



**Material safety data sheet**  
According to EU Regulation 1907/2006 in the current version  
**Polystyrene containers**

### 1. Identification of the substance/mixture and company

General name : Polystyrene based packaging (jars, bottles, caps, pumps, packagings)  
CAS No. : 9003-53-6  
EINESCS No. : -  
REACH registration No. : -  
Recommended use: Industrial and professional use  
Supplier company identification: **Elemental SRL**, Piața Cazărmii no.15, 410188-Oradea, jud.Bihor, Romania  
Tel/Fax: +40259-436.755, www.elemental.eu  
Emergency: RO: număr național pentru cazuri de urgență: 021 3183606 Institutul de Sănătate Publică București.  
International emergency number: +49 180 2273-112

### 2. Hazards Identification

#### 2.1 Classification of the substance or mixture

Not classified as dangerous according to EC criteria.

#### 2.2 Label elements

No labeling required.

#### 2.3 Other hazards

Not dangerous at normal usage. Processing, damage or breakage can result in sharp edges. This may cause cuts. Processing can result in dust. Grinding debris and other waste must be disposed consistent with applicable regulations.

### 3. Declaration of ingredients

#### 3.1 Substances

Polystyrene >= 99.0 % Not classified

#### 3.2 Mixtures

Classified as substance acc. to regulation (EC) No 987/2008 (amending of Reach-Reg.).

### 4. First aid measures

Eye Contact: Flush eyes thoroughly with water for several minutes. Remove contact lenses after the initial 1-2 minutes and continue flushing for several additional minutes. If effects occur, consult a physician, preferably an ophthalmologist.

Skin Contact: Wash skin with plenty of water. Seek first aid or medical attention as needed. If molten material comes in contact with the skin, do not apply ice but cool under ice water or running stream of water. DO NOT attempt to remove the material from skin. Removal could result in severe tissue damage. Seek medical attention immediately. Safety shower should be located in immediate work area.

Inhalation: Move person to fresh air; if effects occur, consult a physician.



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Ingestion: If swallowed, seek medical attention. May cause gastrointestinal blockage. Do not give laxatives. Do not induce vomiting unless directed to do so by medical personnel.

Notes to Physician: If burn is present, treat as any thermal burn, after decontamination. If lavage is performed, suggest endotracheal and/or esophageal control. Danger from lung aspiration must be weighed against toxicity when considering emptying the stomach. No specific antidote. Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient.

Emergency Personnel Protection: First Aid responders should pay attention to self-protection and use the recommended protective clothing (chemical resistant gloves, splash protection). If potential for exposure exists refer to Section 8 for specific personal protective equipment.

#### 5. Fire fighting measures

Extinguishing Media: Water fog or fine spray. Dry chemical fire extinguishers. Carbon dioxide fire extinguishers. Foam.  
Fire Fighting Procedures: Keep people away. Isolate fire and deny unnecessary entry. Soak thoroughly with water to cool and prevent re-ignition. If material is molten, do not apply direct water stream. Use fine water spray or foam. Cool surroundings with water to localize fire zone. Hand held dry chemical or carbon dioxide extinguishers may be used for small fires.

Special Protective Equipment for Firefighters: Wear positive-pressure self-contained breathing apparatus (SCBA) and protective fire fighting clothing (includes fire fighting helmet, coat, trousers, boots, and gloves). If protective equipment is not available or not used, fight fire from a protected location or safe distance.

Unusual Fire and Explosion Hazards: Pneumatic conveying and other mechanical handling operations can generate combustible dust. To reduce the potential for dust explosions, do not permit dust to accumulate. Dense smoke is emitted when burned without sufficient oxygen.

Hazardous Combustion Products: During a fire, smoke may contain the original material in addition to combustion products of varying composition which may be toxic and/or irritating. Combustion products may include and are not limited to: Carbon monoxide. Carbon dioxide.

#### 6. Accidental release measures

Steps to be Taken if Material is Released or Spilled: Contain spilled material if possible. Sweep up. Collect in suitable and properly labeled containers. See Section 13, Disposal Considerations, for additional information.

Personal Precautions: Spilled material may cause a slipping hazard. Use appropriate safety equipment. For additional information, refer to Section 8, Exposure Controls and Personal Protection.

Environmental Precautions: Prevent from entering into soil, ditches, sewers, waterways and/or groundwater. See Section 12, Ecological Information.

#### 7. Handling and storage

##### Handling

General Handling: No smoking, open flames or sources of ignition in handling and storage area. Good housekeeping and controlling of dusts are necessary for safe handling of product. Avoid breathing process fumes. Use with adequate ventilation. When appropriate, unique handling information for containers can be found on the product label. Workers should be protected from the possibility of contact with molten resin. Do not get molten material in eyes, on skin or clothing. Pneumatic conveying and other mechanical handling operations can generate combustible dust. To reduce



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the potential for dust explosions, electrically bond and ground equipment and do not permit dust to accumulate. Dust can be ignited by static discharge.

#### Storage

Store in accordance with good manufacturing practices

### 8. Exposure controls / personal protection

Exposure Limits: None established

Biological limit values

This product, as supplied, does not contain any hazardous materials with biological limits established by the region specific regulatory bodies.

Personal Protection

Eye/Face Protection: Use safety glasses (with side shields). Safety glasses (with side shields) should be consistent with EN 166 or equivalent. If there is a potential for exposure to particles which could cause eye discomfort, wear chemical goggles. Chemical goggles should be consistent with EN 166 or equivalent. If exposure causes eye discomfort, use a full-face respirator.

