

# Safety Data Sheet

according to Regulation (EC) No 1907/2006

## UP cast resin, transparent

Revision date: 24.08.2018

Product code: 140125

Page 1 of 7

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

#### 1.1. Product identifier

UP cast resin, transparent

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

##### Use of the substance/mixture

unsaturated polyester, preaccelerated  
binder

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

Company name:	R&G Faserverbundwerkstoffe GmbH	
	Composite Technology	
Street:	Im Meißel 7 - 13	
Place:	D-71111 Waldenbuch	
Post-office box:	1145	
	D-71107 Waldenbuch	
Telephone:	+49 (0)7157 5304-60	Telefax: +49 (0)7157 5304-70
e-mail:	info@r-g.de	
Internet:	www.r-g.de	
Responsible Department:	Management	

**1.4. Emergency telephone number:** Vergiftungs-Informationen-Zentrale Freiburg  
Tel: +49 (0)761 19240

### SECTION 2: Hazards identification

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

##### Regulation (EC) No. 1272/2008

Hazard categories:  
Flammable liquid: Flam. Liq. 3  
Acute toxicity: Acute Tox. 4  
Skin corrosion/irritation: Skin Irrit. 2  
Serious eye damage/eye irritation: Eye Irrit. 2  
Reproductive toxicity: Repr. 2  
Specific target organ toxicity - repeated exposure: STOT RE 1  
Hazardous to the aquatic environment: Aquatic Acute 1  
Hazard Statements:  
Flammable liquid and vapour.  
Harmful if inhaled.  
Causes skin irritation.  
Causes serious eye irritation.  
Suspected of damaging the unborn child.  
Causes damage to organs through prolonged or repeated exposure.  
Very toxic to aquatic life.

#### 2.2. Label elements

##### Regulation (EC) No. 1272/2008

##### Hazard components for labelling

styrene

**Signal word:** Danger

# Safety Data Sheet

according to Regulation (EC) No 1907/2006

## UP cast resin, transparent

Revision date: 24.08.2018

Product code: 140125

Page 2 of 7

### Pictograms:



### Hazard statements

H226	Flammable liquid and vapour.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H361d	Suspected of damaging the unborn child.
H335	May cause respiratory irritation.
H372	Causes damage to organs through prolonged or repeated exposure.
H412	Harmful to aquatic life with long lasting effects.

### Precautionary statements

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
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.

### Additional advice on labelling

The product is classified and labelled under the EC Directives/hazardous substances laws (GefStoffV).

## SECTION 3: Composition/information on ingredients

### 3.2. Mixtures

#### Hazardous components

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	Classification according to Regulation (EC) No. 1272/2008 [CLP]			
100-42-5	styrene			>= 29 < 50 %
	202-851-5	601-026-00-0		
	Flam. Liq. 3, Repr. 2, Acute Tox. 4, STOT RE 1, Skin Irrit. 2, Eye Irrit. 2; H226 H361d H332 H372 H315 H319			

Full text of H and EUH statements: see section 16.

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

#### General information

Remove contaminated, saturated clothing immediately.

#### After inhalation

Remove affected person from the danger area and lay down. Consult physician if problems persist.

#### After contact with skin

After contact with skin, wash immediately with plenty of water and soap. If skin becomes irritated, seek medical treatment.

#### After contact with eyes

After contact with eye rinse immediately with lot of water at least 5 minutes with open eyelid. Subsequently consult an ophthalmologist.

#### After ingestion

Do NOT induce vomiting. Consult physician.

# Safety Data Sheet

according to Regulation (EC) No 1907/2006

## UP cast resin, transparent

Revision date: 24.08.2018

Product code: 140125

Page 3 of 7

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

The following symptoms may occur: Headache. daze. Dizziness.

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

#### Suitable extinguishing media

Carbon dioxide (CO<sub>2</sub>).  
Extinguishing powder.  
Foam.  
Water spray.

#### Unsuitable extinguishing media

High power water jet.

