

## Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 14.12.2022

Version number 5 (replaces version 4)

Revision: 14.12.2022

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

#### 1.1 Product identifier

Trade name **Epoxy BS 4000 Komp.B**

Article number: 6320-6323

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

No further relevant information available.

Application of the substance / the mixture Coating

#### 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  $\leq$  700)  
bisphenol F-(epichlorhydrin); epoxy resin(number average molecular weight<700)  
oxirane, mono[(C12-14-alkyloxy)methyl] derivs.

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**Hazard statements**

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H317 May cause an allergic skin reaction.

H411 Toxic to aquatic life with long lasting effects.

**Precautionary statements**

P273 Avoid release to the environment.

P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.

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

P337+P313 If eye irritation persists: Get medical advice/attention.

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**

The residual content of epichlorhydrin corresponds to APME recommendations: modified resins &lt; 10 ppm (0.001%)

**Results of PBT and vPvB assessment****PBT:** Not applicable.**vPvB:** Not applicable.\* **SECTION 3: Composition/information on ingredients****3.2 Mixtures****Description:** Modified epoxide resin**Dangerous components [% w/w]:**

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 ≤ 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 ≥ 5 % Eye Irrit. 2; H319: C ≥ 5 %	≥50-≤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	≥25-<30%
CAS: 68609-97-2 EINECS: 271-846-8 Index number: 603-103-00-4 Reg.nr.: 01-2119485289-22-XXXX	oxirane, mono[(C12-14-alkyloxy)methyl] derivs. Skin Irrit. 2, H315; Skin Sens. 1, H317	≥20-<30%

**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**

If symptoms occur or in case of doubt, seek medical attention. In case of unconsciousness, do not administer anything orally.

**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**

Seek immediate medical advice.

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.

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### 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

May be released in case of fire

Carbon monoxide (CO)

Under certain fire conditions, traces of other toxic gases cannot be excluded, e.g.:

Hydrogen chloride (HCl)

### 5.3 Advice for firefighters

**Protective equipment:**

Wear full protective suit.

Wear self-contained breathing apparatus.

**Additional information**

Cool endangered containers with water spray jet.

Collect contaminated fire fighting water separately. It must not enter drains.

Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

## SECTION 6: Accidental release measures

### 6.1 Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation

### 6.2 Environmental precautions:

Do not allow to enter the ground/soil.

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.

### 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

Use only in well ventilated areas.

Ensure good interior ventilation, especially at floor level. (Fumes are heavier than air).

**Information about protection against explosions and fires:** No special requirements.

### 7.2 Conditions for safe storage, including any incompatibilities

**Storage****Requirements to be met by storerooms and containers:** Prevent any penetration into the ground.**Information on storage in a common storage facility:** none**Further information about storage conditions:**

Store container in a well ventilated position.

Protect from frost.

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.

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**Individual protection measures, such as personal protective equipment****General protective and hygienic measures**

Do not eat, drink or smoke while working.  
 Use skin protection cream for preventive skin protection.  
 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:**

Only use ambient air independent respiratory equipment in pits, shafts and silos!  
 Filter A (brown)

**Hand protection**

Impervious gloves  
 Long cuffed gloves  
 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**

The determined penetration times according to EN 16523-1:2015 are not performed under practical conditions. Therefore a maximum wearing time, which corresponds to 50% of the penetration time, is recommended.

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**

Face protection  
 Tightly sealed safety glasses.

**Body protection:** Protective work clothing.

## 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>	transparent
<b>Odour:</b>	Weak, characteristic
<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</b>	Not determined.
<b>Viscosity:</b>	
<b>Kinematic viscosity</b>	Not determined.

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<b>dynamic at 20 °C:</b>	450 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>	1.1 g/cm <sup>3</sup>
<b>Relative density</b>	Not determined.
<b>Vapour density</b>	Not determined.
<b>9.2 Other information</b>	
<b>Appearance:</b>	
<b>Form:</b>	Fluid
<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>Change in condition</b>	
<b>Evaporation rate</b>	Not determined.
<b>Information with regard to physical hazard classes</b>	
<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
<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 handled and stored according to specifications.

