

**Section 1 : Identification of the substance/mixture and of the company/undertaking****1.1. Product Identifier**

Product Name : Polyester Resin

**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**Address : GEPOSB 12.Cadde No:8. TR41400  
Gebze/Kocaeli Turkey

Telefon : +90 262 751 07 24

Fax : +90 262 751 3330

Email : info@polrespolyester.com.tr

**1.4. Emergency Telephone**

: +90 262 751 07 24

**Section 2: Classification of the substance or mixture****2.1. Product Identifier****Classification (EC 1272/2008)**

Flammable liquid and vapour.

Flam. Liq. 3- H226

Human Health

Skin Irrit.2-H315;EyeIrrit.2-H319;Repr.2-H361d;STOTRE 1 - H372

Environment

Not classified.

The Full Text for all R-Phrases and Hazard Statements are displayed in Section 16. Human health  
See section 11 for additional information on health hazards**2.2. Label Elements****Contains**

: Styrene

**GHS pictograms**

(Label In Accordance With (EC) No. 1272/2008)

**Signal Word**

: Danger

**Hazard Statements**

H226 Flammable liquid and vapour.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H332 Harmful if inhaled.

H372 Causes damage to organs  
through prolonged or repeated exposure.**Precautionary Statements**

P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

P233 Keep container tightly closed.

P240 Ground/bond container and receiving equipment.

P241 Use explosion-proof electrical/ventilating/lighting/.../equipment.

P242 Use only non-sparking tools.

- P243 Take precautionary measures against static discharge.
- P260 Do not breathe dust/fume/gas/mist/vapours/spray.
- P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
- P264 Wash 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
- P281 Use personal protective equipment as required.
- P501 Dispose of contents/container to.....
- P312 Call a POISON CENTER or doctor/physician if you feel unwell.

### Precautionary Statements

P302+P352 IF ON SKIN: wash with plenty of soap and water.  
 P303+P361+P353 IF ON SKIN (or hair): Remove/Take off Immediately all contaminated clothing. Rinse SKIN with water/shower.  
 P304+P340 IF INHALED: Remove victim to fresh air and Keep at rest in a position 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.  
 P321 Specific treatment (see ... on this label).  
 P332 +P313 IF SKIN irritation occurs: Get medical advice/attention.  
 P337 +P313 IF eye irritation persists: Get medical advice/attention.  
 P362 Take off contaminated clothing and wash before reuse.  
 P370 +P378 In case of fire: Use ... for extinction.  
 P403 +P235 Store in a well-ventilated place. Keep cool.

### 2.3. Other Hazards

No data

## Section 3: Composition/information on ingredients

### 3.1. Substances

N.A.

### 3.2. Mixtures

STYRENE	CAS Number.: 100-42-5	EC Number: 202-851-5	Concentration: 12.5-<60%
Classification (EC 1272/2008)		Classification (67/548/EEC)	
Flam. Liq. 3 - H226		R10	
Acute Tox. 4 - H332		Xn;R20	
Skin Irrit. 2 - H315		Xi;R36/38	
Eye Irrit. 2 - H319			
UNSATURATED POLYESTER RESIN		Concentration: 40-87.5%	
For the wording of the listed phrases refer to section 16			

## Section 4: Description of first aid measures

### 4.1. Product Identifier

#### General information

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

### Inhalation

Move injured person into fresh air immediately. Call an ambulance. Be aware that symptoms of lung oedema (shortness of breath) may develop up to 24 hours after exposure. Bring these instructions. Place unconscious person on the side in the recovery position and ensure breathing can take place.

### Ingestion

Immediately rinse mouth and drink plenty of water or milk. Keep person under observation. Do not induce vomiting. If vomiting occurs, keep head low. Transport immediately to hospital and bring along these instructions.

### Skin contact

Remove contaminated clothing immediately and wash skin with soap and water. Consult a physician for specific advice. Burns: Flush with water immediately. While flushing, remove clothes which do not adhere to affected area. Call an ambulance. Continue flushing during transport to hospital.

### Eye contact

Immediately flush with plenty of water for up to 15 minutes. Remove any contact lenses and open eyes wide apart. Immediately transport to hospital or eye specialist.

