

## Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 16.08.2023

Version number 1

Revision: 16.08.2023

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

#### 1.1 Product identifier

Trade name **EPOXY CONDUCTIVE VDE KOMP B**

Article number: 216703

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

No further relevant information available.

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

##### Manufacturer/Supplier:

Remmers GmbH  
Bernhard-Remmers-Str. 13  
D-49624 Lönigen / Germany  
Tel.: +49(0)5432/83-0  
Fax: +49(0)5432/3985

Remmers (UK) Limited  
Unit 4 , Lloyds Court  
Manor Royal, Crawley – West Sussex RH10 9QU  
fon +44 (0) 1293 594 010  
fax +44 (0) 1293 594 037

##### Information department:

Product Safety department: Phone: +44 (0) 1293 594 010  
Email: sales@remmers.co.ukk

#### 1.4 Emergency telephone number:

National Poisons Information Service (NPIS):  
In England and Wales: NHS 111 - dial 111  
In Scotland: NHS 24 - dial 111

24h-Transport Emergency Contact Phone Number:  
within USA and Canada: 1-800-424-9300  
outside USA and Canada: 001-703-527-3887

### SECTION 2: Hazards identification

#### 2.1 Classification of the substance or mixture

##### Classification according to Regulation (EC) No 1272/2008

Skin Irrit. 2            H315 Causes skin irritation.  
Eye Irrit. 2            H319 Causes serious eye irritation.  
Skin Sens. 1            H317 May cause an allergic skin reaction.  
Aquatic Chronic 2    H411 Toxic to aquatic life with long lasting effects.

#### 2.2 Label elements

##### Labelling according to Regulation (EC) No 1272/2008

The product is classified and labelled according to the GB CLP regulation.

##### Hazard pictograms



GHS07    GHS09

Signal word Warning

##### Hazard-determining components of labelling:

reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight ≤ 700)  
1,6-Bis(2,3-epoxypropoxy)hexan  
bisphenol F-(epichlorhydrin); epoxy resin(number average molecular weight<700)

##### Hazard statements

H315 Causes skin irritation.

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H319 Causes serious eye irritation.

H317 May cause an allergic skin reaction.

H411 Toxic to aquatic life with long lasting effects.

**Precautionary statements**

P261 Avoid breathing mist/vapours/spray.

P264 Wash thoroughly after handling.

P273 Avoid release to the environment.

P280 Wear protective gloves / eye protection / face protection.

P333+P313 If skin irritation or rash occurs: Get medical advice/attention.

P391 Collect spillage.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

**Additional information:**

EUH205 Contains epoxy constituents. May produce an allergic reaction.

**2.3 Other hazards****Results of PBT and vPvB assessment****PBT:** Not applicable.**vPvB:** Not applicable.**SECTION 3: Composition/information on ingredients****3.2 Mixtures****Description:** Mixture of the substances listed below with harmless additions.

<b>Dangerous components [% w/w]:</b>		
CAS: 25068-38-6 NLP: 500-033-5 Index number: 603-074-00-8 Reg.nr.: 01-2119456619-26-XXXX	reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight $\leq$ 700) ----- Aquatic Chronic 2, H411; Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317, EUH205 Specific concentration limits: Skin Irrit. 2; H315: C $\geq$ 5 % Eye Irrit. 2; H319: C $\geq$ 5 %	$\geq$ 50- $\leq$ 70%
CAS: 28064-14-4 NLP: 500-006-8 Reg.nr.: 01-2119454392-40-XXXX	bisphenol F-(epichlorhydrin); epoxy resin(number average molecular weight<700) ----- Aquatic Chronic 2, H411; Skin Irrit. 2, H315; Skin Sens. 1, H317	$\geq$ 20-<25%
CAS: 933999-84-9 EC number: 618-939-5 Reg.nr.: 01-2119463471-41-XXXX	Reaction products of hexane-1,6-diol with 2-(chloromethyl)oxirane ----- Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317; Aquatic Chronic 3, H412	$\geq$ 20-<25%

**Additional information** For the wording of the listed hazard phrases refer to section 16.**SECTION 4: First aid measures****4.1 Description of first aid measures****After inhalation**

Supply fresh air and call for doctor for safety reasons.