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

In case of fire may be liberated:

Carbon monoxide

Gases emitted by burning organic materials must always be classified as respiratory poisons.

### 5.3. Advice for firefighters

Use appropriate respiratory protection.

#### Additional information

Fire residue and contaminated firefighting water must be disposed of in accordance with government regulations. Burning causes large quantities of soot.

## SECTION 6: Accidental release measures

### 6.2. Environmental precautions

Do not allow to enter into surface water or drains. Notify the responsible authority when the substance enters open water, the soil, or sewerage system.

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

Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents).

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

#### Advice on safe handling

Provide adequate ventilation as well as local exhaust at critical locations.

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

#### Requirements for storage rooms and vessels

Keep away from sources of ignition - No smoking. Take precautionary measures against static discharges. Usual measures for fire prevention. Keep in a cool, well-ventilated place. Keep receptacles tightly sealed. Protect against the effects of heat and direct sunlight.

#### Further information on storage conditions

Fire rating: B

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

#### Exposure limits (EH40)

CAS No	Substance	ppm	mg/m <sup>3</sup>	fibres/ml	Category	Origin
100-42-5	Styrene	100	430		TWA (8 h)	WEL
		250	1080		STEL (15 min)	WEL

**Safety Data Sheet**

according to Regulation (EC) No 1907/2006

**UP cast resin, transparent**

Revision date: 24.08.2018

Product code: 140125

Page 4 of 7

**8.2. Exposure controls****Appropriate engineering controls**

Do not breathe in vapours. Avoid contact with skin and eyes.

**Protective and hygiene measures**

Take off immediately all contaminated clothing Apply protective skin cream. Wash hands before breaks and after work. Keep away from food stuffs, beverages, and ignitable materials.

**Eye/face protection**

Wear goggles.

**Hand protection**

Wear protective gloves.

Material: NBR (Nitrile rubber). Butyl rubber. FKM (Fluoroelastomer).

Breakthrough time: See information supplied by the manufacturer.

**Respiratory protection**

Respiratory protection necessary at: prolonged action. Insufficient absorption.

**SECTION 9: Physical and chemical properties****9.1. Information on basic physical and chemical properties**

Physical state:	liquid
Colour:	light blue
Odour:	of styrene

**Test method****Changes in the physical state**

Initial boiling point and boiling range:	100 - 200 °C
Flash point:	34 °C DIN EN ISO 1523
Lower explosion limits:	1,1 vol. %
Upper explosion limits:	8 vol. %
Ignition temperature:	> 400 °C DIN 51794
Vapour pressure: (at 20 °C)	650.000 hPa
Density (at 20 °C):	1,13 g/cm <sup>3</sup> ISO 2811
Water solubility: (at 20 °C)	insoluble
Viscosity / dynamic: (at 23 °C)	600 - 800 mPa·s ISO 3219

**9.2. Other information**

The values for vapour pressure, ignition temperature, and explosion limits refer to the solvent/solvent mixture.

**SECTION 10: Stability and reactivity****10.4. Conditions to avoid**

no decomposition when stored and handled properly

**10.5. Incompatible materials**

Heating above the flashpoint and/or spraying or atomising may form ignitable mixtures. reaction with peroxides and other radical formers polymerisation under the action of heat

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

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### UP cast resin, transparent

Revision date: 24.08.2018

Product code: 140125

Page 5 of 7

**ATEmix calculated**

ATE (inhalation aerosol) 3,000 mg/l

**Acute toxicity**

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
100-42-5	styrene				
	oral	LD50 mg/kg	2650	Rat	GESTIS
	inhalation (4 h) vapour	LC50	12 mg/l	Rat	GESTIS
	inhalation aerosol	ATE	1,5 mg/l		

**Irritation and corrosivity**

Irritation to skin, eyes, and mucous membranes.

**Specific effects in experiment on an animal**

The classification was undertaken in accordance with the method of calculation governed by the preparation regulations (1999/45/EC).

