

# Expanded Polystyrene (EPS)

Safety Data Sheet Product Information Version 1.0

Issue date : March 2017



# CONTENTS

| 1.  | IDENTIFICATION OF THE MIXTURE AND OF THE COMPANY/UNDERTAKING | 02 |
|-----|--|----|
| 2.  | HAZARDS IDENTIFICATION                                       | 02 |
| 3.  | COMPOSITION / INFORMATION on INGREDIENTS                     | 02 |
| 4.  | FIRST AID MEASURES   | 03 |
| 5.  | FIREFIGHTING MEASURES  | 03 |
| 6.  | ACCIDENTAL RELEASE MEASURES                                  | 03 |
| 7.  | HANDLING and STORAGE   | 04 |
| 8.  | EXPOSURE CONTROLS / PERSONAL PROTECTION                      | 04 |
| 9.  | PHYSICAL and CHEMICAL PROPERTIES                             | 05 |
| 10. | STABILITY and REACTIVITY                                     | 05 |
| 11. | TOXICOLOGICAL INFORMATION                                    | 06 |
| 12. | ECOLOGICAL INFORMATION                                       | 06 |
| 13. | DISPOSAL CONSIDERATIONS                                      | 06 |
| 14. | TRANSPORT INFORMATION  | 06 |
| 15. | REGULATORY INFORMATION                                       | 07 |
| 16. | OTHER INFORMATION  | 07 |



# 01 IDENTIFICATION OF THE SUBSTANCE / MIXTURE AND OF THE COMPANY/UNDERTAKING

| Generic product name:        | Expanded Polystyrene Foam (EPS) for insulation purposes                       |
|------------------------------|---|
| 2. Relevant identified uses: | Relevant identified uses of the substance or mixture and uses advised against |
| Recommended use:             | Insulation / building material  |

#### 3. Details of the supplier of the safety data sheet:

| Producer: | STYRO Insul<br>Manufactur<br>Industrial Ar<br>P.O.Box: 272<br>United Arab | rea 11<br>292 Sharjah |
|-----------|---|-----------------------|
|           | Web:  | www.styrouae.com      |
|           | Region:   | UAE                   |
|           | Contact:  | Head Office           |
|           | Tel No:   | +971 6 5344504        |
|           | Email:  | info@styrouae.com     |

### 02 HAZARDS IDENTIFICATION

#### 1. Classification of the substance or mixture:

No information about specific classification.

- 2. Label elements: None
- 3. Other hazards:

| Most important hazards: | Polystyrene melts at high temperature and molten<br>droplets may cause skin burns.  |
|-------------------------|---|
| Specific hazards:       | Non-hazardous in finished form. Residual quantities of process<br>chemicals, styrene and blowing agents are insignificant. The product<br>is organic and therefore combustible if exposed to intense heat<br>or a fire. |

### 03

### **COMPOSITION / INFORMATION on INGREDIENTS**

| Substance:        | Expanded Polystyrene(EPS)* |
|-------------------|----------------------------|
|                   | PolyFR flame retardant **  |
| C.A.S.number ***: | 9003-53-6                  |

- \* Expanded Polystyrene Foam (EPS)
- \*\* The ingredients are bound in the polymatrix. Because they are encapsulated in the matrix, they are not expected to create any unusual hazards when handled and processed according to good manufacturing and industrial hygiene practices and the guidelines provided in this SDS. Possible facing materials: none Expanded Polystyrene (EPS) REACH Registration number: not applicable
- \*\*\* C.A.S.: Chemical Abstract Service



# 04 FIRST AID MEASURES

#### 1. Description of first aid measures

#### Exposure route:

| • | Inhalation:    | Keep patient calm, remove to fresh air.  |  |
|---|----------------|--|--|
|   |                | If difficulties occur: Obtain medical attention.                                 |  |
| • | Skin contact : | After use, wash with soap and water.   |  |
|   |                | If irritation develops, seek medical attention.                                  |  |
| • | Eye contact :  | If dust particles enter the eye, rinse immediately for at least                  |  |
|   |                | 15 minutes with plenty of water. If irritation develops, seek medical attention. |  |
| • | Ingestion:     | No hazards anticipated. Rinse mouth and then drink plenty of water.              |  |
|   |                | If difficulties occur: Obtain medical attention.                                 |  |

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

Polystyrene melts at high temperature and molten droplets may cause skin burns.