In case of unconsciousness bring patient into stable side position for transport.

**After skin contact** Wash immediately with water and soap and rinse thoroughly.**After eye contact**

Rinse opened eye for several minutes under running water. If symptoms persist, consult doctor.

**After swallowing** Seek immediate medical advice.**4.2 Most important symptoms and effects, both acute and delayed**

No further relevant information available.

**4.3 Indication of any immediate medical attention and special treatment needed**

No further relevant information available.

**SECTION 5: Firefighting measures****5.1 Extinguishing media****Suitable extinguishing agents** Use fire fighting measures that suit the environment.**5.2 Special hazards arising from the substance or mixture** No further relevant information available.

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**5.3 Advice for firefighters****Protective equipment:** No special measures required.\* **SECTION 6: Accidental release measures****6.1 Personal precautions, protective equipment and emergency procedures**

Keep people at a distance and stay on the windward side.

**6.2 Environmental precautions:**

Do not allow product to reach sewage system or water bodies.

Inform responsible authorities in case product reaches bodies of water or sewage system.

**6.3 Methods and material for containment and cleaning up:**

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Dispose of contaminated material as waste according to item 13.

Ensure adequate ventilation.

**6.4 Reference to other sections**

See Section 7 for information on safe handling

See Section 8 for information on personal protection equipment.

See Section 13 for information on disposal.

\* **SECTION 7: Handling and storage****7.1 Precautions for safe handling**

Ensure good ventilation/exhaust in workplaces.

Avoid the formation of aerosols.

**7.2 Conditions for safe storage, including any incompatibilities****Storage****Requirements to be met by storerooms and containers:** No special requirements.**Further information about storage conditions:** Keep container tightly closed.**SECTION 8: Exposure controls/personal protection****8.1 Control parameters****Components with limit values that require monitoring at the workplace:**

The product does not contain any relevant quantities of materials with limit values that have to be monitored at the workplace.

**Additional information:** The lists that were valid during compilation were used as a basis.**8.2 Exposure controls****Appropriate engineering controls** No further data; see item 7.**Individual protective measures, such as personal protective equipment****General protective and hygienic measures**

Keep away from food, beverages and animal feed.

Immediately remove soiled, saturated clothing.

Wash hands before pauses and after work.

Avoid contact with eyes and skin.

The following indication regarding the personal protective equipment are to be considered as suggestions. The selection of the necessary personal protective equipment is to be evaluated by the employer depending on the types of operations and the local circumstances. If a risk assessment on-site shows that there is no risk for employees, the personal protective equipment is not required or the amount of the PPE can be adapted accordingly.

**Respiratory equipment:**

In case of brief exposure or low pollution load, use respiratory protection equipment with filter. In case of intensive or longer exposure, use self-contained respiratory protection equipment.

**Hand protection**

Protective gloves.

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

**Material of gloves**

Nitrile rubber, NBR

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

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**Penetration time of glove material**

Break through time: max. 240 min (DIN EN 374).

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

**Eye/face protection** Tightly sealed safety glasses.**SECTION 9: Physical and chemical properties****9.1 Information on basic physical and chemical properties****General Information**

