

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 15.08.2023

Version number 1

Revision: 15.08.2023

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

1.1 Product identifier

Trade name **EPOXY CONDUCTIVE VDE KOMP A**

Article number: 206703

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 Dam. 1 H318 Causes serious eye damage.
Aquatic Chronic 3 H412 Harmful 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



GHS05

Signal word Danger

Hazard-determining components of labelling:

Linseed oil polymer with bisphenol A, bisphenol A diglycidyl ether, diethylenetriamine, formaldehyde, glycidyl Ph ether and pentaethylenehexamine
2,4,6-tris(dimethylaminomethyl)phenol

Hazard statements

H315 Causes skin irritation.
H318 Causes serious eye damage.
H412 Harmful to aquatic life with long lasting effects.

(Contd. on page 2)

Safety data sheet

according to 1907/2006/EC, Article 31

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Version number 1

Revision: 15.08.2023

Trade name **EPOXY CONDUCTIVE VDE KOMP A**

(Contd. of page 1)

Precautionary statements

P264 Wash thoroughly after handling.
 P273 Avoid release to the environment.
 P280 Wear protective gloves / eye protection / face protection.
 P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 P310 Immediately call a POISON CENTER/doctor.
 P332+P313 If skin irritation occurs: Get medical advice/attention.
 P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

Additional information:

EUH208 Contains 2,2'-iminodiethylamine, 3,6,9-triazaundecamethylenediamine, 3,6,9,12-tetra-azatetradecamethylenediamine, Poly(oxy-1,2-ethandiyl),.alpha.-[(2Z)-3-carboxy-1-oxo-2-propenyl]-.omega.-hydroxy-, C9-11-alkyl ethers. 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.

Dangerous components [% w/w]:		
CAS: 68915-81-1	Linseed oil polymer with bisphenol A, bisphenol A diglycidyl ether, diethylenetriamine, formaldehyde, glycidyl Ph ether and pentaethylenehexamine ----- Eye Dam. 1, H318; Skin Irrit. 2, H315	≥10-<20%
CAS: 90-72-2 EINECS: 202-013-9 Index number: 603-069-00-0 Reg.nr.: 01-2119560597-27-XXXX	2,4,6-tris(dimethylaminomethyl)phenol ----- Skin Corr. 1, H314; Eye Dam. 1, H318; Acute Tox. 4, H302	≥1-<2.5%
CAS: 111-40-0 EINECS: 203-865-4 Index number: 612-058-00-X Reg.nr.: 01-2119473793-27-XXXX	2,2'-iminodiethylamine ----- Acute Tox. 2, H330; Skin Corr. 1B, H314; Acute Tox. 4, H302; Acute Tox. 4, H312; Skin Sens. 1, H317; STOT SE 3, H335	≥0.25-≤0.5%
CAS: 112-57-2 EINECS: 203-986-2 Index number: 612-060-00-0	3,6,9-triazaundecamethylenediamine ----- Skin Corr. 1B, H314; Aquatic Chronic 2, H411; Acute Tox. 4, H302; Acute Tox. 4, H312; Skin Sens. 1, H317	≥0.25-≤0.5%
CAS: 4067-16-7 EINECS: 223-775-9 Index number: 612-064-00-2 Reg.nr.: 01-2119485826-22-XXXX	3,6,9,12-tetra-azatetradecamethylenediamine ----- Skin Corr. 1B, H314; Aquatic Acute 1, H400; Aquatic Chronic 1, H410; Skin Sens. 1, H317	≥0.25-≤0.5%
CAS: 709014-50-6	Poly(oxy-1,2-ethandiyl),.alpha.-[(2Z)-3-carboxy-1-oxo-2-propenyl]-.omega.-hydroxy-, C9-11-alkyl ethers ----- Skin Sens. 1, H317	≥0.1-≤0.25%

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**General information** When symptoms occur or in case of doubt, seek medical advice**After inhalation** 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. Then consult doctor.**After swallowing** Seek immediate medical advice.

(Contd. on page 3)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 15.08.2023

Version number 1

Revision: 15.08.2023

Trade name **EPOXY CONDUCTIVE VDE KOMP A**

(Contd. of page 2)

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
symptomatic treatment**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.**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**

Wear protective equipment. Keep unprotected persons away.

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.

Dilute with plenty of water.

6.3 Methods and material for containment and cleaning up:

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

Use neutralising agent.

Dispose of contaminated material as waste according to item 13.

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**

No special measures required.

No special precautions necessary if used correctly.

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:****CAS: 111-40-0 2,2'-iminodiethylamine**

WEL	Long-term value: 4.3 mg/m ³ , 1 ppm
Sk	

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 protection 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.

(Contd. on page 4)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 15.08.2023

Version number 1

Revision: 15.08.2023

Trade name **EPOXY CONDUCTIVE VDE KOMP A**

(Contd. of page 3)

Respiratory equipment:

In case vapours/aerosols develop:

Filter A (brown)

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.

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****Physical state**

Fluid

Colour:

Black

Odour:

Amine-like

Odour threshold:

Not determined.

