

## Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 28.09.2016

Version number 4

Revision: 28.09.2016

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

#### 1.1 Product identifier

Trade name **Epoxy CR 100, Component B**

Article number: 6171, 6365

#### 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 Baustofftechnik GmbH  
Postfach 1255  
D-49624 Lönigen / Germany  
Tel.: +49(0)5432/83-0  
Fax: +49(0)5432/3985

Remmers (UK) Limited  
Unit B1 The Fleming Centre  
West Sussex RH10 9NN  
fon +44 (0) 1293 594 010  
fax +44 (0) 1293 594 037

##### Informing 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

info@remmers.de

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

Acute Tox. 4 H302 Harmful if swallowed.  
Acute Tox. 4 H332 Harmful if inhaled.  
Skin Corr. 1B H314 Causes severe skin burns and eye damage.  
Eye Dam. 1 H318 Causes serious eye damage.  
Skin Sens. 1 H317 May cause an allergic skin reaction.  
Repr. 2 H361f Suspected of damaging fertility.  
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



GHS05 GHS07 GHS08 GHS09

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**Signal word** Danger**Hazard-determining components of labelling:**

Benzyl alcohol  
 m-phenylenebis(methylamine)  
 3-aminomethyl-3,5,5-trimethylcyclohexylamine  
 4-tert-butylphenol

**Hazard statements**

H302+H332 Harmful if swallowed or if inhaled.  
 H314 Causes severe skin burns and eye damage.  
 H317 May cause an allergic skin reaction.  
 H361f Suspected of damaging fertility.  
 H411 Toxic to aquatic life with long lasting effects.

**Precautionary statements**

P260 Do not breathe dust/fume/gas/mist/vapours/spray.  
 P280 Wear protective gloves/protective clothing/eye protection/face protection.  
 P273 Avoid release to the environment.  
 P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
 P301+P312 IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.  
 P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.  
 P302+P352 IF ON SKIN: Wash with plenty of soap and water.  
 P405 Store locked up.  
 P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

**2.3 Other hazards****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.**Dangerous components:**

CAS: 100-51-6 EINECS: 202-859-9 Index number: 603-057-00-5 Reg.nr.: 01-2119492630-38-XXXX	Benzyl alcohol Acute Tox. 4, H302; Acute Tox. 4, H332; Eye Irrit. 2, H319	40-60%
CAS: 2855-13-2 EINECS: 220-666-8 Index number: 612-067-00-9 Reg.nr.: 01-2119514687-32-XXXX	3-aminomethyl-3,5,5-trimethylcyclohexylamine Skin Corr. 1B, H314; Acute Tox. 4, H302; Acute Tox. 4, H312; Skin Sens. 1, H317; Aquatic Chronic 3, H412	10-20%
CAS: 1477-55-0 EINECS: 216-032-5 Reg.nr.: 01-2119480150-50-XXXX	m-phenylenebis(methylamine) Skin Corr. 1B, H314; Eye Dam. 1, H318; Acute Tox. 4, H302; Acute Tox. 4, H332; Skin Sens. 1, H317; Aquatic Chronic 3, H412	10-20%
CAS: 98-54-4 EINECS: 202-679-0 Reg.nr.: 01-2119489419-21-XXXX	4-tert-butylphenol Repr. 2, H361f; Eye Dam. 1, H318; Aquatic Chronic 1, H410; Skin Irrit. 2, H315; STOT SE 3, H335	2.5-5%
CAS: 84852-15-3 EINECS: 284-325-5 Index number: 601-053-00-8	4-nonylphenol, branched Repr. 2, H361fd; Skin Corr. 1B, H314; Aquatic Acute 1, H400; Aquatic Chronic 1, H410; Acute Tox. 4, H302	2.5-5%

**SVHC**

CAS: 84852-15-3 4-nonylphenol, branched

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**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.

Immediately remove any clothing soiled by the product.

Take affected persons out of danger area and instruct to lie down.

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

##### After inhalation

Supply fresh air and call for doctor for safety reasons.

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

Seek medical treatment in case of complaints.

##### After skin contact

Wash immediately with water and soap and rinse thoroughly.

Cover wound with a sterile dressing.

If skin irritation continues, consult a doctor.

**After eye contact** Rinse opened eye for several minutes under running water. Then consult doctor.

##### After swallowing

Rinse out mouth and then drink plenty of water.

Call a doctor immediately.

#### 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

May be released in case of fire

Nitrogen oxides (NO<sub>x</sub>)

Carbon monoxide (CO)

Ammonia

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.

Wear protective equipment. Keep unprotected persons away.

#### 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).

Use neutralising agent.

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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.

### **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.  
Ventilate storage and work rooms sufficiently.

**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.

#### **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:**

Impervious 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

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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 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****Appearance:**

<b>Form:</b>	Fluid
<b>Colour:</b>	Light yellow
<b>Odour:</b>	Amine-like
<b>Odour threshold:</b>	Not determined.
<b>pH-value:</b>	Not determined.

