

## Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 03.06.2020

Version number 7

Revision: 03.06.2020

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

#### 1.1 Product identifier

Trade name **Epoxy BS 2000 clear, component B**

Article number: 6011

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

SU3 Industrial uses: Uses of substances as such or in preparations at industrial sites

SU21 Consumer uses: Private households / general public / consumers

SU22 Professional uses: Public domain (administration, education, entertainment, services, craftsmen)

**Product category** PC9a Coatings and paints, thinners, paint removers

#### Process category

PROC8a Transfer of substance or mixture (charging and discharging) at non-dedicated facilities

PROC8b Transfer of substance or mixture (charging and discharging) at dedicated facilities

PROC10 Roller application or brushing

PROC13 Treatment of articles by dipping and pouring

#### Environmental release category

ERC8a Widespread use of non-reactive processing aid (no inclusion into or onto article, indoor)

ERC8c Widespread use leading to inclusion into/onto article (indoor)

ERC8d Widespread use of non-reactive processing aid (no inclusion into or onto article, outdoor)

ERC8f Widespread use leading to inclusion into/onto article (outdoor)

ERC10a Widespread use of articles with low release (outdoor)

ERC11a Widespread use of articles with low release (indoor)

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

##### Manufacturer/Supplier:

Remmers GmbH

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D-49624 Lönningen / Germany

Tel.: +49(0)5432/83-0

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Remmers (UK) Limited  
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fon +44 (0) 1293 594 010  
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##### Information department:

Product Safety department: Tel.: Steve Dunn Tel.: +44 (0) 1293 594 010

E-Mail: sales@remmers.co.uk

#### 1.4 Emergency telephone number:

during working hours:

U.K.: Tel.: +44 (0) 1293 594 010

sales@remmers.co.uk

Head Office Germany: Tel.: +49 (0)5432 83 187

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after working hours: Tel.: +49 (0)171 21 34 091

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.

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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 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)

hexandiol diglycidylether

bisphenol F-(epichlorhydrin); epoxy resin(number average molecular weight&lt;700)

**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**

P260 Do not breathe dust/fume/gas/mist/vapours/spray.

P273 Avoid release to the environment.

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

P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/ doctor.

P302+P352 IF ON SKIN: Wash with plenty of soap and water.

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 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 Chemical characterisation: 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	$\geq$ 60-<80%
CAS: 16096-31-4 EINECS: 240-260-4 Reg.nr.: 01-2119463471-41-XXXX	hexandiol diglycidylether Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317; Aquatic Chronic 3, H412	$\geq$ 20-<25%
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%

**Additional information** For the wording of the listed hazard phrases refer to section 16.

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## 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.

### 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)

Formation of poisonous gases during heating or in fires.

### 5.3 Advice for firefighters

#### Protective equipment:

Wear full protective suit.

Wear self-contained breathing apparatus.

Put on breathing apparatus.

#### Additional information

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

Put on breathing apparatus.

### 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.

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

Use only in well ventilated areas.

Ensure good ventilation/exhaust in workplaces.

Avoid the formation of aerosols.

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**Information about protection against explosions and fires:**

No special requirements.

Keep breathing equipment ready.

**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:**

Protect from frost.

Keep container tightly closed.

**7.3 Specific end use(s)** No further relevant information available.**SECTION 8: Exposure controls/personal protection****Additional information about design of technical systems:** No further data; see item 7.**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****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:**

Filter A (brown)

Only use ambient air independent respiratory equipment in pits, shafts and silos!

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.

**Protection of hands:**

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 protection:** Tightly sealed safety glasses.**Body protection:** Protective work clothing.

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## SECTION 9: Physical and chemical properties

<b>9.1 Information on basic physical and chemical properties</b>	
<b>General Information</b>	
<b>Appearance:</b>	
<b>Form:</b>	Fluid
<b>Colour:</b>	Yellowish
<b>Odour:</b>	Aromatic
<b>Odour threshold:</b>	Not determined.
<b>pH-value:</b>	Not determined.
<b>Change in condition</b>	
<b>Melting point/freezing point:</b>	Not determined
<b>Initial boiling point and boiling range:</b>	Not determined
<b>Flash point:</b>	> 105 °C
<b>Inflammability (solid, gaseous)</b>	Not applicable.
<b>Ignition temperature:</b>	not applicable
<b>Decomposition temperature:</b>	Not determined.
<b>Self-inflammability:</b>	Product is not self-igniting.
<b>Explosive properties:</b>	Product is not explosive.
<b>Explosive Limits:</b>	
<b>Lower:</b>	Not determined.
<b>Upper:</b>	Not determined.
<b>Vapour pressure:</b>	Not determined.
<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.
<b>Evaporation rate</b>	Not determined.
<b>Solubility in / Miscibility with</b>	
<b>Water:</b>	Not miscible or difficult to mix
<b>Distribution coefficient (n-octanol/water):</b> Not determined.	
<b>Viscosity:</b>	
<b>dynamic at 20 °C:</b>	750 mPas
<b>kinematic:</b>	Not determined.
<b>Solvent separation test</b>	< 3 %
<b>Organic solvents:</b>	0.0 %
<b>Solid content:</b>	100.0 %
<b>9.2 Other information</b>	No further relevant information available.

## 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

**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

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## SECTION 11: Toxicological information

**11.1 Information on toxicological effects****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 ≤ 700)**

Oral LD50 &gt;10,000 mg/kg (rat)

Dermal LD50 &gt;2,000 mg/kg (rat)

**CAS: 16096-31-4 hexandiol diglycidylether**

Oral LD50 2,900 mg/kg (rat)

Dermal LD50 &gt;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.

## 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.**Ecotoxicological 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

**12.5 Results of PBT and vPvB assessment****PBT:** Not applicable.**vPvB:** Not applicable.**12.6 Other adverse effects** No further relevant information available.

## 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.

**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.

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## \* SECTION 14: Transport information

<b>14.1 UN-Number</b>	UN3082
<b>ADR, IMDG, IATA</b>	
<b>14.2 UN proper shipping name</b>	3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Epoxy Resin (reaction product: bisphenol A-(epichlorhydrin) (number average molecular weight ≤ 700)))
<b>ADR</b>	
<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, IATA</b>	
	
<b>Class</b>	9 Miscellaneous hazardous substances and articles.
<b>Label</b>	9
<b>14.4 Packing group</b>	III
<b>ADR, IMDG, IATA</b>	
<b>14.5 Environmental hazards:</b>	Product contains environmentally hazardous substances: Epoxy Resin (reaction product: bisphenol A-(epichlorhydrin) (number average molecular weight ≤ 700))
<b>Marine pollutant:</b>	Symbol (fish and tree)
<b>Special marking (ADR):</b>	Symbol (fish and tree)
<b>Special marking (IATA):</b>	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
<b>14.7 Transport in bulk according to Annex II of Marpol and the IBC Code</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

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<b>Transport category</b>	3
<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: BISPHENOL A-(EPICHLORHYDRIN) (NUMBER AVERAGE MOLECULAR WEIGHT $\leq$ 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

#### National regulations

#### Other regulations, limitations and prohibition ordinances

APME document: "Epoxy resins and curing agents: Toxicology, working safety, environment."

**15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

## SECTION 16: Other information

Delivery specifications are found in the respective Technical Information Sheets.

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.

### 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.

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

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

### Abbreviations and acronyms:

ADR: Accord européen sur le transport 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