#### 3. Indication of any immediate medical attention and special treatment needed.

If any adverse reaction or discomfort continues from any of the above exposures, seek professional medical advice.

### 05 FIREFIGHTING MEASURES

#### 1. Extinguishing media:

Suitable extinguishing media: Water, foam, dry powder, carbon dioxide (CO2),

#### 2. Special hazards arising from the substance or mixture:

Monoxide, Carbon dioxide, styrene, aliphatic hydrocarbons

#### 3. Advice for firefighters:

Special protective equipment:

Wear self-contained breathing apparatus and chemicalprotective clothing

# 06 ACCIDENTAL RELEASE MEASURES

**1. High risk of slipping due to leakage/spillage of product.** Shut off or stop source of leak. Substance/product can form explosive mixture with air.

#### 2. Personal precautions, protective equipment and emergency procedures

Sources of ignition should be kept well clear. Ensure adequate ventilation. Note that this gas is heavier than air and can spread along the ground in the direction of the wind. Beware of pits and confined spaces. Use antistatic tools. Vapours are heavy and collect in low areas. Avoid all sources of ignition: heat, sparks, open flame.



#### 3. Environmental precautions

Do not allow to enter drains or waterways. Discharge into the environment must be avoided.

#### 4. Methods and material for containment and cleaning up

For small amounts:Sweep/shovel up. Pack in tightly closed containers for disposal.For large amounts:Pick up with vacuum equipment approved for use in hazardous locations.Pack in tightly closed containers for disposal.

Ensure adequate ventilation. Dispose of absorbed material in accordance with regulations. Avoid raising dust.

#### 5. Reference to other sections

Information regarding exposure controls/personal protection and disposal considerations can be found in section 8 and 13.

### 07 HANDLING and STORAGE

#### 1. Precautions for safe handling

| Technical measures:   | Hand cutting tools should be used when possible. If using power tools, suitable dust extraction should be used and/or respiratory and eye protection. |
|-----------------------|---|
| Precautions:          | When cutting, ensure adequate ventilation of workplace is available. Be aware of strong winds especially at working at heights.                       |
| Safe handling advice: | No special requirements.  |

#### 2. Conditions for safe storage, including any incompatibilities

| Technical measures:         | Avoid exposure to heat, flames and other ignition sources.<br>Do not store near to any sources of heat or ignition. |
|-----------------------------|---|
| Suitable storage condition: | Avoid prolonged exposure to sunlight.   |
| Incompatible materials:     | Resistant to many chemicals but not to solvents.<br>Care should be taken in choice of adhesives used.               |
| Packaging material:         | Delivered on pallets, packed in polyethylene film or<br>open.   |

#### 3. Specific end use(s): not relevant

### 08

### **EXPOSURE CONTROLS / PERSONAL PROTECTION**

#### 1. Control parameters

| Exposure Limit Value: | Refer to local guidelines and legislation. |  |
|-----------------------|--|--|
|-----------------------|--|--|

#### 2. Exposure controls

| Engineering controls: | No specific requirements |  |
|-----------------------|--------------------------|--|
|-----------------------|--------------------------|--|

#### Individual protection equipments:

| Respiratory protection: Disposable face mask |   |  |
|--|---|--|
| Hand protection:                             | No special precautions                              |  |
| Eye protection:                              | Goggles   |  |
| Skin protection:                             | None  |  |
| Hygiene measures:                            | After contact, wash hands with cold water and soap. |  |



# 09 PHYSICAL and CHEMICAL PROPERTIES

### 1. Information on basic physical and chemical properties

| Physical state :                    | Cellular Foam  |
|-------------------------------------|--|
| Form:                               | Block, panel, sheet or board consisting of small fused beads |
| Color :                             | White or Grey  |
| Odour :                             | Odourless  |
| pH:                                 | Not relevant   |
| Boiling point :                     | Not relevant   |
| Flash point :                       | 350°C  |
| Flammability :                      | Not relevant   |
| Explosive properties :              | Not relevant   |
| Density :                           | From 10-50 kg/m <sup>3</sup>                                 |
| Solubility (qualitative) solvent(s) | : Aromatic hydrocarbons, ketones,                            |
|                                     | organic solvents soluble.                                    |

