



# FASTGLAS RESIN (FASTGLAS-R)

## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

Date of issue: 6/27/2016 Revision date: 3/12/2018 Supersedes: 4/26/2017 Version: 3.1

DRIVING SURFACE PERFECTION

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

#### 1.1. Product identifier

Product form : Mixture  
Product name : FASTGLAS RESIN (FASTGLAS-R)  
Product group : Unsaturated polyester

#### 1.2. Relevant identified uses of the substance or mixture and uses advised against

##### 1.2.1. Relevant identified uses

Intended for general public  
Industrial/Professional use spec : Intended for general public  
Function or use category : Unsaturated polyester

##### 1.2.2. Uses advised against

No additional information available

#### 1.3. Details of the supplier of the safety data sheet

U-POL LIMITED  
Denington Road, Wellingborough  
Northants. NN8 2QH - UK  
T +44 (0) 1933 230310 - F +44 (0) 1933 425797  
[technical.department@u-pol.com](mailto:technical.department@u-pol.com) - [www.u-pol.com](http://www.u-pol.com)

#### 1.4. Emergency telephone number

Emergency number : +44 (0) 870 8200418

### SECTION 2: Hazards identification

#### 2.1. Classification of the substance or mixture

##### Classification according to Regulation (EC) No. 1272/2008 [CLP]

Flammable liquids, Category 3 H226  
Skin corrosion/irritation, Category 2 H315  
Serious eye damage/eye irritation, Category 2 H319  
Reproductive toxicity, Category 2 H361  
Specific target organ toxicity — Repeated exposure, Category 1 H372

Full text of H statements : see section 16

##### Adverse physicochemical, human health and environmental effects

Flammable liquid and vapour. Suspected of damaging the unborn child. Causes damage to organs (hearing organs) through prolonged or repeated exposure (inhalation). Causes skin irritation. Causes serious eye irritation.

#### 2.2. Label elements

##### Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP) :



Signal word (CLP) :

Danger

Hazardous ingredients :

styrene

Hazard statements (CLP) :

H226 - Flammable liquid and vapour.  
H315 - Causes skin irritation.  
H319 - Causes serious eye irritation.  
H361 - Suspected of damaging fertility or the unborn child.  
H372 - Causes damage to organs (hearing organs) through prolonged or repeated exposure

# FASTGLAS RESIN (FASTGLAS-R)

## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

|                                |   |
|--------------------------------|---|
| Precautionary statements (CLP) | (Inhalation).<br>: P102 - Keep out of reach of children.<br>P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.<br>P261 - Avoid breathing fume, vapours.<br>P280 - Wear eye protection, protective clothing, protective gloves.<br>P303+P361+P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.<br>P305 - IF IN EYES: Wash with plenty of water and if necessary take medical advice<br>P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation |
| EUH-statements                 | : EUH208 - Contains phthalic anhydride. May produce an allergic reaction.   |

### 2.3. Other hazards

No additional information available

## SECTION 3: Composition/information on ingredients

### 3.1. Substances

Not applicable

### 3.2. Mixtures

| Name                | Product identifier   | %    | Classification according to Regulation (EC) No. 1272/2008 [CLP]   |
|---------------------|--|------|---|
| styrene<br>(Note D) | (CAS-No.) 100-42-5<br>(EC-No.) 202-851-5<br>(EC Index-No.) 601-026-00-0<br>(REACH-no) 01-2119457861-32 | < 50 | Flam. Liq. 3, H226<br>Repr. 2, H361d<br>Acute Tox. 4 (Inhalation), H332<br>STOT RE 1, H372<br>Skin Irrit. 2, H315<br>Eye Irrit. 2, H319 |
| phthalic anhydride  | (CAS-No.) 85-44-9<br>(EC-No.) 201-607-5<br>(EC Index-No.) 607-009-00-4                                 | < 1  | Acute Tox. 4 (Oral), H302<br>STOT SE 3, H335<br>Skin Irrit. 2, H315<br>Eye Dam. 1, H318<br>Resp. Sens. 1, H334<br>Skin Sens. 1, H317    |