<b>Physical state</b>	Fluid
<b>Colour:</b>	Yellowish
<b>Odour:</b>	Aromatic
<b>Odour threshold:</b>	Not determined.
<b>Melting point/freezing point:</b>	Not determined
<b>Boiling point or initial boiling point and boiling range</b>	Not determined
<b>Flammability</b>	Not applicable.
<b>Lower and upper explosion limit</b>	
<b>Lower:</b>	Not determined.
<b>Upper:</b>	Not determined.
<b>Flash point:</b>	>100 °C
<b>Ignition temperature:</b>	not applicable
<b>Decomposition temperature:</b>	Not determined.
<b>pH at 20 °C</b>	7
<b>Viscosity:</b>	
<b>Kinematic viscosity dynamic at 20 °C:</b>	Not determined. 750 mPas
<b>Solubility</b>	
<b>Water:</b>	Not miscible or difficult to mix
<b>Partition coefficient n-octanol/water (log value)</b>	Not determined.
<b>Vapour pressure:</b>	Not determined.
<b>Density and/or relative density</b>	
<b>Density at 20 °C:</b>	1.15 g/cm <sup>3</sup>
<b>Relative density</b>	Not determined.
<b>Vapour density</b>	Not determined.

**9.2 Other information**

<b>Appearance:</b>	
<b>Form:</b>	Liquid
<b>Important information on protection of health and environment, and on safety.</b>	
<b>Explosive properties:</b>	Product is not explosive.
<b>Solvent separation test</b>	< 3 %
<b>VOC EU</b>	0.0 g/l
<b>Change in condition</b>	
<b>Evaporation rate</b>	Not determined.

**Information with regard to physical hazard classes**

<b>Explosives</b>	Void
<b>Flammable gases</b>	Void
<b>Aerosols</b>	Void
<b>Oxidising gases</b>	Void
<b>Gases under pressure</b>	Void
<b>Flammable liquids</b>	Void
<b>Flammable solids</b>	Void
<b>Self-reactive substances and mixtures</b>	Void
<b>Pyrophoric liquids</b>	Void
<b>Pyrophoric solids</b>	Void

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<b>Self-heating substances and mixtures</b>	Void
<b>Substances and mixtures, which emit flammable gases in contact with water</b>	Void
<b>Oxidising liquids</b>	Void
<b>Oxidising solids</b>	Void
<b>Organic peroxides</b>	Void
<b>Corrosive to metals</b>	Void
<b>Desensitised explosives</b>	Void

## SECTION 10: Stability and reactivity

**10.1 Reactivity** No further relevant information available.

### 10.2 Chemical stability

**Thermal decomposition / conditions to be avoided:**

No decomposition if used according to specifications.

**10.3 Possibility of hazardous reactions** No dangerous reactions known

**10.4 Conditions to avoid** No further relevant information available.

**10.5 Incompatible materials:** No further relevant information available.

**10.6 Hazardous decomposition products:** No dangerous decomposition products known

## SECTION 11: Toxicological information

### 11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

**Acute toxicity:** Based on available data, the classification criteria are not met.

#### LD/LC50 values that are relevant for classification:

**CAS: 25068-38-6 reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight  $\leq 700$ )**

Oral	LD50	>10,000 mg/kg (rat)
Dermal	LD50	>2,000 mg/kg (rat)

**CAS: 933999-84-9 Reaction products of hexane-1,6-diol with 2-(chloromethyl)oxirane**

Oral	LD50	8,500 mg/kg (rat)
Dermal	LD50	>4,900 mg/kg (rat)

**Skin corrosion/irritation:** Causes skin irritation.

**Serious eye damage/irritation:** Causes serious eye irritation.

**Sensitisation:** May cause an allergic skin reaction.

**Germ cell mutagenicity:** Based on available data, the classification criteria are not met.

**Carcinogenicity:** Based on available data, the classification criteria are not met.

**Reproductive toxicity:** Based on available data, the classification criteria are not met.

**STOT-single exposure:** Based on available data, the classification criteria are not met.

**STOT-repeated exposure:** Based on available data, the classification criteria are not met.

**Aspiration hazard:** Based on available data, the classification criteria are not met.

### 11.2 Information on other hazards

#### Endocrine disrupting properties

None of the ingredients is listed.

## SECTION 12: Ecological information

### 12.1 Toxicity

#### Aquatic toxicity:

**CAS: 933999-84-9 Reaction products of hexane-1,6-diol with 2-(chloromethyl)oxirane**

EC50/48h	67 mg/l (Daphnia magna)
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**12.2 Persistence and degradability** No further relevant information available.

