

Safety Data Sheet

according to Regulation (EC) No 1907/2006

Active diluent EPD-BD (130135-X)

Print date: 16.03.2016

Product code: 130135

Page 1 of 6

SECTION 1: Identification of the substance/mixture and of the company/undertaking**1.1. Product identifier**

Active diluent EPD-BD (130135-X)

CAS No: 2425-79-8
Index No: 603-072-00-7
EC No: 219-371-7

1.2. Relevant identified uses of the substance or mixture and uses advised against**Use of the substance/mixture**

epoxy resin systems, reactive diluent

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:

Acute toxicity: Acute Tox. 4

Acute toxicity: Acute Tox. 4

Serious eye damage/eye irritation: Eye Irrit. 2

Skin corrosion/irritation: Skin Irrit. 2

Respiratory or skin sensitisation: Skin Sens. 1

Hazard Statements:

Harmful if inhaled.

Harmful in contact with skin.

Causes serious eye irritation.

Causes skin irritation.

May cause an allergic skin reaction.

2.2. Label elements**Regulation (EC) No. 1272/2008****Hazard components for labelling**

1,4-bis(2,3 epoxypropoxy)butane, butanedioldiglycidyl ether

Signal word: Danger**Pictograms:**

Safety Data Sheet

according to Regulation (EC) No 1907/2006

Active diluent EPD-BD (130135-X)

Print date: 16.03.2016

Product code: 130135

Page 2 of 6

Hazard statements

H302+H312+H332 Harmful if swallowed, in contact with skin or if inhaled.
 H318 Causes serious eye damage.
 H315 Causes skin irritation.
 H317 May cause an allergic skin reaction.
 H412 Harmful to aquatic life with long lasting effects.

Precautionary statements

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
 P280 Wear protective gloves/protective clothing/eye protection/face protection.
 P310 Immediately call a POISON CENTER/doctor.
 P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 P501 Dispose of contents/container to Dispose of waste according to applicable legislation.

Additional advice on labelling

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

2.3. Other hazards

Constituents contain epoxy. Observe the manufacturer's instructions.
 The residual content of epichlorohydrin complies with the APME recommendations for modified epoxy resins. < 20 ppm (0,002%)

SECTION 3: Composition/information on ingredients

3.1. Substances

Hazardous components

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	Classification according to Regulation (EC) No. 1272/2008 [CLP]			
2425-79-8	1,4-bis(2,3 epoxypropoxy)butane, butanedioldiglycidyl ether			100 %
	219-371-7	603-072-00-7		
	Acute Tox. 4, Acute Tox. 4, Eye Irrit. 2, Skin Irrit. 2, Skin Sens. 1; H332 H312 H319 H315 H317			

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 affected person from the danger area and lay down. Remove contaminated, saturated clothing immediately. Symptoms of poisoning may develop several hours following exposure. Victim should be under medical observation for at least 48 hours after exposure.

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 plenty of water and soap. If skin becomes irritated, seek medical treatment.

After contact with eyes

In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist.

After ingestion

Seek medical advice immediately.

Safety Data Sheet

according to Regulation (EC) No 1907/2006

Active diluent EPD-BD (130135-X)

Print date: 16.03.2016

Product code: 130135

Page 3 of 6

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Carbon dioxide (CO₂).
Extinguishing powder.
Water spray.
Fight major fires with a water spray jet or alcohol-resistant foam.

Unsuitable extinguishing media

High power water jet.

5.2. Special hazards arising from the substance or mixture

When heating up or in the fire case formation of poisonous gasses possible.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

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

6.2. Environmental precautions

Do not allow to enter into surface water or drains. Do not allow to enter groundwater. Do not allow to enter the soil or subsoil.

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).
Dispose of contaminated material as § 13 waste.

6.4. Reference to other sections

Carefully cleaning scene of an accident.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

Provide adequate ventilation/vapour extraction at the workplace.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep/Store only in original container. Provide for retaining containers, eg. floor pan without outflow.

Advice on storage compatibility

Store separately from foodstuffs.

Further information on storage conditions

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

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.2. Exposure controls

Protective and hygiene measures

Take off immediately all contaminated clothing. Avoid contact with skin and eyes. After work and before breaks for thorough skin cleansing. Keep away from food, drink and animal feeding stuffs.

Eye/face protection

Tightly sealed safety glasses. (EN 166)

Hand protection

Wear protective gloves. (EN 374)

Safety Data Sheet

according to Regulation (EC) No 1907/2006

Active diluent EPD-BD (130135-X)

Print date: 16.03.2016

Product code: 130135

Page 4 of 6

Material: NBR (Nitrile rubber). Butyl rubber.

Breakthrough time: See information supplied by the manufacturer.

