

# Styro-Flex

## Safety Data Sheet

According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations  
Revision Date: 03/13/2017 Date of issue: 07/23/2015

Version: 1.0

### SECTION 1: IDENTIFICATION

#### 1.1. Product Identifier

**Product Form:** Rigid boards and shapes

**Product Name:** Styro-Flex

**Synonyms:** EPS, Expanded Polystyrene

#### 1.2. Intended Use of the Product

**Use of the substance/mixture:** Thermal insulation, packaging, geotechnical.

#### 1.3. Name, Address, and Telephone of the Responsible Party

##### Company

Styrotech, Inc.

8800 Wyoming Ave N

Brooklyn Park, MN 55445

763-425-4001

[www.styrotech.com](http://www.styrotech.com)

#### 1.4. Emergency Telephone Number

**Emergency Number** : 763-425-4001

### SECTION 2: HAZARDS IDENTIFICATION

#### 2.1. Classification of the Substance or Mixture

##### Classification (GHS-US)

Not classified

#### 2.2. Label Elements

##### GHS-US Labeling

No labeling applicable

#### 2.3. Other Hazards

Exposure may aggravate pre-existing eye, skin, or respiratory conditions.

#### 2.4. Unknown Acute Toxicity (GHS-US)

No data available

### SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

#### 3.1. Substance

Not applicable

#### 3.2. Mixture

| Name        | Product Identifier | %    |
|-------------|--------------------|------|
| Polystyrene | (CAS No) 9003-53-6 | ≥ 98 |
| Pentane     | (CAS No) 109-66-0  | ≤ 1  |

### SECTION 4: FIRST AID MEASURES

#### 4.1. Description of First Aid Measures

**First-aid Measures General:** Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

**First-aid Measures After Inhalation:** When symptoms occur: go into open air and ventilate suspected area. Obtain medical attention if breathing difficulty persists.

**First-aid Measures After Skin Contact:** Wash affected area with plenty of water.

**First-aid Measures After Eye Contact:** Rinse cautiously with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain medical attention.

**First-aid Measures After Ingestion:** Rinse mouth. Do NOT induce vomiting. Obtain medical attention if symptoms occur.

#### 4.2. Most important symptoms and effects, both acute and delayed

**Symptoms/Injuries:** Not expected to present a significant hazard under anticipated conditions of normal use.

**Symptoms/Injuries After Inhalation:** Prolonged exposure may cause irritation.

**Symptoms/Injuries After Skin Contact:** Prolonged exposure may cause skin irritation.

**Symptoms/Injuries After Eye Contact:** May cause slight irritation to eyes.

**Symptoms/Injuries After Ingestion:** Ingestion may cause adverse effects.

#### 4.3. Indication of Any Immediate Medical Attention and Special Treatment Needed

If exposed or concerned, get medical advice and attention. If medical advice is needed, have product container or label at hand.

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## SECTION 5: FIRE-FIGHTING MEASURES

### 5.1. Extinguishing Media

**Suitable Extinguishing Media:** Water spray, dry chemical, foam, carbon dioxide.

**Unsuitable Extinguishing Media:** Do not use a heavy water stream. Use of heavy stream of water may spread fire.

### 5.2. Special Hazards Arising From the Substance or Mixture

**Fire Hazard:** Not considered flammable but may burn at high temperatures.

**Explosion Hazard:** Product is not explosive.

**Reactivity:** Hazardous reactions will not occur under normal conditions.

### 5.3. Advice for Firefighters

**Precautionary Measures Fire:** Exercise caution when fighting any chemical fire.

**Firefighting Instructions:** Use water spray or fog for cooling exposed containers.

**Protection During Firefighting:** Do not enter fire area without proper protective equipment, including respiratory protection.

## SECTION 6: ACCIDENTAL RELEASE MEASURES

### 6.1. Personal Precautions, Protective Equipment and Emergency Procedures

**General Measures:** Avoid prolonged contact with eyes, skin and clothing. Avoid breathing dust.

#### 6.1.1. For Non-emergency Personnel

**Protective Equipment:** Use appropriate personal protection equipment (PPE).

**Emergency Procedures:** Evacuate unnecessary personnel.

#### 6.1.2. For Emergency Responders

**Protective Equipment:** Equip cleanup crew with proper protection.

**Emergency Procedures:** Ventilate area. Upon arrival at the scene, a first responder is expected to recognize the presence of dangerous goods, protect oneself and the public, secure the area, and call for the assistance of trained personnel as soon as conditions permit.

### 6.2. Environmental Precautions

Prevent entry to sewers and public waters.

### 6.3. Methods and Material for Containment and Cleaning Up

**For Containment:** Contain solid spills with appropriate barriers and prevent migration and entry into sewers or streams.

