# SAFETY DATA SHEET
## POLYESTER RESIN

## SECTION 1: Identification of the substance/mixture and of the company/undertaking

### 1.1. Product identifier
- **Product name**: POLYESTER RESIN
- **Product number**: POR001, POR002
- **Internal identification**: C

### 1.2. Relevant identified uses of the substance or mixture and uses advised against
- **Identified uses**: Polyester resin.

### 1.3. Details of the supplier of the safety data sheet
- **Supplier**: TETROSYL LIMITED
  - Bury
  - Lancashire
  - England
  - BL9 7NY
  - 0161 764 5981
  - 0161 797 5899
  - info@tetrosyl.com

### 1.4. Emergency telephone number

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

**Classification (EC 1272/2008)**
- **Physical hazards**: Flam. Liq. 3 - H226
- **Health hazards**: Acute Tox. 4 - H332 Skin Irrit. 2 - H315 Eye Irrit. 2 - H319 Repr. 2 - H361d STOT RE 1 - H372
- **Environmental hazards**: Not Classified

**Human health**: See Section 11 for additional information on health hazards.

### 2.2. Label elements

**Pictogram**
- [Flammable](#)
- [Exclamation](#)
- [Fetus](#)

**Signal word**: Danger

**Hazard statements**: H226 Flammable liquid and vapour.
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H332 Harmful if inhaled.
H361d Suspected of damaging the unborn child.
H372 Causes damage to organs through prolonged or repeated exposure.
POLYESTER RESIN

Precautionary statements

P101 If medical advice is needed, have product container or label at hand.
P102 Keep out of reach of children.
P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P233 Keep container tightly closed.
P240 Ground/ bond container and receiving equipment.
P241 Use explosion-proof electrical equipment.
P242 Use only non-sparking tools.
P243 Take precautionary measures against static discharge.
P260 Do not breathe vapour/ spray.
P264 Wash contaminated skin thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P271 Use only outdoors or in a well-ventilated area.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
P302+P352 IF ON SKIN: Wash with plenty of water.
P303+P361 IF ON SKIN (or hair): Take off immediately all contaminated clothing.
Rinse skin with water/ shower.
P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308+P313 IF exposed or concerned: Get medical advice/ attention.
P312 Call a POISON CENTER/ doctor if you feel unwell.
P314 Get medical advice/ attention if you feel unwell.
P321 Specific treatment (see medical advice on this label).
P332+P313 If skin irritation occurs: Get medical advice/ attention.
P337+P313 If eye irritation persists: Get medical advice/ attention.
P362+P364 Take off contaminated clothing and wash it before reuse.
P370+P378 In case of fire: Use foam, carbon dioxide, dry powder or water fog to extinguish.
P403+P235 Store in a well-ventilated place. Keep cool.
P405 Store locked up.
P501 Dispose of contents/ container in accordance with national regulations.

Contains

STYRENE

Supplementary precautionary statements

P261 Avoid breathing vapour/ spray.
P262 Avoid breathing vapour/ spray.
P302+P352 IF ON SKIN: Wash with plenty of water.
P303+P361 IF ON SKIN (or hair): Take off immediately all contaminated clothing.
Rinse skin with water/ shower.
P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
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P405 Store locked up.
P501 Dispose of contents/ container in accordance with national regulations.

2.3. Other hazards

SECTION 3: Composition/information on ingredients

3.2. Mixtures

<table>
<thead>
<tr>
<th>STYRENE</th>
<th>30–&lt;60%</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAS number: 100-42-5</td>
<td>EC number: 202-851-5</td>
</tr>
<tr>
<td>REACH registration number: 01-2119457861-32-0017</td>
<td></td>
</tr>
</tbody>
</table>

Classification

Flam. Liq. 3 - H226
Acute Tox. 4 - H332
Skin Irrit. 2 - H315
Eye Irrit. 2 - H319
Repr. 2 - H361d
STOT RE 1 - H372

The full text for all hazard statements is displayed in Section 16.
POLYESTER RESIN

SECTION 4: First aid measures

4.1. Description of first aid measures

General information
Remove affected person from source of contamination. Get medical attention immediately.

Inhalation
Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Get medical attention. Symptoms of lung oedema (shortness of breath) may develop up to 24 hours after exposure. Show this Safety Data Sheet to the medical personnel. Place unconscious person on the side in the recovery position and ensure breathing can take place.