**Change in condition**

<b>Melting point/Melting range:</b>	Not determined
<b>Boiling point/Boiling range:</b>	>200 °C

**Flash point:** >100 °C**Inflammability (solid, gaseous)** Not applicable.**Ignition temperature:** not applicable**Decomposition temperature:** Not determined.**Self-inflammability:** Product is not self-igniting.**Danger of explosion:** Product is not explosive.**Explosive Limits:**

<b>Lower:</b>	1.3 Vol %
<b>Upper:</b>	13.0 Vol %

**Vapour pressure at 20 °C:** 0.28 hPa**Density at 20 °C** 1.06 g/cm<sup>3</sup>**Relative density** Not determined.**Vapour density** Not determined.**Evaporation rate** Not determined.**Solubility in / Miscibility with****Water:** Not miscible or difficult to mix**Distribution coefficient (n-octanol/water):** Not determined.**Viscosity:**

<b>dynamic at 20 °C:</b>	385-485 mPas
<b>kinematic:</b>	Not determined.

**Solvent separation test** < 3 %**9.2 Other information** 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** Strong exothermic reaction with acids**10.4 Conditions to avoid** No further relevant information available.

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

**10.6 Hazardous decomposition products:**

Corrosive gases/vapours  
ammonia

#### \* SECTION 11: Toxicological information

##### 11.1 Information on toxicological effects

**Acute toxicity:**

Harmful if swallowed or if inhaled.

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

**ATE (Acute Toxicity Estimates)**

Oral	LD50	1287 mg/kg (rat)
Dermal	LD50	2886 mg/kg (rabbit)
Inhalative	LC50/4 h	8.12 mg/l

**CAS: 100-51-6 Benzyl alcohol**

Oral	LD50	1230 mg/kg (rat)
Dermal	LD50	2000 mg/kg (rabbit)

**CAS: 2855-13-2 3-aminomethyl-3,5,5-trimethylcyclohexylamine**

Oral	LD50	1030 mg/kg (rat)
Dermal	LD50	1840 mg/kg (rabbit)

**CAS: 1477-55-0 m-phenylenebis(methylamine)**

Oral	LD50	1040 mg/kg (rat)
Inhalative	LC50/4 h	2.4 mg/l (rat)

**CAS: 98-54-4 4-tert-butylphenol**

Oral	LD50	2951 mg/kg (rat)
Dermal	LD50	2288 mg/kg (rabbit)

**CAS: 84852-15-3 4-nonylphenol, branched**

Oral	LD50	1900 mg/kg (rat)
Dermal	LD50	2140 mg/kg (rabbit)

**Primary irritant effect:**

**Skin corrosion/irritation**

Causes severe skin burns and eye damage.

**Serious eye damage/irritation**

Caustic effect

Causes serious eye damage.

**Sensitisation:**

May cause an allergic skin reaction.

**CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**

**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**

Suspected of damaging fertility.

**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.

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**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.

Do not allow undiluted or non-neutralised product to reach the sewage system or receiving waters.

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

**13.1 Waste treatment methods**

**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**

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.

### SECTION 14: Transport information

**14.1 UN-Number**

**ADR, IMDG, IATA**

UN2735

**14.2 UN proper shipping name**

**ADR**

2735 POLYAMINES, LIQUID, CORROSIVE, N.O.S.  
(ISOPHORONEDIAMINE), ENVIRONMENTALLY  
HAZARDOUS

**IMDG**

POLYAMINES, LIQUID, CORROSIVE, N.O.S.  
(ISOPHORONEDIAMINE), MARINE POLLUTANT

**IATA**

POLYAMINES, LIQUID, CORROSIVE, N.O.S.  
(ISOPHORONEDIAMINE)

**14.3 Transport hazard class(es)**

**ADR**



**Class**

8 (C7) Corrosive substances.

**Label**

8

**IMDG**



**Class**

8 Corrosive substances.

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Label 8

**IATA**

<b>Class</b>	8 Corrosive substances.
<b>Label</b>	8
<b>14.4 Packing group</b>	
<b>ADR, IMDG, IATA</b>	III
<b>14.5 Environmental hazards:</b>	
<b>Marine pollutant:</b>	Yes
	Symbol (fish and tree)
<b>Special marking (ADR):</b>	Symbol (fish and tree)
<b>14.6 Special precautions for user</b>	Warning: Corrosive substances.
<b>Kemler Number:</b>	80
<b>EMS Number:</b>	F-A,S-B
<b>Segregation groups</b>	Alkalis
<b>Stowage Category</b>	A
<b>Segregation Code</b>	SG35 Stow "separated from" acids.
<b>14.7 Transport in bulk according to Annex II of Marpol and the IBC Code</b>	Not applicable.

**Transport/Additional information:**

<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>	E

<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 2735 POLYAMINES, LIQUID, CORROSIVE, N.O.S. (ISOPHORONEDIAMINE), 8, III, ENVIRONMENTALLY HAZARDOUS

**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."

**Substances of very high concern (SVHC) according to REACH, Article 57**

CAS: 84852-15-3 4-nonylphenol, branched

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

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### 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

- 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.
- H319 Causes serious eye irritation.
- H332 Harmful if inhaled.
- H335 May cause respiratory irritation.
- H361f Suspected of damaging fertility.
- H361fd Suspected of damaging fertility. Suspected of damaging the unborn child.
- H400 Very toxic to aquatic life.
- H410 Very toxic to aquatic life with long lasting effects.
- H412 Harmful to aquatic life with long lasting effects.

**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
- SVHC: Substances of Very High Concern
- vPvB: very Persistent and very Bioaccumulative
- Acute Tox. 4: Acute toxicity – Category 4
- 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
- Eye Irrit. 2: Serious eye damage/eye irritation – Category 2
- Skin Sens. 1: Skin sensitisation – Category 1
- Repr. 2: Reproductive toxicity – Category 2
- Repr. 2: Reproductive toxicity – Category 2
- 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