according to Regulation (EC) No. 1907/2006

Flexibilizer (130140-X)

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

Identification of the substance or mixture

Flexibilizer (130140-X)

Use of the substance/mixture

epoxy resin systems

hardener

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: Irritant

R-phrases:

Irritating to eyes and skin.

May cause sensitization by skin contact.

GHS: This substance is not classified as dangerous according to Regulation (EC) No. 1272/2008.

3. Composition/information on ingredients

Chemical characterization (substance)

polyaminoamide

Hazardous components

EC No.	CAS No.	Chemical name	Quantity
		Classification	
		GHS classification	
	26142-30-3	Polypropyleneglycol diglycidyl ether	100 %
		Xi R36/38-43	
1			

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

4. First aid measures

General information

Change contaminated clothing.

After inhalation

Following inhalation: Move victim to fresh air. Consult physician. If victim is at risk of losing consciousness, position and transport on their side.

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After contact with skin

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

After contact with eves

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

After ingestion

Rinse mouth immediately and drink large quantities of water. Consult physician.

5. Fire-fighting measures

Suitable extinguishing media

Carbon dioxide (CO2).

Extinguishing powder.

Water fog.

Fight major fires with a water spray jet or alcohol-resistant foam.

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.

Under certain conditions traces of toxic substances cannot be ruled out, e.g.: Chlorhydric gas (HCl).

Special protective equipment for fire-fighters

Wear a protective full body suit. Wear breathing apparatus with own air supply.

Additional information

Contaminated fire-fighting water must be collected separately. Contaminated fire-fighting water must not get into the sewerage network. Fire residue and contaminated firefighting water must be disposed of in accordance with government regulations.

6. Accidental release measures

Personal precautions

Wear personal protection equipment. Keep unprotected persons at a safe distance.

Environmental precautions

Do not empty into drains or the aquatic environment. Do not allow to enter the soil or subsoil.

Methods for cleaning up/taking up

Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents). Dispose of contaminated material as § 13 waste.

7. Handling and storage

Handling

Advice on safe handling

Provide for sufficient ventilation and punctiform suction at critical points.

Advice on protection against fire and explosion

No special measures are necessary.

Storage

Requirements for storage rooms and vessels

Ventilate adequately storage and work rooms. Employ reliable measures to prevent the product from entering the soil.

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Further information on storage conditions

Keep in well sealed receptacles at a cool, dry location.

Storageclass (D): 10

8. Exposure controls/personal protection

Exposure limit values

Exposure controls

Protective and hygiene measures

Take off immediately all contaminated clothing Avoid contact with skin and eyes. "Wash hands when done working with material; at breaks, lunch, shift changes, etc." Do not breathe in gases/vapours/aerosols.

Respiratory protection

Not necessary when the room is well ventilated.

Hand protection

Wear protective gloves. (EN 374)

Material: NBR (Nitrile rubber). Butyl rubber.

Breakthrough time: See information supplied by the manufacturer.

Eye protection

Tightly sealed safety glasses. (EN 166)

Skin protection

Wear protective clothing. (EN 340)

9. Physical and chemical properties

General information

Physical state: liquid
Colour: colourless

Odour: weak characteristic

Important health, safety and environmental information

Test method

Changes in the physical state

Boiling point: > 200 °C DIN 53171
Flash point: >100 °C ISO 2719

Vapour pressure: < 0,1 hPa

(at 20 °C)

Density (at 20 °C): ca. 1,06 g/cm³ DIN 53217

Water solubility: not miscible / slightly soluble

Viscosity / dynamic: 50 mPa·s ISO 9371

(at 25 °C)

Other information

Ignition temperature: > 300 °C DIN 51794

10. Stability and reactivity

Conditions to avoid

no decomposition when stored and handled properly

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Materials to avoid

strong exothermal reaction with: alkalis and numerous organic substance categories like alcohols and

polymerisation under the action of heat

Hazardous decomposition products

Gas / vapours, irritant.

11. Toxicological information

Specific effects in experiment on an animal

oral: LD 50 > 4.000 mg/kg rat dermal: LD 50 > 2.000 mg/kg rat

Irritation and corrosivity

Irritation to skin, eyes, and mucous membranes.

Sensitizing effects

Contact may cause skin sensitisation.

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 Waste key numbers are assigned according to the European Waste Catalogue (EWC) depending on the sector and process type.

Contaminated packaging

Dispose of waste according to applicable local, state, and federal regulations.

14. Transport information

Land transport (ADR/RID)

ADR/RID class: Not a hazardous material with respect to transportation regulations.

Other applicable information (land transport)

No dangerous good in sense of this transport regulation.

Inland waterways transport

Other applicable information (inland waterways transport)

No dangerous good in sense of this transport regulation.

Marine transport

Other applicable information (marine transport)

No dangerous good in sense of this transport regulation.

Air transport

Other applicable information (air transport)

No dangerous good in sense of this transport regulation.

15. Regulatory information

Labelling

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Danger symbols: Xi - Irritant



Xi - Irritant

R phrases

36/38 Irritating to eyes and skin.

43 May cause sensitization by skin contact.

S phrases

24 Avoid contact with skin.

26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

This material and its container must be disposed of as hazardous waste.

37/39 Wear suitable gloves and eye/face protection.

Additional advice on labelling

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

GHS labelling

EU regulatory information

Additional information

Contains epoxy constituents. See information supplied by the manufacturer.

National regulatory information

Water contaminating class (D): 1 - slightly water contaminating

Additional information

APME document: "Epoxidharze und Härter (Toxikologie, Arbeitssicherheit, Umwelt)" ("Epoxy resins and hardeners (toxicology, work safety, environment)")

16. Other information

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

36/38 Irritating to eyes and skin.

43 May cause sensitization by skin contact.

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 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.