Skin Protection: No precautions other than clean body-covering clothing should be needed.

Hand protection: Chemical protective gloves should not be needed when handling this material. Consistent with general hygienic practice for any material, skin contact should be minimized. Use gloves to protect from mechanical injury. Selection of gloves will depend on the task. Use gloves with insulation for thermal protection (EN 407), when needed.

Respiratory Protection: No protective equipment is needed under normal use conditions

Ingestion: Use good personal hygiene. Do not consume or store food in the work area. Wash hands before smoking or eating.

Ventilation: Use local exhaust ventilation, or other engineering controls to maintain airborne levels below exposure limit requirements or guidelines. If there are no applicable exposure limit requirements or guidelines, general ventilation should be sufficient for most operations. Local exhaust ventilation may be necessary for some operations.

### 9. Physical and chemical properties

#### 9.1 Information on basic physical and chemical properties

Physical state	solid
Colour	clear / colored
Odour	odorless
pH-value	not applicable
Melting Point/Range	93°C
Autoignition Temperature	No test data available
Vapor Pressure	Not applicable
Boiling Point (760 mmHg)	Not applicable.
Vapor Density (air = 1)	Not applicable
Specific Gravity (H <sub>2</sub> O = 1)	1.05 Literature
Freezing Point	Not applicable
Melting Point	No test data available
Solubility in water (by weight)	Insoluble
Decomposition Temperature	425°C
Partition coefficient, n-	No data available for this



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<b>octanol/water (log Pow)</b>	product.
<b>Kinematic Viscosity</b>	Not applicable

### 9.2 Other information

none

## 10. Stability and reactivity

### Stability/Instability

Stable under normal conditions.

Conditions to Avoid: Exposure to elevated temperatures can cause product to decompose.

Incompatible Materials: Strong oxidizing agents.

Hazardous Polymerization

Will not occur.

### Thermal Decomposition

Decomposition products depend upon temperature, air supply and the presence of other materials. Decomposition products can include trace amounts of: Carbon monoxide (CO). Carbon dioxide (CO<sub>2</sub>).

## 11. Toxicological information

### Acute Toxicity

Ingestion: Very low toxicity if swallowed. Harmful effects not anticipated from swallowing small amounts. May cause choking if swallowed.

Aspiration hazard: Based on physical properties, not likely to be an aspiration hazard.

Dermal: No adverse effects anticipated by skin absorption.

Inhalation: No adverse effects are anticipated from single exposure to dust. Vapors released during thermal processing may cause respiratory irritation.

Eye damage/eye irritation: Solid or dust may cause irritation or corneal injury due to mechanical action. Elevated temperatures may generate vapor levels sufficient to cause eye irritation. Effects may include discomfort and redness.

### Skin corrosion/irritation

Prolonged contact is essentially nonirritating to skin. Mechanical injury only. Under normal processing conditions, material is heated to elevated temperatures; contact with the material may cause thermal burns.

### Sensitization

Skin: No relevant information found.

Respiratory: No relevant information found.

Repeated Dose Toxicity: No relevant information found.

Chronic Toxicity and Carcinogenicity: No relevant information found.

Developmental Toxicity: No relevant information found.

Reproductive Toxicity: No relevant information found.

Genetic Toxicology: No relevant information found.



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## 12. Ecological information

### Movement & Partitioning

In the terrestrial environment, material is expected to remain in the soil. In the aquatic environment, material is expected to float.

### Persistence and Degradability

Expected to be inert in the environment. Surface photodegradation is expected with exposure to sunlight. No appreciable biodegradation is expected.

Not expected to be acutely toxic, but material in pellet or bead form may mechanically cause adverse effects if ingested by waterfowl or aquatic life. This product does not contain any known or suspected endocrine disruptors,

## 13. Disposal considerations

### 13.1 Waste treatment methods

Any disposal practice must be in compliance with all local and national laws and regulations. Do not dump into any sewers, on the ground, or into any body of water. Empty remaining contents. Dispose of in accordance with local regulations. According to the European Waste Catalogue, Waste Codes are not product specific, but application specific. Waste codes should be assigned by the user based on the application for which the product was used.

## 14. Transport information

### 14.1 UN Number

no requirements

### 14.2 UN Proper Shipping Name

no requirements

### 14.3 Transport hazard class(es)

no requirements

### 14.4 Packing group

no requirements

### 14.5 Environmental hazards

no requirements

### 14.6 Special precautions for user

no requirements

### 14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

no requirements

## 15. Regulatory information



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

International Inventories: Component Polystyrene Listed NLP 500-008-9

Take note of Control of Substances Hazardous to Health Regulations (COSHH) 2002 and 2005 Amendment.

15.2. Chemical safety assessment

A Chemical Safety Assessment/Report (CSA/CSR) has not been conducted

### 16. Additional information

#### 16.1 Disclaimer

This material safety data sheet does not constitute a guarantee of the properties of the product and is not a contractual legal report. The information is given in good faith on the basis of our best knowledge of the product at the indicated time. However, we cannot accept responsibility or liability for any consequences arising from its use, no warranty for correctness and completeness is given. We caution the users against the incurred possible risks when the product is used at other ends than the use for which it was initially planned. It is the user's responsibility during handling, storage and product use to consult the main regulatory texts in force regarding workers and environment protection.