### 10.3 Possibility of hazardous reactions

May produce violent reactions with bases and numerous organic substances including alcohols and amines

Exothermic polymerisation

Possible formation of peroxide

Reacts with strong oxidising agents

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

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

**10.6 Hazardous decomposition products:** Irritating gases/vapours

## 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.

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<b>LD/LC50 values that are relevant for classification:</b>		
<b>CAS: 25068-38-6 reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight <math>\leq</math> 700)</b>		
Oral	LD50	>10,000 mg/kg (rat)
Dermal	LD50	>2,000 mg/kg (rat)
<b>CAS: 68609-97-2 oxirane, mono[(C12-14-alkyloxy)methyl] derivs.</b>		
Oral	LD50	>5,000 mg/kg (rat)
Dermal	LD50	>4,500 mg/kg (rabbit)

**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**

<b>Endocrine disrupting properties</b>
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.**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:** 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**

Not hardened material must be disposed of as hazardous waste according to official regulations.

Hardened product remains may be disposed of as building rubble or put into household garbage.

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.

Do not dispose of together with household garbage. Do not allow product to reach sewage system.

<b>European waste catalogue</b>	
08 01 11*	waste paint and varnish containing organic solvents or other hazardous substances
20 01 28	paint, inks, adhesives and resins other than those mentioned in 20 01 27

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

Disposal must be made according to official regulations.

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Packaging can be reused or recycled after cleaning.

## \* SECTION 14: Transport information

<b>14.1 UN number or ID number</b> ADR, IMDG, IATA	UN3082
<b>14.2 UN proper shipping name</b> ADR	3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Epoxy Resin (reaction product: bisphenol A-(epichlorhydrin) (number average molecular weight ≤ 700)))
<b>IMDG</b>	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Epoxy Resin (reaction product: bisphenol A-(epichlorhydrin) (number average molecular weight ≤ 700))), MARINE POLLUTANT
<b>IATA</b>	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Epoxy Resin (reaction product: bisphenol A-(epichlorhydrin) (number average molecular weight ≤ 700)))
<b>14.3 Transport hazard class(es)</b>	
<b>ADR</b>	
	
<b>Class</b>	9 (M6) Miscellaneous hazardous substances and articles.
<b>Label</b>	9
<b>IMDG</b>	
	
<b>Class</b>	9 Miscellaneous hazardous substances and articles.
<b>Label</b>	9
<b>IATA</b>	
	
<b>Class</b>	9 Miscellaneous hazardous substances and articles.
<b>Label</b>	9
<b>14.4 Packing group</b> ADR, IMDG, IATA	III
<b>14.5 Environmental hazards:</b>	
<b>Marine pollutant:</b>	Yes
<b>Special marking (ADR):</b>	Symbol (fish and tree) Symbol (fish and tree)
<b>14.6 Special precautions for user</b>	Warning: Miscellaneous hazardous substances and articles.
<b>hazard identification number:</b>	90
<b>EMS Number:</b>	F-A,S-F
<b>Stowage Category</b>	A

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<b>14.7 Maritime transport in bulk according to IMO instruments</b>	Not applicable.
<b>Transport/Additional information:</b>	
<b>ADR</b>	
<b>Limited quantities (LQ)</b>	5L
<b>Excepted quantities (EQ)</b>	Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
<b>Transport category</b>	3
<b>Tunnel restriction code</b>	(-)
<b>IMDG</b>	
<b>Limited quantities (LQ)</b>	5L
<b>Excepted quantities (EQ)</b>	Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
<b>UN "Model Regulation":</b>	UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (EPOXY RESIN (REACTION PRODUCT: BISPENOL A-(EPICHLORHYDRIN) (NUMBER AVERAGE MOLECULAR WEIGHT ≤ 700))), 9, III

## 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

#### 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

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

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.

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

**Date of previous version:** 05.07.2022

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**Version number of previous version: 4****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