Ingestion
Rinse mouth thoroughly with water. Give plenty of water to drink. Give milk instead of water if readily available. Keep affected person under observation. Do not induce vomiting. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention immediately. Show this Safety Data Sheet to the medical personnel.

Skin contact
Remove contaminated clothing immediately and wash skin with soap and water. Consult a physician for specific advice. Rinse immediately with plenty of water. While rinsing, remove clothing not adhering to the affected area. Get medical attention.

Eye contact
Rinse immediately with plenty of water. Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 minutes. Get medical attention immediately.

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

4.3. Indication of any immediate medical attention and special treatment needed

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media
Use fire-extinguishing media suitable for the surrounding fire.

5.2. Special hazards arising from the substance or mixture

Specific hazards
In case of fire, toxic and corrosive gases may be formed.

5.3. Advice for firefighters

Protective actions during firefighting
Thermal decomposition or combustion products may include the following substances: Toxic and corrosive gases or vapours.

Special protective equipment for firefighters
Leave danger zone immediately.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions
Wear protective clothing as described in Section 8 of this safety data sheet. In case of spills, beware of slippery floors and surfaces.

6.2. Environmental precautions

Environmental precautions
Collect and dispose of spillage as indicated in Section 13.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up
For waste disposal, see Section 13. Wear protective clothing as described in Section 8 of this safety data sheet. Absorb spillage with non-combustible, absorbent material. Provide adequate ventilation. Avoid the spillage or runoff entering drains, sewers or watercourses.

6.4. Reference to other sections

SECTION 7: Handling and storage

7.1. Precautions for safe handling
# POLYESTER RESIN

**Usage precautions**
Read and follow manufacturer's recommendations. Remove contamination with soap and water or recognised skin cleansing agent. Do not use organic solvents. Good personal hygiene procedures should be implemented. Wash hands and any other contaminated areas of the body with soap and water before leaving the work site. Do not eat, drink or smoke when using the product.

**7.2. Conditions for safe storage, including any incompatibilities**

**Storage precautions**
Keep away from heat, sparks and open flame. Store in tightly-closed, original container in a dry, cool and well-ventilated place.

**7.3. Specific end use(s)**

<table>
<thead>
<tr>
<th>SECTION 8: Exposure Controls/personal protection</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>8.1. Control parameters</strong></td>
</tr>
<tr>
<td><strong>Occupational exposure limits</strong></td>
</tr>
<tr>
<td><strong>STYRENE</strong></td>
</tr>
<tr>
<td>Long-term exposure limit (8-hour TWA): WEL 100 ppm 430 mg/m³</td>
</tr>
<tr>
<td>Short-term exposure limit (15-minute): WEL 250 ppm 1080 mg/m³</td>
</tr>
<tr>
<td>WEL = Workplace Exposure Limit</td>
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</tbody>
</table>

**8.2. Exposure controls**

**Protective equipment**

- **Appropriate engineering controls**
  Provide adequate general and local exhaust ventilation. Observe any occupational exposure limits for the product or ingredients.

- **Eye/face protection**
  Wear tight-fitting, chemical splash goggles or face shield.

- **Hand protection**
  The most suitable glove should be chosen in consultation with the glove supplier/manufacturer, who can provide information about the breakthrough time of the glove material. Chemical-resistant, impervious gloves complying with an approved standard should be worn if a risk assessment indicates skin contact is possible.

- **Other skin and body protection**
  Provide eyewash station. AVOID ALL SKIN AND RESPIRATORY CONTACT! Wear chemical protective suit.

- **Hygiene measures**
  Use engineering controls to reduce air contamination to permissible exposure level. Provide eyewash station. Wash contaminated clothing before reuse. Wash at the end of each work shift and before eating, smoking and using the toilet.

- **Respiratory protection**
  If ventilation is inadequate, suitable respiratory protection must be worn. Check that the respirator fits tightly and the filter is changed regularly.