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

Product can cause irritation to eyes, skin and respiratory system. Contact with decomposition products can be dangerous for health. After exposure, symptoms can be delayed. Contact with eyes can result in eye erythema and excessive lacrimation. Exposure of inhalation routes can cause coughing. Prolonged exposure of skin can cause erythema. Lack of data on symptoms occurring after ingestion.

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

In case of inhalation of decomposition products, symptoms may be delayed. Exposed individual may need to be kept under medical surveillance for 48 hours

## Section 5: Firefighting Measures

### 5.1. Extinguishing media

**Unsuitable extinguishing media:** Use dry chemical (ABC powder) or CO<sub>2</sub>, optionally spray mist water  
NOT recommended to be used with water or water spray.

### 5.2. Special hazards arising from the substance or mixture

Product heating can cause pressure rise and result in packaging explosion. In case of fire, hazardous decomposition products can arise: e.g. carbon oxides, unidentified hydrocarbons.

### 5.3. Advice for firefighters

Use full protective clothing compliant with EN 469 standard. Wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Product containers exposed to heat cool with water.

## Section 6: Accidental release measures

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

For non-emergency personnel:

No action involving any health risk shall be taken through contact with product. Avoid contact with product without personal protective equipment, in case of contact with large quantities of product or ventilation is insufficient. Avoid breathing vapours.

For emergency responders:

Disposal of product spillage should be taken only if personal protective equipment described in section 8 is available.

### 6.2. Environmental precautions

Avoid dispersal of spilled material and its contact with soil, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution.

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

Secure drains and sewers. Collect product mechanically (e.g. with shovel) together with contaminated soil. Absorb with inert dry material and place in an appropriate waste disposal container.

### 6.4. Reference to other sections

See section 8 for information on appropriate personal protective equipment.  
See section 13 for additional waste treatment information.

### Section 7: Handling and storage

#### 7.1. Precautions for safe handling

Put on an appropriate personal protective equipment (see section 8). Persons with a history of skin sensitization problems should avoid contact with product. Do not allow product to contact eyes or skin. Avoid breathing vapours released during curing process. Use only in places with sufficient ventilation. Wear appropriate respirator when ventilation is inadequate. Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed.

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

Store in original container, protect from direct sunlight and other heat sources in dry, well-ventilated area, away from incompatible materials, food and drink. Store at 5– 25 °C. To ensure product stability avoid temperature fluctuation during storage.

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




Product used in large quantities produces a lot of heat during curing process, generating release of irritating vapours. In such cases, please use appropriate breathing apparatus (as described in section 8) if ventilation is insufficient. In case of disposal of unused product, mix both components thoroughly, leave to cure and cool down before removing.

### Section 8: Exposure controls/personal protection

#### 8.1. Control parameters

Name	STD	TWA - 8 Hrs		STEL - 15 Min		Notes
STYRENE	WEL	50 ppm	215 mg/m <sup>3</sup>	100 ppm	425 mg/m <sup>3</sup>	
WEL = Workplace Exposure Limit.						

#### 8.2. Exposure controls

Protective equipment	  
Process conditions	Use engineering controls to reduce air contamination to permissible exposure level. Provide eyewash station.
Respiratory equipment	Wear suitable respiratory protection. Check that mask fits tight and change filter regularly.
Hand protection	The most suitable glove must be chosen in consultation with the gloves supplier, who can inform about the breakthrough time of the glove material. Protection against this substance requires special consideration.
Eye protection	Wear tight-fitting goggles or face shield.
Other Protection	Provide eyewash station. AVOID ALL SKIN AND RESPIRATORY CONTACT!
Hygiene measures	Wash contaminated clothing before reuse. Wash hands at the end of each work shift and before eating, smoking and using the toilet.
Skin protection	Protection suit must be worn.