**Methods for Cleaning Up:** Clean up spills immediately and dispose of waste safely. Recover the product by vacuuming, shoveling or sweeping. Transfer spilled material to a suitable container for disposal. Contact competent authorities after a spill.

### 6.4. Reference to Other Sections

See Heading 8. Exposure controls and personal protection. See Section 13, Disposal Considerations.

## SECTION 7: HANDLING AND STORAGE

### 7.1. Precautions for Safe Handling

**Precautions for Safe Handling:** Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Avoid prolonged contact with eyes, skin and clothing. Avoid breathing dust.

**Hygiene Measures:** Handle in accordance with good industrial hygiene and safety procedures.

### 7.2. Conditions for Safe Storage, Including Any Incompatibilities

**Technical Measures:** Comply with applicable regulations.

**Storage Conditions:** Keep container closed when not in use. Store in a dry, cool place. Keep/Store away from direct sunlight, extremely high or low temperatures and incompatible materials.

**Incompatible Products:** Strong acids, strong bases, and strong oxidizers. Organic solvents.

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1. Control Parameters

For substances listed in section 3 that are not listed here, there are no established exposure limits from the manufacturer, supplier, importer, or the appropriate advisory agency including: ACGIH (TLV), NIOSH (REL), or OSHA (PEL).

| Pentane (109-66-0) |  |                        |
|--------------------|--|------------------------|
| USA ACGIH          | ACGIH TWA (ppm)                          | 1000 ppm               |
| USA NIOSH          | NIOSH REL (TWA) (mg/m <sup>3</sup> )     | 350 mg/m <sup>3</sup>  |
| USA NIOSH          | NIOSH REL (TWA) (ppm)                    | 120 ppm                |
| USA NIOSH          | NIOSH REL (ceiling) (mg/m <sup>3</sup> ) | 1800 mg/m <sup>3</sup> |
| USA NIOSH          | NIOSH REL (ceiling) (ppm)                | 610 ppm                |
| USA IDLH           | US IDLH (ppm)                            | 1500 ppm (10% LEL)     |
| USA OSHA           | OSHA PEL (TWA) (mg/m <sup>3</sup> )      | 2950 mg/m <sup>3</sup> |
| USA OSHA           | OSHA PEL (TWA) (ppm)                     | 1000 ppm               |

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## 8.2. Exposure controls

|  |  |
|--|--|
| <b>Appropriate engineering controls</b>  | : Ensure adequate ventilation, especially in confined areas. Ensure all national/local regulations are observed.                       |
| <b>Personal protective equipment</b>     | : Not generally required. The use of personal protective equipment may be necessary as conditions warrant.                             |
| <b>Materials for protective clothing</b> | : Not required for normal conditions of use.   |
| <b>Hand protection</b>                   | : Not required for normal conditions of use.   |
| <b>Eye protection</b>                    | : If cutting or processing: safety glasses.  |
| <b>Skin and body protection</b>          | : Not required for normal conditions of use.   |
| <b>Respiratory protection</b>            | : Use approved respirator or self-contained breathing apparatus whenever exposure may exceed established Occupational Exposure Limits. |
| <b>Other information</b>                 | : When using, do not eat, drink, or smoke.   |

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

### 9.1. Information on Basic Physical and Chemical Properties

|   |                                |
|---|--------------------------------|
| <b>Physical State</b>                         | : Solid                        |
| <b>Appearance</b>                             | : White rigid board or shape   |
| <b>Odor</b>                                   | : Slight                       |
| <b>Odor Threshold</b>                         | : No data available            |
| <b>pH</b>                                     | : No data available            |
| <b>Evaporation Rate</b>                       | : No data available            |
| <b>Melting Point</b>                          | : 175 - 200 °C (347 - 392 °F)  |
| <b>Freezing Point</b>                         | : No data available            |
| <b>Boiling Point</b>                          | : No data available            |
| <b>Flash Point</b>                            | : 610 °C (1130 °F) ASTM D 1929 |
| <b>Auto-ignition Temperature</b>              | : No data available            |
| <b>Decomposition Temperature</b>              | : No data available            |
| <b>Flammability (solid, gas)</b>              | : No data available            |
| <b>Vapor Pressure</b>                         | : No data available            |
| <b>Relative Vapor Density at 20 °C</b>        | : No data available            |
| <b>Relative Density</b>                       | : No data available            |
| <b>Specific gravity / density</b>             | : 0.6 - 2.5 pcf                |
| <b>Solubility</b>                             | : Insoluble                    |
| <b>Partition Coefficient: N-Octanol/Water</b> | : No data available            |
| <b>Viscosity</b>                              | : No data available            |

