

Safety Data Sheet

according to Regulation (EC) No. 1907/2006

UP cast resin, transparent

Print date: 21.09.2011

Product code: 140125-X

Page 1 of 7

1. Identification of the substance/mixture and of the company/undertaking

Identification of the substance or mixture

UP cast resin, transparent

Use of the substance/mixture

unsaturated polyester, preaccelerated
binder

Company/undertaking identification

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: +49-7157-530460
Telefax: +49-7157-530470
e-mail: info@r-g.de
Internet: www.r-g.de
Responsible Department: Management
Emergency telephone: poison information centre

2. Hazards identification

Classification

Indications of danger : Harmful

R-phrases:

Flammable.

Harmful by inhalation.

Irritating to eyes.

Irritating to skin.

GHS:

Hazard categories:

Flammable liquid: Flam. Liq. 3

Skin corrosion/irritation: Skin Irrit. 2

Serious eye damage/eye irritation: Eye Irrit. 2

Hazard Statements:

Flammable liquid and vapour.

Causes skin irritation.

Causes serious eye irritation.

3. Composition/information on ingredients

Chemical characterization (Mixture)

Hazardous components

EC No.	CAS No.	Chemical name	Quantity
202-851-5	100-42-5	styrene	33,8 %
		Xn, Xi R10-20-36/38	
		Flam. Liq. 3, Acute Tox. 4, Eye Irrit. 2, Skin Irrit. 2; H226 H332 H319 H315	

Full text of R- and H-phrases: see section 16.

Safety Data Sheet

according to Regulation (EC) No. 1907/2006

UP cast resin, transparent

Print date: 21.09.2011

Product code: 140125-X

Page 2 of 7

4. First aid measures

General information

Take off immediately all contaminated clothing

After inhalation

Take the injured person out of the danger area and lay him/her down. Consult physician if problems persist.

After contact with skin

After contact with skin, wash immediately with soap and plenty of water. 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.

Advice to doctor

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

5. Fire-fighting measures

Suitable extinguishing media

Carbon dioxide (CO₂).
Extinguishing powder.
Foam.
Water fog.

Extinguishing media which must not be used for safety reasons

High power water jet.

Special exposure hazards arising from substance or mixture itself, combustion products, resulting gases

In case of fire may form:
Carbon monoxide.
Gases emitted by burning organic materials must always be classified as respiratory poisons.

Special protective equipment for fire-fighters

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.

6. Accidental release measures

Environmental precautions

Do not empty into drains or the aquatic environment. Notify the responsible authority when the substance enters open water, the soil, or sewerage system.

Methods for cleaning up/taking up

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

7. Handling and storage

Handling

Advice on safe handling

Provide for sufficient ventilation and punctiform suction at critical points.

Safety Data Sheet

according to Regulation (EC) No. 1907/2006

UP cast resin, transparent

Print date: 21.09.2011

Product code: 140125-X

Page 3 of 7

Storage

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

Storageclass (D): 3A

8. Exposure controls/personal protection

Exposure limit values

Exposure limits (EH40)

CAS No.	Chemical name	ml/m ³	mg/m ³	F/ml	Category	Origin
100-42-5	Styrene	100	430		TWA (8 h)	WEL
		250	1080		STEL (15 min)	WEL

Exposure controls

Occupational exposure 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 when done working with material; at breaks, lunch, shift changes, etc." Keep away from food stuffs, beverages, and ignitable materials.

Respiratory protection

breathing protection indicated: prolonged action. Insufficient absorption.

Hand protection

Wear protective gloves.

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

Breakthrough time: See information supplied by the manufacturer.

Eye protection

Wear goggles.

9. Physical and chemical properties

General information

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

Important health, safety and environmental information

Test method

Changes in the physical state

Boiling point: 100 - 200 °C
Flash point: 34 °C DIN EN ISO 1523
Lower explosion limits: 1,1 vol. %
Upper explosion limits: 8 vol. %

Safety Data Sheet

according to Regulation (EC) No. 1907/2006

UP cast resin, transparent

Print date: 21.09.2011

Product code: 140125-X

Page 4 of 7

Vapour pressure: (at 20 °C)	650.000 hPa
Density (at 20 °C):	1,13 g/cm ³ ISO 2811
Water solubility: (at 20 °C)	insoluble
Viscosity / dynamic: (at 23 °C)	600 - 800 mPa·s ISO 3219

Other information

Ignition temperature: > 400 °C DIN 51794

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

10. Stability and reactivity

Conditions to avoid

no decomposition when stored and handled properly

Materials to avoid

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

11. Toxicological information

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).

