



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.
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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
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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



Signal word	Danger
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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.
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Precautionary statements	<p>P101 If medical advice is needed, have product container or label at hand.</p> <p>P102 Keep out of reach of children.</p> <p>P201 Obtain special instructions before use.</p> <p>P202 Do not handle until all safety precautions have been read and understood.</p> <p>P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.</p> <p>P233 Keep container tightly closed.</p> <p>P240 Ground/ bond container and receiving equipment.</p> <p>P241 Use explosion-proof electrical equipment.</p> <p>P242 Use only non-sparking tools.</p> <p>P243 Take precautionary measures against static discharge.</p> <p>P260 Do not breathe vapour/ spray.</p> <p>P264 Wash contaminated skin thoroughly after handling.</p> <p>P270 Do not eat, drink or smoke when using this product.</p> <p>P271 Use only outdoors or in a well-ventilated area.</p> <p>P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.</p> <p>P302+P352 IF ON SKIN: Wash with plenty of water.</p> <p>P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower.</p> <p>P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.</p> <p>P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.</p> <p>P308+P313 IF exposed or concerned: Get medical advice/ attention.</p> <p>P312 Call a POISON CENTER/ doctor if you feel unwell.</p> <p>P314 Get medical advice/ attention if you feel unwell.</p> <p>P332+P313 If skin irritation occurs: Get medical advice/ attention.</p> <p>P337+P313 If eye irritation persists: Get medical advice/ attention.</p> <p>P362+P364 Take off contaminated clothing and wash it before reuse.</p> <p>P370+P378 In case of fire: Use foam, carbon dioxide, dry powder or water fog to extinguish.</p> <p>P403+P235 Store in a well-ventilated place. Keep cool.</p> <p>P405 Store locked up.</p> <p>P501 Dispose of contents/ container in accordance with national regulations.</p>
Contains	STYRENE
Supplementary precautionary statements	<p>P261 Avoid breathing vapour/ spray.</p> <p>P321 Specific treatment (see medical advice on this label).</p>

2.3. Other hazards

SECTION 3: Composition/information on ingredients

3.2. Mixtures

STYRENE	30-<60%
CAS number: 100-42-5	EC number: 202-851-5
	REACH registration number: 01-2119457861-32-0017
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.

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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

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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)

SECTION 8: Exposure Controls/personal protection

8.1. Control parameters

Occupational exposure limits

STYRENE

Long-term exposure limit (8-hour TWA): WEL 100 ppm 430 mg/m³

Short-term exposure limit (15-minute): WEL 250 ppm 1080 mg/m³

WEL = Workplace Exposure Limit

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.

SECTION 9: Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

Appearance	Viscous liquid.
Colour	Amber. Brown.
Odour	Strong. Characteristic.
Flash point	31°C
Vapour pressure	6.7 hPa @ 20°C

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Relative density	1.1g/cm ³ @ 20°C
Solubility(ies)	Insoluble in water.
Auto-ignition temperature	490°C
Viscosity	400 cP @ 20°C

9.2. Other information

Volatility	36 - 39
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SECTION 10: Stability and reactivity

10.1. Reactivity

10.2. Chemical stability

Stability	No particular stability concerns.
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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.
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10.5. Incompatible materials

Materials to avoid	Organic peroxides/hydroperoxides. Strong oxidising agents.
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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
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ATE inhalation (vapours mg/l)	28.95
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ATE inhalation (dusts/mists mg/l)	3.95
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Inhalation	Harmful by inhalation.
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Skin contact	May cause skin irritation/eczema.
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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.
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Route of entry	Inhalation Ingestion. Skin and/or eye contact Skin absorption
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SECTION 12: Ecological Information

12.1. Toxicity

Acute toxicity - fish	LC ₅₀ , 96 hours: 10-100 mg/l, Algae
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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

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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

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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

Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (as amended).

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.