**9.2. Other Information** No additional information available

## SECTION 10: STABILITY AND REACTIVITY

- 10.1. Reactivity:** Hazardous reactions will not occur under normal conditions.
- 10.2. Chemical Stability:** Stable under recommended handling and storage conditions (see section 7).
- 10.3. Possibility of Hazardous Reactions:** Hazardous polymerization will not occur.
- 10.4. Conditions to Avoid:** Direct sunlight, extremely high or low temperatures, and incompatible materials.
- 10.5. Incompatible Materials:** Strong acids, strong bases, and strong oxidizers. Organic solvents.
- 10.6. Hazardous Decomposition Products:** Not available

## SECTION 11: TOXICOLOGICAL INFORMATION

### 11.1. Information On Toxicological Effects

**Acute Toxicity:** Not classified

|                            |   |
|----------------------------|---|
| <b>Pentane (109-66-0)</b>  |   |
| <b>LD50 Dermal Rabbit</b>  | 3000 mg/kg                                |
| <b>LC50 Inhalation Rat</b> | 364 g/m <sup>3</sup> (Exposure time: 4 h) |

**Skin Corrosion/Irritation:** Not classified

**Serious Eye Damage/Irritation:** Not classified

**Respiratory or Skin Sensitization:** Not classified

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**Germ Cell Mutagenicity:** Not classified

**Carcinogenicity:** Not classified

**Polystyrene (9003-53-6)**

|            |   |
|------------|---|
| IARC group | 3 |
|------------|---|

**Reproductive Toxicity:** Not classified

**Specific Target Organ Toxicity (Single Exposure):** Not classified

**Specific Target Organ Toxicity (Repeated Exposure):** Not classified

**Aspiration Hazard:** Not classified

**Symptoms/Injuries After Inhalation:** Prolonged exposure may cause irritation.

**Symptoms/Injuries After Skin Contact:** Prolonged exposure may cause skin irritation.

**Symptoms/Injuries After Eye Contact:** May cause slight irritation to eyes.

**Symptoms/Injuries After Ingestion:** Ingestion may cause adverse effects.

## SECTION 12: ECOLOGICAL INFORMATION

### 12.1. Toxicity

**Ecology - General** : Not classified.

**Pentane (109-66-0)**

|             |  |
|-------------|--|
| LC50 Fish 1 | 9.87 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss) |
|-------------|--|

|                |  |
|----------------|--|
| EC50 Daphnia 1 | 9.74 mg/l (Exposure time: 48 h - Species: Daphnia magna) |
|----------------|--|

|              |   |
|--------------|---|
| LC 50 Fish 2 | 11.59 mg/l (Exposure time: 96 h - Species: Pimephales promelas) |
|--------------|---|

### 12.2. Persistence and Degradability

**Styro-Flex**

|                               |                  |
|-------------------------------|------------------|
| Persistence and Degradability | Not established. |
|-------------------------------|------------------|

### 12.3. Bioaccumulative Potential

**Styro-Flex**

|                           |                  |
|---------------------------|------------------|
| Bioaccumulative Potential | Not established. |
|---------------------------|------------------|

**Pentane (109-66-0)**

|         |      |
|---------|------|
| Log Pow | 3.39 |
|---------|------|

**12.4. Mobility in Soil** No additional information available

### 12.5. Other Adverse Effects

**Other Information** : Avoid release to the environment.

## SECTION 13: DISPOSAL CONSIDERATIONS

### 13.1. Waste treatment methods

**Waste Disposal Recommendations:** Dispose of contents/container in accordance with local, regional, national, and international regulations.

**Additional Information:** Container may remain hazardous when empty. Continue to observe all precautions.

**Ecology – Waste Materials:** Avoid release to the environment.

## SECTION 14: TRANSPORT INFORMATION

**14.1. In Accordance with DOT** Not regulated for transport

**14.2. In Accordance with IMDG** Not regulated for transport

**14.3. In Accordance with IATA** Not regulated for transport

## SECTION 15: REGULATORY INFORMATION

### 15.1 US Federal Regulations

**Polystyrene (9003-53-6)**

Listed on the United States TSCA (Toxic Substances Control Act) inventory

**Pentane (109-66-0)**

Listed on the United States TSCA (Toxic Substances Control Act) inventory

**EPA TSCA Regulatory Flag**

T - T - indicates a substance that is the subject of a Section 4 test rule under TSCA.

### 15.2 US State Regulations

**Pentane (109-66-0)**

U.S. - Massachusetts - Right To Know List

U.S. - New Jersey - Right to Know Hazardous Substance List

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U.S. - Pennsylvania - RTK (Right to Know) List

## SECTION 16: OTHER INFORMATION, INCLUDING DATE OF PREPARATION OR LAST REVISION

**Revision Date** : 03/13/2017

**Other Information** : This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200.

*This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.*

SDS US (GHS HazCom)