Irritation and corrosivity

Irritation to skin, eyes, and mucous membranes.

Additional information on tests

Inhalation causes narcotic effects/intoxication.

12. Ecological information

Further information

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

13. Disposal considerations

Advice on disposal

Dispose of waste according to applicable local, state, and federal regulations. e.g. transfer to a suitable incineration plant

Contaminated packaging

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

14. Transport information

Land transport (ADR/RID)

UN number:	1866
ADR/RID class:	3
Warning plate	
Hazard-no.:	30
Hazard label:	3

Safety Data Sheet

according to Regulation (EC) No. 1907/2006

UP cast resin, transparent

Print date: 21.09.2011

Product code: 140125-X

Page 5 of 7



ADR/RID packing group: III

Description of the goods

HARZLÖSUNG, entzündbar

Other applicable information (land transport)

Special provisions: 640E
postal dispatch forbidden

Marine transport

UN number: 1866
IMDG code: 3
IMDG packing group: III
EmS: F-E, S-E

Description of the goods

RESIN SOLUTION, flammable

Air transport

UN/ID number: 1866
ICAO/IATA-DGR: 3
ICAO packing group: III

Description of the goods

RESIN SOLUTION, flammable

15. Regulatory information

Labelling

Danger symbols: Xn - Harmful



Xn - Harmful

R phrases

10 Flammable.
20 Harmful by inhalation.
36 Irritating to eyes.
38 Irritating to skin.

S phrases

24 Avoid contact with skin.
26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
51 Use only in well-ventilated areas.

Additional advice on labelling

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

GHS labelling

Signal word: Warning
Pictograms: flame; exclamation mark

Safety Data Sheet

according to Regulation (EC) No. 1907/2006

UP cast resin, transparent

Print date: 21.09.2011

Product code: 140125-X

Page 6 of 7



Hazard statements

- | | |
|------|--------------------------------|
| H226 | Flammable liquid and vapour. |
| H315 | Causes skin irritation. |
| H319 | Causes serious eye irritation. |

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. |
| P264 | Wash ... thoroughly after handling. |
| P280 | Wear protective gloves/protective clothing/eye protection/face protection. |
| P303+P361+P353 | IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. |
| P321 | Specific treatment (see ... on this label). |
| P332+P313 | If skin irritation occurs: Get medical advice/attention. |
| P352 | Wash with plenty of soap and water. |
| P305+P351+P338 | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. |
| P337+P313 | If eye irritation persists: Get medical advice/attention. |
| P370+P378 | In case of fire: Use ... for extinction. |
| P403+P235 | Store in a well-ventilated place. Keep cool. |
| P501 | Dispose of contents/container to |

National regulatory information

Water contaminating class (D): 2 - 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")

16. Other information

Full text of R-phrases referred to under sections 2 and 3

- | | |
|-------|------------------------------|
| 10 | Flammable. |
| 20 | Harmful by inhalation. |
| 36 | Irritating to eyes. |
| 36/38 | Irritating to eyes and skin. |
| 38 | Irritating to skin. |

Full text of H-Statements referred to under sections 2 and 3

- | | |
|------|--------------------------------|
| H226 | Flammable liquid and vapour. |
| H315 | Causes skin irritation. |
| H319 | Causes serious eye irritation. |
| H332 | Harmful if inhaled. |

Further Information

All information, recommendations, and advice on the part of R&G Faserverbundwerkstoffe GmbH are published to the best of our knowledge and belief. They are noncommittal and contain neither explicit

Safety Data Sheet

according to Regulation (EC) No. 1907/2006

UP cast resin, transparent

Print date: 21.09.2011

Product code: 140125-X

Page 7 of 7

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.)