### Section 9: Physical and chemical properties

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

Appearance	Viscous liquid.
Colour	Transparent/Bluish/Yellowish
Odour	Characteristic
Initial boiling point and boiling range (°C)	145 °C
pH:	n.a.
Flammability(solid, gas):	Flammable
Melting point / freezing point:	n.a.
Explosive properties:	n.a.
Viscosity (@ 20°C)	Dynamic:>150 mPa.s
Density	1,06 – 1,65 ± 0,02 g/cm <sup>3</sup> at 200
Flashpoint	>30°C - 60< °C

#### 9.2. Other Information n.a.

**Section 10: Stability and reactivity**

- 10.1. Reactivity** : No test data on reactivity available
- 10.2. Chemical stability** : Product is stable under normal storage conditions. In case of apparent product consistency change or presence of significant air amounts in components, it is advised to interrupt work with product and consult producer.
- 10.3. Possibility of hazardous reactions** :
- 10.4. Conditions to avoid** : No specific data
- 10.5. Incompatible materials** : Avoid exposing to heat and contact with strong oxidising substances.
- 10.6. Hazardous decomposition products** : No specific data.  
Irritating vapours. Unidentified hydrocarbons, carbon oxides.

**Section 11: Toxicological information****11.1. Information on toxicological effects**

Acute toxicity :

Ingredient name	Dose(route of exposure)/method	Species	Result
styrene	LD <sub>50</sub> (oral)	rat	316 mg/kg

Inhalation

Respiratory tract irritation, coughing, nausea and dizziness exposure to decomposition products may cause a health hazard. Side effects may be delayed following exposure.

Skin corrosion/irritation

Irritating (based on information on ingredients)

Serious eye damage/irritation

Irritating to eyes (based on information on ingredients)

Health Warnings

This chemical can be hazardous when inhaled and/or touched. This chemical may cause skin/eye irritation and burns (corrosive). May cause severe internal injury. Vapour from this chemical can be hazardous when inhaled.

Route of entry

Inhalation. Ingestion. Skin and/or eye contact. Skin absorption.

**Section 12: Ecological Information**

- Mobility in soil:** Not available.
- Persistence and Degradability:** Not available.
- Bioaccumulative Potential:** Not available.
- Ecotoxicity:** Not available.

**Section 13: Disposal considerations****General information**

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

**13.1. Waste treatment methods**

Dispose of waste and residues in accordance with local authority requirements.

**Section 14: Transport Information**

General : Full protective clothing should be worn when handling this product.

**14.1. UN number**UN No. (ADR/RID/ADN) : 1866  
UN No. (IMDG) : 1866  
UN No. (ICAO) : 1866**14.2. UN proper shipping name**

Proper Shipping Name : RESIN SOLUTION

**14.3. Transport hazard class(es)**ADR/RID/ADN Class : 3  
ADR/RID/ADN Class : Class 3: Flammable liquids.  
ADR Label No. : 3  
IMDG Class : 3  
ICAO Class/Division : 3**14.4. Packing group**ADR/RID/ADN Packing group : III  
IMDG Packing group : III  
ICAO Packing group : III**14.5. Environmental hazards**

Environmentally Hazardous Substance/Marine Pollutant : No.

**14.6. Special precautions for user**EMS : F-E, S-E  
Emergency Action Code : 3Y  
Hazard Identification Number: : 30-1866**14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** : n.a.**Section 15: Regulatory information****15.1. Safety, health and environmental regulations/legislation for the substance or mixture**

EU regulations:

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), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, including amendments.

**15.2. Chemical Safety Assessment** : n.a.**Section 16: Other information**

Full text of H statements, and corresponding hazard class and category codes :

**Hazard Statements In Full**

- H226 Flammable liquid and vapour.
- H315 Causes skin irritation.
- H319 Causes serious eye irritation.
- H332 Harmful if inhaled.
- H372 Causes damage to organs through prolonged or repeated exposure.

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Flam Liq.3	Flammable liquid – category 3
AcuteTox.2,4	Acute toxicity – category 2,4
EyeDam.1	Serious eye damage – category 1
EyeIrrit.2,	Eye irritation – category 2
SkinSens.1,	Skin sensitization – category 1
SkinIrrit.2,	Skin irritation, category 2
STOTSE3	Use personal protective equipment as required.
STOTRE1,2	Do not breathe vapour/spray.
AquaticAcute1	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

**Training advice**

People using the product professionally, should be trained in handling the product, safety and hygiene. Drivers should be trained and obtain the appropriate certificate in accordance with the ADR requirements

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This Material Safety Data Sheet is prepared according to Regulation about preparation and distribution of Material Safety Data Sheet related Dangerous Substances and Preparations

**MSDS Certification Number :** GBF-A-0-2648

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