### 2. Other information:

| Softening point :           | Арргох. 70°С |
|-----------------------------|--------------|
| Self-ignition temperature : | 450°C        |

# 10 STABILITY and REACTIVITY

| Reactivity:              | None.  |
|--------------------------|--|
| Chemical Stability:      | The product is stable if stored and handled as prescribed/<br>indicated. |
|                          | Resistant to many chemicals but not to solvents. Care                    |
|                          | should be taken in choices of adhesives.                                 |
| Possibility of hazardous | No hazardous reactions if stored and handled as                          |
| reactions:               | prescribed/indicated   |
| Conditions to avoid:     | Heating above 100°C. Ignition sources, solvents and                      |
|                          | prolonged sunlight.  |
| Incompatible materials:  | None.  |
| Hazardous decomposition  | Decomposition of foam above 100°C produces fumes                         |
| products:                | from molten material and smoke may produce toxic gases                   |
|                          | such as carbon monoxide, carbon dioxide and hydrogen                     |
|                          | bromide. The duration of release is dependent upon the                   |
|                          | thickness of the foam, and the temperature applied.                      |



# **11 TOXICOLOGICAL INFORMATION**

| Information on         | Expanded polystyrene is non-toxic and No irritation is       |
|------------------------|--|
| toxicological effects: | expected under intended use and appropriate handling.        |
| Acute effect:          | Dust can be irritating to eyes – please refer to section 7.1 |

# 12 ECOLOGICAL INFORMATION

| Toxicity                            | There is a high probability that the product is not acutely harmful to aquatic organisms. No toxic effects occur within the range of solubility. |
|-------------------------------------|--|
| Persistence and degradability:      | Non-biodegradable.   |
| Bioaccumulative potential:          | The product is not expected to bioaccumulate.  |
| Mobility in soil:                   | The product is inert.  |
| Results of PBT and vPvB assessment: | No data available.   |
| Other adverse effects:              | No data available.   |

## 13 DISPOSAL CONSIDERATIONS

#### Waste treatment methods

| Waste from residues: | Dispose of in accordance with local, state or national legislation. |
|----------------------|---|
| Dirty packaging:     | Dispose of in accordance with local, state or national legislation. |

## 14 TRANSPORT INFORMATION

| UN number:                    | not classified for transport |
|-------------------------------|------------------------------|
| UN proper shipping name :     | not classified for transport |
| Transport hazard class(es) :  | not classified for transport |
| Packing group:                | not classified for transport |
| Environmental hazards:        | not classified for transport |
| Special precautions for user: | not classified for transport |



15

## **REGULATORY INFORMATION**

#### 1. Safety, health and environmental regulations/legislation specific for the substance or mixture.

STYRO insulation material industries LLC expanded polystyrene products (Block, panel or molding), are defined as articles under REACH and therefore a Safety Data Sheet for these products is not a legal requirement.

In accordance with industry practice and voluntary commitments, STYRO insulation material industries LLC has decided to continue to provide its customers with the appropriate information for the purpose of assuring safe handling and use of expanded polystyrene foam throughout the product life.

- 2. Chemical safety assessment: not relevant.
- 16 OTHER INFORMATION

If using adhesives with this product, follow the adhesive manufacturer's instructions carefully.

This Safety Data Sheet does not constitute a workplace assessment Information contained in this document represents the state of our knowledge regarding this product as of the date of issue of the document. Attention of users is drawn to possible risks taken when the product is used for other applications than the ones it has been designed for.

The data contained in this safety data sheet are based on our current knowledge and experience and describe the product only with regard to safety requirements. The data do not describe the product's properties (product specification). Neither should any agreed property nor the suitability of the product for any specific purpose be deduced from the data contained in the safety data sheet. It is the responsibility of the recipient of the product to ensure any proprietary rights and existing laws and legislation are observed.

The publisher and editors can NOT assume any legal responsibility or any liability whatever for incorrect information and the consequences thereof. The publisher and editors will be grateful for any improvement suggestions and details of errors pointed out.

STYRO makes no guarantee or warranty and does not assume any liability with respect to the accuracy or completeness of this document.

