fab Ltd. #100, 2886 Sunridge Way N.E. Calgary, Alberta T1Y 7H9 Health Issues Information (8:00 AM to 5:00 PM MT): (403) 248-9306

| Section 2: Composition/Ingredients |                  |                           |
|------------------------------------|------------------|---------------------------|
| Component                          | CAS Registry No. | Approx. Weight Percentage |
| n-Pentane                          | 109-66-0         | <2% amounts rapidly       |
| Isopentane                         | 78-78-4          | decreasing with age       |
| Brominated Flame Retardant         | 3194-55-6        | <1%.                      |
| Polymeric Film                     | N/A              | 1 to 3%                   |
| Polystyrene Thermoplastic          | 9003-53-6        | 98 to 99%                 |

# **Component Related Regulatory Information:**

This product may be regulated or have exposure limits identified as the following: Nuisance particulates.

#### <u>Component Information/Information on Non-Hazardous Components</u>: No additional information available.

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Material Safety Data Sheet (MSDS) for Plasti-Fab EPS Products Technical Bulletin 110-02

Page 2 of 4

# **Section 3: Health Hazards**

#### PRINCIPAL HEALTH HAZARDS, SIGNS & SYMPTOMS OF EXPOSURE:

**Eye Contact:** Dust or particles in eyes may cause mechanical eye irritation and/or injury. **Inhalation:** Dust from mechanical fabrication may cause upper respiratory tract irritation. Fumes from heated cutting tools can also cause upper respiratory tract irritation (see also section 8 of this MSDS).

**Skin Contact:** Irritation from skin contact is rare. In a few individuals, contact may produce slight skin irritation.

Ingestion: Product is biologically inert. If swallowed, it may act as an obstruction.

**Incompatibility (Materials to avoid):** Product will dissolve in most organic solvents, and some insecticides, aldehydes and amines.

# Section 4: First Aid

**Eyes:** If dust or particles become lodged in eyes, rinse with clean water. Obtain medical attention if condition is painful.

**Inhalation:** If overcome by exposure, remove individual to fresh air. If systems persist provide oxygen and obtain medical attention.

**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.

# Section 5: Physical Data

Form: Products consist of rigid cellular foam blocks, boards and shapes. Colour: White or tinted green, yellow or brown. Odour: Very slight hydrocarbon odour Boiling Point: N/A Melting Point: Softening begins between 70 to 80 °C (160 to 176 °F) Density: 10 to 48 kg/m<sup>3</sup> (0.6 to 3 lbs/ft<sup>3</sup>) Specific Gravity: <1.0 Vapour Pressure: N/A Volatile by Volume: <4% (pentane and water) Vapour Density (Air = 1): N/A Evaporation Rate: None Solubility in Water: Insoluble

# Section 6: Fire & Explosion

**Flash Point:** >345 °C (>650 °F) using ASTM Test Method D1929 **Special Fire Fighting Instructions:** Fire fighters should wear self-contained breathing apparatus and personal protective clothing (turn out gear) in a sustained fire. **Extinguishing Media:** Water fog, carbon dioxide, dry chemical, foam should be used.

Auto-ignition Temperature: 440 °C (824°F) Min.

**Usual Fire and Explosion Hazards:** 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.



Material Safety Data Sheet (MSDS) for Plasti-Fab EPS Products Technical Bulletin 110-02 Page 3 of 4

# Section 7: Reactivity Data

**Stability (Conditions to avoid):** Product is stable. However, exposure to fire and high temperatures must be avoided.

**Incompatibility (Materials to avoid):** Product will dissolve in hydrocarbons, esters, aldehydes and amines.

**Hazardous Decomposition:** Primary combustion products include carbon monoxide, carbon dioxide, styrene, hydrogen halide, nuisance particulate, carbon (soot) and pentane. Other undetermined hydrocarbon fractions could be released in trace quantities.

Hazardous Polymerization: Will not occur.

# Section 8: Exposure Controls/Personal Protection

#### General Control Measures for Cutting with Heated Cutting Tools:

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. **Personal Protective Equipment:** 

**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: Spill or Leak Procedures

**Spill, Leak or Release Procedures:** Normal good housekeeping should be observed. Material can be swept or picked up and placed into a suitable container for disposal. **Reportable Quantity:** None.

Disposal Method: Recycle, incinerate (WTE) or landfill per local and provincial regulations.

# **Section 10: 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 11: Transportation Information

Shipping Name: Not regulated for transport. Hazard Class: None UN/NA #: None Packing Group: None

#### **Section 12: Special Precautions**

**Storage and Handling:** Although expanded polystyrene contains a fire retardant additive, it is considered combustible and adequate protection from sources of ignition should be taken. **Combustibility Labelling:** 

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



Material Safety Data Sheet (MSDS) for Plasti-Fab EPS Products Technical Bulletin 110-02 Page 4 of 4

# Section 13: MSDS INFORMATION

The information contained herein is provided as a general reference. Plasti-Fab Ltd. believes the data set forth herein to be accurate and the information is given in good faith. Plasti-Fab Ltd. makes no guarantee or warranty and does not assume any liability with respect to the accuracy or completeness of such information.

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