Melting point/freezing point:

Not determined

Boiling point or initial boiling point and boiling range

100 °C (CAS: 7732-18-5 Water)

Flammability

Not applicable.

Lower and upper explosion limit**Lower:**

Not determined.

Upper:

Not determined.

Flash point:

>100 °C

Ignition temperature:

not applicable

Decomposition temperature:

Not determined.

pH

Not determined.

Viscosity:**Kinematic viscosity**

Not determined.

dynamic at 20 °C:

1,500 mPas

Solubility**Water:**

Fully miscible

Partition coefficient n-octanol/water (log value)

Not determined.

Vapour pressure at 20 °C:

23 hPa (CAS: 7732-18-5 Water)

Density and/or relative density**Density at 20 °C:**1.083 g/cm³**Relative density**

Not determined.

Vapour density

Not determined.

9.2 Other information**Appearance:****Form:**

thixotropic

Important information on protection of health and environment, and on safety.**Explosive properties:**

Product is not explosive.

Solvent separation test

< 3 %

(Contd. on page 5)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 15.08.2023

Version number 1

Revision: 15.08.2023

Trade name **EPOXY CONDUCTIVE VDE KOMP A**

(Contd. of page 4)

Change in condition	
Evaporation rate	Not determined.
Information with regard to physical hazard classes	
Explosives	Void
Flammable gases	Void
Aerosols	Void
Oxidising gases	Void
Gases under pressure	Void
Flammable liquids	Void
Flammable solids	Void
Self-reactive substances and mixtures	Void
Pyrophoric liquids	Void
Pyrophoric solids	Void
Self-heating substances and mixtures	Void
Substances and mixtures, which emit flammable gases in contact with water	Void
Oxidising liquids	Void
Oxidising solids	Void
Organic peroxides	Void
Corrosive to metals	Void
Desensitised explosives	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: 90-72-2 2,4,6-tris(dimethylaminomethyl)phenol

Oral	LD50	2,169 mg/kg (rat)
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Skin corrosion/irritation: Causes skin irritation.

Serious eye damage/irritation: Causes serious eye damage.

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

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: No further relevant information available.

12.2 Persistence and degradability No further relevant information available.

(Contd. on page 6)

Safety data sheet

according to 1907/2006/EC, Article 31

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Revision: 15.08.2023

Trade name **EPOXY CONDUCTIVE VDE KOMP A**

(Contd. of page 5)

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.**12.6 Endocrine disrupting properties**

The product does not contain substances with endocrine disrupting properties.

12.7 Other adverse effects**Remark:** Harmful to fish**Additional ecological information:****General notes:**

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

Harmful to aquatic organisms

* SECTION 13: Disposal considerations

Recommendation

Do not dispose of together with household garbage. Do not allow product to reach sewage system. 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 19*	aqueous suspensions containing paint or varnish containing organic solvents or other hazardous substances
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Uncleaned packaging:**Recommendation:**

Disposal must be made according to official regulations.

Packaging can be reused or recycled after cleaning.

Recommended cleaning agent: Water, if necessary with cleaning agent.

SECTION 14: Transport information

14.1 UN number or ID number ADR, ADN, IMDG, IATA	Void
14.2 UN proper shipping name ADR, ADN, 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.
UN "Model Regulation":	Void

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

(Contd. on page 7)

Safety data sheet

according to 1907/2006/EC, Article 31

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Version number 1

Revision: 15.08.2023

Trade name **EPOXY CONDUCTIVE VDE KOMP A**

(Contd. of page 6)

DIRECTIVE 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment – Annex II

None of the ingredients is listed.

REGULATION (EU) 2019/1148

Annex I - RESTRICTED EXPLOSIVES PRECURSORS (Upper limit value for the purpose of licensing under Article 5(3))

None of the ingredients is listed.

Annex II - REPORTABLE EXPLOSIVES PRECURSORS
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None of the ingredients is listed.

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

H302 Harmful if swallowed.
 H312 Harmful in contact with skin.
 H314 Causes severe skin burns and eye damage.
 H315 Causes skin irritation.
 H317 May cause an allergic skin reaction.
 H318 Causes serious eye damage.
 H330 Fatal if inhaled.
 H335 May cause respiratory irritation.
 H400 Very toxic to aquatic life.
 H410 Very toxic to aquatic life with long lasting effects.
 H411 Toxic to aquatic life with long lasting effects.

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
 Acute Tox. 4: Acute toxicity – Category 4
 Acute Tox. 2: Acute toxicity – Category 2
 Skin Corr. 1: Skin corrosion/irritation – Category 1
 Skin Corr. 1B: Skin corrosion/irritation – Category 1B
 Skin Irrit. 2: Skin corrosion/irritation – Category 2
 Eye Dam. 1: Serious eye damage/eye irritation – Category 1
 Skin Sens. 1: Skin sensitisation – Category 1
 STOT SE 3: Specific target organ toxicity (single exposure) – Category 3
 Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard – Category 1
 Aquatic Chronic 1: Hazardous to the aquatic environment - long-term aquatic hazard – 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