Full text of H-statements: see section 16

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

|                                       |  |
|---------------------------------------|--|
| First-aid measures general            | : IF exposed or concerned: Get medical advice/attention.   |
| First-aid measures after inhalation   | : Remove person to fresh air and keep comfortable for breathing.   |
| First-aid measures after skin contact | : Rinse skin with water/shower. Take off immediately all contaminated clothing. If skin irritation occurs: Get medical advice/attention.   |
| First-aid measures after eye contact  | : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. |
| First-aid measures after ingestion    | : Call a poison center or a doctor if you feel unwell.   |

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

|                                     |                   |
|-------------------------------------|-------------------|
| Symptoms/effects after skin contact | : Irritation.     |
| Symptoms/effects after eye contact  | : Eye irritation. |

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

Treat symptomatically.

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam. Carbon dioxide.

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

|  |                                |
|--|--------------------------------|
| Fire hazard                                      | : Flammable liquid and vapour. |
| Hazardous decomposition products in case of fire | : Toxic fumes may be released. |

# FASTGLAS RESIN (FASTGLAS-R)

## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

### 5.3. Advice for firefighters

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

## SECTION 6: Accidental release measures

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

#### 6.1.1. For non-emergency personnel

Protective equipment : Safety glasses. Protective clothing. Gloves.  
Emergency procedures : Ventilate spillage area. No open flames, no sparks, and no smoking. Do not breathe vapours, fume. Avoid contact with skin and eyes.

#### 6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

### 6.2. Environmental precautions

Avoid release to the environment.

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

For containment : Contain released substance, pump into suitable containers. Collect spillage.  
Methods for cleaning up : Take up liquid spill into absorbent material. Notify authorities if product enters sewers or public waters.  
Other information : Dispose of materials or solid residues at an authorized site.

### 6.4. Reference to other sections

For further information refer to section 13.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

Precautions for safe handling : Ensure good ventilation of the work station. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Ground/bond container and receiving equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Flammable vapours may accumulate in the container. Use explosion-proof equipment. Wear personal protective equipment. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe dust/fume/gas/mist/vapours/spray. Avoid contact with skin and eyes.  
Hygiene measures : Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

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

Technical measures : Ground/bond container and receiving equipment.  
Storage conditions : Store in a well-ventilated place. Keep cool. Keep container tightly closed. Store locked up.  
Incompatible products : Oxidizing agent.  
Storage temperature : < 25 °C  
Storage area : Store in a well-ventilated place.  
Special rules on packaging : Keep only in original container.

### 7.3. Specific end use(s)

No additional information available

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

| styrene (100-42-5) |                               |                        |
|--------------------|-------------------------------|------------------------|
| United Kingdom     | Local name                    | Styrene                |
| United Kingdom     | WEL TWA (mg/m <sup>3</sup> )  | 430 mg/m <sup>3</sup>  |
| United Kingdom     | WEL TWA (ppm)                 | 100 ppm                |
| United Kingdom     | WEL STEL (mg/m <sup>3</sup> ) | 1080 mg/m <sup>3</sup> |
| United Kingdom     | WEL STEL (ppm)                | 250 ppm                |

### 8.2. Exposure controls

Appropriate engineering controls : Ensure good ventilation of the work station.  
Personal protective equipment : Gloves. Protective clothing. Safety glasses.

# FASTGLAS RESIN (FASTGLAS-R)

## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

Materials for protective clothing:

Impermeable clothing

Hand protection:

Protective gloves

| Type              | Material             | Permeation       | Thickness (mm) | Penetration | Standard |
|-------------------|----------------------|------------------|----------------|-------------|----------|
| Protective gloves | Nitrile rubber (NBR) | 3 (> 60 minutes) | 0.3            |             | EN 374-3 |

Eye protection:

Safety glasses

Skin and body protection:

Wear suitable protective clothing

Respiratory protection:

In case of inadequate ventilation wear respiratory protection. Gas mask with filter type A. [In case of inadequate ventilation] wear respiratory protection.