**12.3 Bioaccumulative potential** No further relevant information available.

**12.4 Mobility in soil** No further relevant information available.

#### 12.5 Results of PBT and vPvB assessment

**PBT:** Not applicable.

**vPvB:** Not applicable.

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**12.6 Endocrine disrupting properties**

The product does not contain substances with endocrine disrupting properties.

**12.7 Other adverse effects****Remark:** Toxic for fish**Additional ecological information:****General notes:**

Do not allow product to reach ground water, bodies of water or sewage system.

Hazardous to drinking water even if small quantities leak into soil.

Also toxic for fish and plankton in bodies of water.

Toxic for aquatic organisms

**SECTION 13: Disposal considerations****Recommendation**

The given refuse codes are recommendations based upon the intended use of the product. Because of special use and disposal conditions at the user's, other codes may apply under other conditions.

**European waste catalogue**

08 01 11\* waste paint and varnish containing organic solvents or other hazardous substances

**Uncleaned packaging:****Recommendation:**

Disposal must be made according to official regulations.

Packaging can be reused or recycled after cleaning.

**\* SECTION 14: Transport information****14.1 UN number or ID number**

ADR, IMDG, IATA

Void

**14.2 UN proper shipping name**

ADR, IMDG, IATA

Void

**14.3 Transport hazard class(es)**

ADR, ADN, IMDG, IATA

Class

Void

**14.4 Packing group**

ADR, IMDG, IATA

Void

**14.5 Environmental hazards:**

Not applicable.

**14.6 Special precautions for user**

Not applicable.

**14.7 Maritime transport in bulk according to**

IMO instruments

Not applicable.

**Transport/Additional information:****ADR****Remarks:**

In drums/vessels ≤ 5 L/Kg no dangerous good according transport regulations.

**IMDG****Remarks:**

In drums/vessels ≤ 5 L/Kg no dangerous good according transport regulations.

**IATA****Remarks:**

In drums/vessels ≤ 5 L/Kg no dangerous good according transport regulations.

**UN "Model Regulation":**

Void

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## SECTION 15: Regulatory information

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

#### Directive 2012/18/EU

**Named dangerous substances - ANNEX I** None of the ingredients is listed.

**Seveso category** E2 Hazardous to the Aquatic Environment

**Qualifying quantity (tonnes) for the application of lower-tier requirements** 200 t

**Qualifying quantity (tonnes) for the application of upper-tier requirements** 500 t

**REGULATION (EC) No 1907/2006 ANNEX XVII** Conditions of restriction: 3

<b>DIRECTIVE 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment – Annex II</b>
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None of the ingredients is listed.
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<b>REGULATION (EU) 2019/1148</b>
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<b>Annex I - RESTRICTED EXPLOSIVES PRECURSORS (Upper limit value for the purpose of licensing under Article 5(3))</b>
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None of the ingredients is listed.
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<b>Annex II - REPORTABLE EXPLOSIVES PRECURSORS</b>
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None of the ingredients is listed.
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**15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

## SECTION 16: Other information

This data is based on our present state of knowledge. However, it does not constitute a guarantee for any specific product features and does not establish a legally valid contractual relationship. Delivery specifications are found in the respective Technical Information Sheets.

### Relevant phrases

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H319 Causes serious eye irritation.

H411 Toxic to aquatic life with long lasting effects.

H412 Harmful to aquatic life with long lasting effects.

EUH205 Contains epoxy constituents. May produce an allergic reaction.

**Classification according to Regulation (EC) No 1272/2008** Calculation method

**Department issuing data specification sheet:** Product Safety department / EHS

### Abbreviations and acronyms:

ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Skin Irrit. 2: Skin corrosion/irritation – Category 2

Eye Irrit. 2: Serious eye damage/eye irritation – Category 2

Skin Sens. 1: Skin sensitisation – Category 1

Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard – Category 2

Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard – Category 3