

**Safety data sheet**  
according to 1907/2006/EC, Article 31

Printing date 31.03.2017

Version number 4

Revision: 31.03.2017

**SECTION 1: Identification of the substance/mixture and of the company/undertaking****\* 1.1 Product identifier****\* Trade name Crack FIX , comp. A****\* Article number:** 6089**\* 1.2 Relevant identified uses of the substance or mixture and uses advised against**

No further relevant information available.

**\* 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

**\* 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)

ERC11a Widespread use of articles with low release (indoor)

**\* Application of the substance / the mixture** Coating**\* 1.3 Details of the supplier of the safety data sheet****\* Manufacturer/Supplier:**

Remmers GmbH

Postfach 1255

D-49624 Lönningen / 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**

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.

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**\* 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 = 700)  
 bisphenol F-(epichlorhydrin); epoxy resin(number average molecular weight<700)  
 pentaerythritol tetraacrylate  
 2-(hydroxymethyl)-2-[[[1-

**\* 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**

P280 Wear protective gloves/protective clothing/eye protection/face protection.  
 P262 Do not get in eyes, on skin, or on clothing.  
 P273 Avoid release to the environment.  
 P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/ doctor.  
 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****\* 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: 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	60-80%
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	10-20%
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	5-10%

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CAS: 4986-89-4	pentaerythritol tetraacrylate	5-10%
EINECS: 225-644-1	Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317	
Index number: 607-122-00-9		
CAS: 3524-68-3	2-(hydroxymethyl)-2-[[[1-	5-10%
EINECS: 222-540-8	Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317	
Index number: 607-110-00-3		
CAS: 13048-33-4	hexamethylene diacrylate	2.5-5%
EINECS: 235-921-9	Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317;	
Index number: 607-109-00-8	Aquatic Chronic 3, H412	
Reg.nr.: 2119484737-22-xxxx		
CAS: 2461-15-6	[[[2-ethylhexyl)oxy]methyl]oxirane	1-2.5%
EINECS: 219-553-6	Skin Irrit. 2, H315; Skin Sens. 1, H317	
Reg.nr.: 01-2119962196-31-XXXX		

\* **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** Seek medical treatment in case of complaints.

##### \* After skin contact

If skin irritation continues, consult a doctor.

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** Rinse out mouth and then drink plenty of water.

##### \* 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

Water spray jet

Carbon dioxide

Foam

Use fire fighting measures that suit the environment.

##### \* 5.2 Special hazards arising from the substance or mixture

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

Hydrogen chloride (HCl)

further harmful conflagration gases and fumes

##### \* 5.3 Advice for firefighters

\* **Protective equipment:** 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.

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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.

**\* 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:**

Store away from oxidising agents.

Store away from food.

**\* Further information about storage conditions:**

Store container in a well ventilated position.

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!

**\* 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.

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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 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:****Form:** Fluid**Colour:** Clear**\* Odour:** Weak, characteristic**\* Odour threshold:** Not determined.**\* pH-value:** Not determined.**\* Change in condition****Melting point/freezing point:** Not determined**Initial boiling point and boiling range:** > 100 °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.**\* Explosive properties:** Product is not explosive.**\* Explosive Limits:****Lower:** Not determined.**Upper:** Not determined.**\* Vapour pressure:** Not determined.**\* Density at 20 °C** 1.15 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:****dynamic at 20 °C:** 600 mPas**kinematic:** 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** Exothermic polymerisation**\* 10.4 Conditions to avoid** No further relevant information available.**\* 10.5 Incompatible materials:** No further relevant information available.

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**\* 10.6 Hazardous decomposition products:**

None if used properly.  
 None if stored properly.  
 May be released in fire:  
 Carbon monoxide and carbon dioxide  
 Hydrogen chloride (HCl)  
 Phenol

### 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:****ATE (Acute Toxicity Estimates)**

Oral	LD50	14922 mg/kg (rat)
Dermal	LD50	24263 mg/kg (rabbit)
Inhalative	LC50/4 h	133 mg/l

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

Oral	LD50	> 10000 mg/kg (rat)
Dermal	LD50	> 2000 mg/kg (rat)

**CAS: 13048-33-4 hexamethylene diacrylate**

Oral	LD50	>5000 mg/kg (rat)
Dermal	LD50	>3000 mg/kg (rab)

**\* Primary irritant effect:****\* Skin corrosion/irritation**

Causes skin irritation.

**\* Serious eye damage/irritation**

Causes serious eye irritation.

**\* 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** 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

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\* **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**

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**

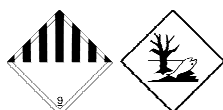
UN3082

\* **14.2 UN proper shipping name**\* **ADR**

3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight = 700))

\* **IMDG, IATA**

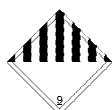
ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight = 700))

\* **14.3 Transport hazard class(es)**\* **ADR**\* **Class**

9 (M6) Miscellaneous hazardous substances and articles.

\* **Label**

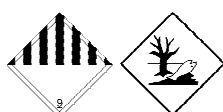
9

\* **IMDG**\* **Class**

9 Miscellaneous hazardous substances and articles.

\* **Label**

9

\* **IATA**\* **Class**

9 Miscellaneous hazardous substances and articles.

\* **Label**

9

\* **14.4 Packing group**\* **ADR, IMDG, IATA**

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* <b>14.5 Environmental hazards:</b>	
* <b>Marine pollutant:</b>	No
* <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>Kemler 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>	

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* <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>Remarks:</b>	According to Chapter 3.4 (Transport in Limited Quantities), this product is not subject to ADR.

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* <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. (REACTION PRODUCT: BISPHENOL-A-(EPICHLORHYDRIN) EPOXY RESIN (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
- \* **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**

H302 Harmful if swallowed.  
 H315 Causes skin irritation.  
 H317 May cause an allergic skin reaction.  
 H319 Causes serious eye irritation.  
 H332 Harmful if inhaled.  
 H411 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

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**\* 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

Acute Tox. 4: Acute toxicity – Category 4

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