Environmental exposure controls : Avoid release to the environment.

## SECTION 9: Physical and chemical properties

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

|  |   |
|--|---|
| Physical state                             | : Liquid  |
| Appearance                                 | : Liquid.   |
| Colour                                     | : amber.  |
| Odour                                      | : No data available                                     |
| Odour threshold                            | : No data available                                     |
| pH   | : No data available                                     |
| Relative evaporation rate (butylacetate=1) | : No data available                                     |
| Melting point                              | : -30 °C  |
| Freezing point                             | : No data available                                     |
| Boiling point                              | : 145 °C  |
| Flash point                                | : 31 °C   |
| Auto-ignition temperature                  | : No data available                                     |
| Decomposition temperature                  | : No data available                                     |
| Flammability (solid, gas)                  | : Not applicable  |
| Vapour pressure                            | : 6 hPa   |
| Relative vapour density at 20 °C           | : 3.6   |
| Relative density                           | : No data available                                     |
| Density                                    | : ≈ 1.09 g/cm <sup>3</sup>                              |
| Solubility                                 | : Insoluble in water. Soluble in aromatic hydrocarbons. |
| Log Pow                                    | : No data available                                     |
| Viscosity, kinematic                       | : 477 - 624 mm <sup>2</sup> /s                          |
| Viscosity, dynamic                         | : 520 - 680 mPa.s                                       |
| Explosive properties                       | : No data available                                     |
| Oxidising properties                       | : No data available                                     |
| Explosive limits                           | : No data available                                     |

### 9.2. Other information

No additional information available

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

Flammable liquid and vapour.

# FASTGLAS RESIN (FASTGLAS-R)

## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

### 10.2. Chemical stability

Stable under normal conditions.

### 10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

### 10.4. Conditions to avoid

Avoid contact with hot surfaces. Heat. No flames, no sparks. Eliminate all sources of ignition.

### 10.5. Incompatible materials

No additional information available

### 10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

|                                   |   |
|-----------------------------------|---|
| Acute toxicity                    | : Not classified  |
| Skin corrosion/irritation         | : Causes skin irritation.   |
| Serious eye damage/irritation     | : Causes serious eye irritation.  |
| Respiratory or skin sensitisation | : Not classified  |
| Germ cell mutagenicity            | : Not classified  |
| Carcinogenicity                   | : Not classified  |
| Reproductive toxicity             | : Suspected of damaging fertility or the unborn child.  |
| STOT-single exposure              | : Not classified  |
| STOT-repeated exposure            | : Causes damage to organs (hearing organs) through prolonged or repeated exposure (Inhalation). |
| Aspiration hazard                 | : Not classified  |

### FASTGLAS RESIN (FASTGLAS-R)

|                      |                              |
|----------------------|------------------------------|
| Viscosity, kinematic | 477 - 624 mm <sup>2</sup> /s |
|----------------------|------------------------------|

## SECTION 12: Ecological information

### 12.1. Toxicity

Ecology - general : The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.

### 12.2. Persistence and degradability

No additional information available

### 12.3. Bioaccumulative potential

No additional information available

### 12.4. Mobility in soil

No additional information available

### 12.5. Results of PBT and vPvB assessment

No additional information available

### 12.6. Other adverse effects

No additional information available

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

|                              |   |
|------------------------------|---|
| Regional legislation (waste) | : Disposal must be done according to official regulations.                                    |
| Waste treatment methods      | : Dispose of contents/container in accordance with licensed collector's sorting instructions. |
| Additional information       | : Flammable vapours may accumulate in the container.  |

## SECTION 14: Transport information






In accordance with ADR / RID / IMDG / IATA / ADN

| ADR             | IMDG | IATA | ADN  | RID  |
|-----------------|------|------|------|------|
| 14.1. UN number |      |      |      |      |
| 1866            | 1866 | 1866 | 1866 | 1866 |