Skin protection

Wear protective clothing. (EN 340)

Respiratory protection

In case of inadequate ventilation wear respiratory protection.

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

Physical state:	liquid
Colour:	clear
Odour:	characteristic weak

Test method**Changes in the physical state**

Initial boiling point and boiling range:	266 °C
Flash point:	112 °C DIN 51758
Vapour pressure: (at 20 °C)	< 0,1 hPa
Density (at 20 °C):	1,11 g/cm ³ ISO 2811-2
Water solubility: (at 20 °C)	0,8 g/L
Viscosity / dynamic: (at 25 °C)	15-25 mPa·s ISO 9371

SECTION 10: Stability and reactivity**10.1. Reactivity**

No further relevant information

10.2. Chemical stability

no decomposition when stored and handled properly

10.3. Possibility of hazardous reactions

Response: Oxidising agent, Alkali (lye), Amines, Acids

10.4. Conditions to avoid

No further relevant information

10.5. Incompatible materials

Strong oxidizing agents.

10.6. Hazardous decomposition products

no decomposition when stored and handled properly

SECTION 11: Toxicological information**11.1. Information on toxicological effects****Toxicokinetics, metabolism and distribution**

Harmful if swallowed, in contact with skin or if inhaled.

Acute toxicity

2425-79-8 1,4-bis(2,3 epoxypropoxy)butane, butanedioldiglycidyl ether

oral: 1.410 - 3.000 mg/kg (rat) LD50

dermal: 1.500 mg/kg (rabbit) LD50

Safety Data Sheet

according to Regulation (EC) No 1907/2006

Active diluent EPD-BD (130135-X)

Print date: 16.03.2016

Product code: 130135

Page 5 of 6

CAS No	Chemical name				
	Exposure routes	Method	Dose	Species	Source
2425-79-8	1,4-bis(2,3 epoxypropoxy)butane, butanedioldiglycidyl ether				
	dermal	ATE	1100 mg/kg		
	inhalative vapour	ATE	11 mg/l		
	inhalative aerosol	ATE	1,5 mg/l		

Irritation and corrosivity

Causes skin irritation. Causes serious eye damage.

Sensitising effects

May cause an allergic skin reaction.

Specific effects in experiment on an animal

Irritant effect on the eye, mild irritation to the skin (rabbit).

SECTION 12: Ecological information

12.2. Persistence and degradability

No further relevant information

12.3. Bioaccumulative potential

No further relevant information

12.4. Mobility in soil

No further relevant information

12.5. Results of PBT and vPvB assessment

not applicable

12.6. Other adverse effects

No further relevant information

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

Waste disposal number of waste from residues/unused products

080111 WASTES FROM THE MANUFACTURE, FORMULATION, SUPPLY AND USE (MFSU) OF COATINGS (PAINTS, VARNISHES AND VITREOUS ENAMELS), ADHESIVES, SEALANTS AND PRINTING INKS; wastes from MFSU and removal of paint and varnish; waste paint and varnish containing organic solvents or other hazardous substances
Classified as hazardous waste.

Waste disposal number of used product

080111 WASTES FROM THE MANUFACTURE, FORMULATION, SUPPLY AND USE (MFSU) OF COATINGS (PAINTS, VARNISHES AND VITREOUS ENAMELS), ADHESIVES, SEALANTS AND PRINTING INKS; wastes from MFSU and removal of paint and varnish; waste paint and varnish containing organic solvents or other hazardous substances
Classified as hazardous waste.

Safety Data Sheet

according to Regulation (EC) No 1907/2006

Active diluent EPD-BD (130135-X)

Print date: 16.03.2016

Product code: 130135

Page 6 of 6

Waste disposal number of contaminated packaging

080111 WASTES FROM THE MANUFACTURE, FORMULATION, SUPPLY AND USE (MFSU) OF COATINGS (PAINTS, VARNISHES AND VITREOUS ENAMELS), ADHESIVES, SEALANTS AND PRINTING INKS; wastes from MFSU and removal of paint and varnish; waste paint and varnish containing organic solvents or other hazardous substances
Classified as hazardous waste.

Contaminated packaging

Dispose of waste according to applicable legislation.

SECTION 14: Transport information**Land transport (ADR/RID)**

14.2. UN proper shipping name: National und International: No dangerous good in sense of these transport regulations.

Marine transport (IMDG)

14.1. UN number: UN 9999
Marine pollutant: no

SECTION 15: Regulatory information**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture****EU regulatory information****Additional information**

Contains epoxy constituents. See information supplied by the manufacturer.

National regulatory information

Water contaminating class (D): 2 - water contaminating

SECTION 16: Other information**Relevant H and EUH statements (number and full text)**

H302+H312+H332 Harmful if swallowed, in contact with skin or if inhaled.
H312 Harmful in contact with skin.
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.
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 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.