**Additional information on tests**

Inhalation causes narcotic effects/intoxication.

## SECTION 12: Ecological information

**12.1. Toxicity**

CAS No	Chemical name					
	Aquatic toxicity	Dose	[h]   [d]	Species	Source	Method
100-42-5	styrene					
	Acute algae toxicity	ErC50 mg/l	0,72	96 h	GESTIS	

**12.3. Bioaccumulative potential****Partition coefficient n-octanol/water**

CAS No	Chemical name	Log Pow
100-42-5	styrene	3,05

**Further information**

Do not let the product enter the groundwater, open water, or the sewerage system.

## SECTION 13: Disposal considerations

**13.1. Waste treatment methods****Advice on disposal**

Dispose of waste according to applicable legislation. e.g. transfer to a suitable incineration plant

**Contaminated packaging**

Contaminated packing must be completely emptied and can be re-used following appropriate cleaning.

## SECTION 14: Transport information

**Land transport (ADR/RID)**

- 14.1. UN number:** UN1866
- 14.2. UN proper shipping name:** Resin solution
- 14.3. Transport hazard class(es):** 3

# Safety Data Sheet

according to Regulation (EC) No 1907/2006

## UP cast resin, transparent

Revision date: 24.08.2018

Product code: 140125

Page 6 of 7

**14.4. Packing group:** III  
 Hazard label: 3



Classification code: F1  
 Special Provisions: 640E  
 Limited quantity: 5 L  
 Transport category: 3  
 Hazard No: 30  
 Tunnel restriction code: D/E

### Other applicable information (land transport)

Special provisions: 640E  
 postal dispatch forbidden  
 E1

### Marine transport (IMDG)

**14.1. UN number:** UN 1866  
**14.2. UN proper shipping name:** RESIN SOLUTION, flammable  
**14.3. Transport hazard class(es):** 3  
**14.4. Packing group:** III  
 EmS: F-E, S-E

### Air transport (ICAO-TI/IATA-DGR)

**14.1. UN number:** UN 1866  
**14.2. UN proper shipping name:** RESIN SOLUTION, flammable  
**14.3. Transport hazard class(es):** 3  
**14.4. Packing group:** III

## SECTION 15: Regulatory information

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

#### National regulatory information

Water contaminating class (D): 2 - clearly water contaminating

#### Additional information

BG code of practice: M023 ("Polyester and epoxy resins") (ZH 1/301) BG code of practice: M054 ("Styrene and formulations containing styrene")

## SECTION 16: Other information

### Relevant H and EUH statements (number and full text)

H226 Flammable liquid and vapour.  
 H315 Causes skin irritation.  
 H319 Causes serious eye irritation.  
 H332 Harmful if inhaled.  
 H335 May cause respiratory irritation.  
 H361d Suspected of damaging the unborn child.  
 H372 Causes damage to organs through prolonged or repeated exposure.  
 H412 Harmful to aquatic life with long lasting effects.

### Further Information

All information, recommendations, and advice on the part of R&G Faserverbundwerkstoffe GmbH are

**Safety Data Sheet**

according to Regulation (EC) No 1907/2006

**UP cast resin, transparent**

Revision date: 24.08.2018

Product code: 140125

Page 7 of 7

published to the best of our knowledge and belief. They are noncommittal and contain neither explicit nor tacit assurance or warranty of particular properties. The values specified for properties are typical figures. Recommendations or advice serve to describe our products and possible applications in a general or exemplary, but not specifically individual manner. In the course of the constant technical advancement and improvement of our products there may be changes to the characteristic values, copy, and diagrams; no specific reference is made to any such change. Owing to our products' wide and highly diverse range of potential applications far beyond any of our attempts to analyse, the customer alone is responsible for examining our products' suitability for the respective processes and purposes and their respective processibility. All and any protective rights and the applicable laws, terms, and conditions must be observed by the buyer or user of our products at their own responsibility. Publication is not a licence and does not intend the violation of any patents.

---

*(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)*