# FASTGLAS RESIN (FASTGLAS-R)


## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

| ADR  | IMDG  | IATA  | ADN  | RID   |
|--|---|---|--|---|
| <b>14.2. UN proper shipping name</b>   |   |   |  |   |
| RESIN SOLUTION   | RESIN SOLUTION  | Resin solution  | RESIN SOLUTION   | RESIN SOLUTION  |
| <b>Transport document description</b>  |   |   |  |   |
| UN 1866 RESIN SOLUTION, 3, III, (D/E)  | UN 1866 RESIN SOLUTION, 3, III  | UN 1866 Resin solution, 3, III  | UN 1866 RESIN SOLUTION, 3, III   | UN 1866 RESIN SOLUTION, 3, III  |
| <b>14.3. Transport hazard class(es)</b>  |   |   |  |   |
| 3  | 3   | 3   | 3  | 3   |
|  |  |  |  |  |
| <b>14.4. Packing group</b>   |   |   |  |   |
| III  | III   | III   | III  | III   |
| <b>14.5. Environmental hazards</b>   |   |   |  |   |
| Dangerous for the environment : No   | Dangerous for the environment : No<br>Marine pollutant : No                       | Dangerous for the environment : No  | Dangerous for the environment : No   | Dangerous for the environment : No  |
| No supplementary information available   |   |   |  |   |

### 14.6. Special precautions for user

#### - Overland transport

|   |   |
|---|---|
| Classification code (ADR)                                 | : F1  |
| Special provisions (ADR)                                  | : 640E  |
| Limited quantities (ADR)                                  | : 5I  |
| Excepted quantities (ADR)                                 | : E1  |
| Packing instructions (ADR)                                | : P001, IBC03, LP01, R001   |
| Special packing provisions (ADR)                          | : PP1   |
| Mixed packing provisions (ADR)                            | : MP19  |
| Portable tank and bulk container instructions (ADR)       | : T2  |
| Portable tank and bulk container special provisions (ADR) | : TP1   |
| Tank code (ADR)   | : LGBF  |
| Vehicle for tank carriage                                 | : FL  |
| Transport category (ADR)                                  | : 3   |
| Special provisions for carriage - Packages (ADR)          | : V12   |
| Special provisions for carriage - Operation (ADR)         | : S2  |
| Hazard identification number (Kemler No.)                 | : 30  |
| Orange plates   | :  |
| Tunnel restriction code (ADR)                             | : D/E   |
| EAC code  | : •3YE  |

#### - Transport by sea

|                                   |              |
|-----------------------------------|--------------|
| Special provisions (IMDG)         | : 223, 955   |
| Limited quantities (IMDG)         | : 5 L        |
| Excepted quantities (IMDG)        | : E1         |
| Packing instructions (IMDG)       | : P001, LP01 |
| Special packing provisions (IMDG) | : PP1        |
| IBC packing instructions (IMDG)   | : IBC03      |
| Tank instructions (IMDG)          | : T2         |
| Tank special provisions (IMDG)    | : TP1        |
| EmS-No. (Fire)                    | : F-E        |
| EmS-No. (Spillage)                | : S-E        |

# FASTGLAS RESIN (FASTGLAS-R)

## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

Stowage category (IMDG) : A  
Properties and observations (IMDG) : Miscibility with water depends upon the composition.

### - Air transport

PCA Excepted quantities (IATA) : E1  
PCA Limited quantities (IATA) : Y344  
PCA limited quantity max net quantity (IATA) : 10L  
PCA packing instructions (IATA) : 355  
PCA max net quantity (IATA) : 60L  
CAO packing instructions (IATA) : 366  
CAO max net quantity (IATA) : 220L  
Special provisions (IATA) : A3  
ERG code (IATA) : 3L

### - Inland waterway transport

Classification code (ADN) : F1  
Special provisions (ADN) : 640E  
Limited quantities (ADN) : 5 L  
Excepted quantities (ADN) : E1  
Equipment required (ADN) : PP, EX, A  
Ventilation (ADN) : VE01  
Number of blue cones/lights (ADN) : 0

