



Safety Data Sheet

according to Regulation (EU) No. 1907/2006

Metal adhesive E, component A/resin (158104-X, 158105-X)

Print date : 06.01.2008

Product code : 158104-X

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

Identification of the substance or preparation

Metal adhesive E, component A/resin (158104-X, 158105-X)

Use of the substance/preparation

epoxy resin systems

Company/undertaking identification

Company name : R&G Faserverbundwerkstoffe GmbH
 Composite Technology
 Place : D-71111 Waldenbuch
 Telephone : +49-7157-530460
 Telefax : +49-7157-530470
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 Internet : www.r-g.de
 Inquiry office : business management
 Emergency telephone : poison information centre

2. Hazards identification

Classification

Indications of danger : Irritant, Dangerous for the environment

R-phrases :

Irritating to eyes.

Irritating to skin.

May cause sensitization by skin contact.

Toxic to aquatic organisms.

May cause long-term adverse effects in the aquatic environment.

3. Composition/information on ingredients

Chemical characterization (preparation)

Modifiziertes Epoxidharz

Hazardous components

EC-No.	CAS-No.	Chemical name	Quantity	Classification
500-033-5	25068-38-6	epoxy resin (number average molecular weight \leq 700), reaction product: bisphenol-A-(epichlorhydrin)	> 50%	Xi, N R36/38-43-51-53
240-260-4	16096-31-4	1,6-Hexandioldiglycidylether	< 10%	Xi R36-38-43-52-53

Full text of each relevant R phrase can be found in heading 16.

Further Information

constituents containing epoxy

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.

After contact with skin

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



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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

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 arriving from substance or preparation 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

Employ reliable measures to prevent the product from entering the soil.

Further information on storage conditions

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

Storageclass (VCI) :

10

8. Exposure controls/personal protection



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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."

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 : viscous, liquid
Colour : light yellow
Odour : weak, characteristic

Important health, safety and environmental information

Changes in the physical state

	Test method
Boiling point :	> 200 °C DIN 53171
Flash point :	> 200 °C ISO 2719
Vapour pressure : (at 20 °C)	< 0,1 hPa
Density (at 20 °C) :	1,14-1,16 g/cm ³ DIN 53217
Water solubility :	not miscible / slightly soluble
Viscosity / dynamic : (at 25 °C)	18.000 - 22.000 mPa·s ISO 9371

Other information

Ignition temperature : 460 °C DIN 51794

10. Stability and reactivity

Conditions to avoid

no decomposition when stored and handled properly

Hazardous decomposition products

Violent reaction with: alkalis and numerous organic substance categories like alcohols and amines
polymerisation under the action of heat Thermal decomposition can lead to the escape of irritating gases and vapors.

11. Toxicological information

Specific effects in experiment on an animal

LD/LC50: 25068-38-6 Bisphenol-A-Epichlorhydrinharze MG <= 700
oral: 11400 mg/kg (rat) LD50
dermal: >2000 mg/kg (rabbit) LD50



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Corrosive and irritant effects

Irritation to skin, eyes, and mucous membranes.

Sensitising effects

Contact may cause skin sensitisation.

12. Ecological information

Ecotoxicity

Oncorhynchus mykiss: LC50 (96h) 1,5-7,7 mg/l

Daphnia magna: EC50 (24h) 1,1-3,6 mg/l

Grünalge: EC50 (96h) 220 mg/l

Persistence and degradability

Product is biodegradable with difficulty.

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)

UN number : 3082

ADR/RID class : 9

Warning plate

Hazard-no. : 90

Hazard label : 9

ADR/RID packing group : III

Description of the goods

3082 Umweltgefährdender Stoff, flüssig, N.A.G. (Epoxidderivate)

Marine transport

UN number : 3082

IMDG code : 9

Marine pollutant : yes

Hazard label : 9 + MP

IMDG packing group : III

EmS : F-A, S-F

Description of the goods

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Epoxide derivatives)

Air transport

UN/ID number : 3082

ICAO/IATA-DGR : 9

Hazard label : 9

ICAO packing group : III



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Description of the goods

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Epoxide derivatives)

15. Regulatory information**Labelling**

Danger symbols : Xi - Irritant; N - Dangerous for the environment

Hazardous component(s) to be indicated on label

Bisphenol A-epichlorohydrin resin mw<= 700

R phrases

- 36 Irritating to eyes.
- 38 Irritating to skin.
- 43 May cause sensitization by skin contact.
- 51 Toxic to aquatic organisms.
- 53 May cause long-term adverse effects in the aquatic environment.

S phrases

- 24 Avoid contact with skin.
- 28 After contact with skin, wash immediately with plenty of Wasser und Seife.
- 37 Wear suitable gloves.
- 39 Wear eye/face protection.
- 60 This material and its container must be disposed of as hazardous waste.
- 61 Avoid release to the environment. Refer to special instructions / Safety data sheets.

Special labelling for certain preparations

Contains epoxy constituents. See information supplied by the manufacturer.

Additional advice on labelling

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

National regulatory information

Water contaminating class : 2 - water contaminating

Additional information

APME document: "Epoxidharze und Härter (Toxikologie, Arbeitssicherheit, Umwelt)" ("Epoxy resins and hardeners (toxicology, work safety, environment)")
BG code of practice: M023 ("Polyester and epoxy resins") (ZH 1/301)

16. Other information**Full text of R-phrases referred to under sections 2 and 3**

- 36 Irritating to eyes.
- 36/38 Irritating to eyes and skin.
- 38 Irritating to skin.
- 43 May cause sensitization by skin contact.
- 51 Toxic to aquatic organisms.
- 52 Harmful to aquatic organisms.
- 53 May cause long-term adverse effects in the aquatic environment.

Other data



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