<table>
<thead>
<tr>
<th>SECTION 9: Physical and Chemical Properties</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>9.1. Information on basic physical and chemical properties</strong></td>
</tr>
</tbody>
</table>
| **Appearance**
  Viscous liquid. |
| **Colour**
| **Odour**
  Strong. Characteristic. |
| **Flash point**
  31°C |
| **Vapour pressure**
  6.7 hPa @ 20°C |
POLYESTER RESIN

Relative density 1.1g/cm³ @ 20°C
Solubility(ies) Insoluble in water.
Auto-ignition temperature 490°C
Viscosity 400 cP @ 20°C

9.2. Other information
Volatile 36 - 39

SECTION 10: Stability and reactivity

10.1. Reactivity
10.2. Chemical stability
Stability No particular stability concerns.
10.3. Possibility of hazardous reactions
10.4. Conditions to avoid
Conditions to avoid Avoid heat. Avoid contact with the following materials: Strong oxidising agents.
10.5. Incompatible materials
Materials to avoid Organic peroxides/hydroperoxides. Strong oxidising agents.
10.6. Hazardous decomposition products

SECTION 11: Toxicological information

11.1. Information on toxicological effects
Acute toxicity - inhalation
ATE inhalation (gases ppm) 11,842.11
ATE inhalation (vapours mg/l) 28.95
ATE inhalation (dusts/mists mg/l) 3.95

Inhalation Harmful by inhalation.
Skin contact May cause skin irritation/eczema.
Acute and chronic health hazards This chemical can be hazardous when inhaled and/or touched. This product is corrosive. This product may cause skin and eye irritation. Prolonged contact may cause burns. May cause severe internal injury. Vapour from this product may be hazardous by inhalation.
Route of entry Inhalation Ingestion. Skin and/or eye contact Skin absorption

SECTION 12: Ecological Information

12.1. Toxicity
Acute toxicity - fish LC₅₀, 96 hours: 10-100 mg/l, Algae
12.2. Persistence and degradability
12.3. Bioaccumulative potential
12.4. Mobility In soil
12.5. Results of PBT and vPvB assessment
12.6. Other adverse effects
SECTION 13: Disposal considerations

13.1. Waste treatment methods

General information
When handling waste, the safety precautions applying to handling of the product should be considered. Only experts should be permitted to carry out disposal of this material.

Disposal methods
Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.

SECTION 14: Transport information

14.1. UN number

UN No. (ADR/RID) 2055
UN No. (IMDG) 2055
UN No. (ICAO) 2055
UN No. (ADN) 2055

14.2. UN proper shipping name

Proper shipping name (ADR/RID) STYRENE MONOMER, STABILIZED
Proper shipping name (IMDG) STYRENE MONOMER, STABILIZED
Proper shipping name (ICAO) STYRENE MONOMER, STABILIZED
Proper shipping name (ADN) STYRENE MONOMER, STABILIZED

14.3. Transport hazard class(es)

ADR/RID class 3
ADR/RID classification code F1
ADR/RID label 3
IMDG class 3
ICAO class/division 3
ADN class 3

Transport labels

14.4. Packing group

ADR/RID packing group III
IMDG packing group III
ADN packing group III
ICAO packing group III

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant No.

14.6. Special precautions for user
POLYESTER RESIN

EmS F-E, S-D

ADR transport category 3

Emergency Action Code 3Y

Hazard Identification Number (ADR/RID) 39

Tunnel restriction code (D/E)

14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable.

SECTION 15: Regulatory information

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

EU legislation


15.2. Chemical safety assessment

SECTION 16: Other information

Revision comments

NOTE: Lines within the margin indicate significant changes from the previous revision.

Revision date 26/05/2016

Revision 7

Supersedes date 16/07/2015

Hazard statements in full

H226 Flammable liquid and vapour.
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H332 Harmful if inhaled.
H361d Suspected of damaging the unborn child.
H372 Causes damage to organs (Hearing organs) through prolonged or repeated exposure.
H372 Causes damage to organs through prolonged or repeated exposure.

The information provided in this document has been compiled on the basis of our current knowledge and is believed to be in accordance with the requirements of the Dangerous Substances Directive, Dangerous Preparations Directive and Safety Data Sheets Directive. The information relates to the specific material designated and may not be valid for such material used in combination with any other materials or in any particular conditions or process. The conditions and extent of storage and use of material are outside of our control and within the control of the possessor or user. Consequently it is the responsibility of the possessor or user to satisfy themselves as to the completeness of such information and the suitability of the material for their own particular circumstances, conditions or use.