### - Rail transport

Classification code (RID) : F1  
Special provisions (RID) : 640E  
Limited quantities (RID) : 5L  
Excepted quantities (RID) : E1  
Packing instructions (RID) : P001, IBC03, LP01, R001  
Special packing provisions (RID) : PP1  
Mixed packing provisions (RID) : MP19  
Portable tank and bulk container instructions (RID) : T2  
Portable tank and bulk container special provisions (RID) : TP1  
Tank codes for RID tanks (RID) : LGBF  
Transport category (RID) : 3  
Special provisions for carriage – Packages (RID) : W12  
Colis express (express parcels) (RID) : CE4  
Hazard identification number (RID) : 30

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

Not applicable

## SECTION 15: Regulatory information

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

#### 15.1.1. EU-Regulations

Contains no REACH substances with Annex XVII restrictions  
Contains no substance on the REACH candidate list  
Contains no REACH Annex XIV substances

#### 15.1.2. National regulations

No additional information available

### 15.2. Chemical safety assessment

No chemical safety assessment has been carried out

## SECTION 16: Other information

Full text of H- and EUH-statements:

# FASTGLAS RESIN (FASTGLAS-R)

## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

|                           |  |
|---------------------------|--|
| Acute Tox. 4 (Inhalation) | Acute toxicity (inhal.), Category 4  |
| Acute Tox. 4 (Oral)       | Acute toxicity (oral), Category 4  |
| Eye Dam. 1                | Serious eye damage/eye irritation, Category 1  |
| Eye Irrit. 2              | Serious eye damage/eye irritation, Category 2  |
| Flam. Liq. 3              | Flammable liquids, Category 3  |
| Repr. 2                   | Reproductive toxicity, Category 2  |
| Repr. 2                   | Reproductive toxicity, Category 2  |
| Resp. Sens. 1             | Respiratory sensitisation, Category 1  |
| Skin Irrit. 2             | Skin corrosion/irritation, Category 2  |
| Skin Sens. 1              | Skin sensitisation, Category 1   |
| STOT RE 1                 | Specific target organ toxicity — Repeated exposure, Category 1                             |
| STOT SE 3                 | Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation |
| H226                      | Flammable liquid and vapour.   |
| H302                      | Harmful if swallowed.  |
| H315                      | Causes skin irritation.  |
| H317                      | May cause an allergic skin reaction.   |
| H318                      | Causes serious eye damage.   |
| H319                      | Causes serious eye irritation.   |
| H332                      | Harmful if inhaled.  |
| H334                      | May cause allergy or asthma symptoms or breathing difficulties if inhaled.                 |
| H335                      | May cause respiratory irritation.  |
| H361                      | Suspected of damaging fertility or the unborn child.                                       |
| H361d                     | Suspected of damaging the unborn child   |
| H372                      | Causes damage to organs through prolonged or repeated exposure.                            |
| EUH208                    | Contains phthalic anhydride. May produce an allergic reaction.                             |

|               |      |                       |
|---------------|------|-----------------------|
| Flam. Liq. 3  | H226 | On basis of test data |
| Skin Irrit. 2 | H315 | Calculation method    |
| Eye Irrit. 2  | H319 | Calculation method    |
| Repr. 2       | H361 | Calculation method    |
| STOT RE 1     | H372 | Calculation method    |

UPOL SDS EU (no product code)

*The information contained within this Safety Data Sheet (SDS) is believed to be correct as of the date issued however it is subject to change from time to time. It does not purport to be all inclusive or exhaustive and shall only be used as a guide. U-POL makes no warranties, expressed or implied, including but not limited to, any implied warranty of fitness for a given purpose or usage. It is the Buyers responsibility to ensure the suitability of the products for their own use and to check the information is up to date. U-POL cannot be held responsible for the suitability of use for any of its products, considering the wide range of factors such as application, substrates and handling methods. Since these conditions of use are outside of our control, the company shall not be held liable for any damage resulting from handling or from contact with the product detailed. Moreover, addition of reducers, hardeners or other additives over and above U-POL's recommendations for use, may substantially alter the composition and hazards of the product. U-POL data sheets are available via the U-POL website at WWW.U-POL.COM.*