

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

Printing date 16.09.2021

Version number 18

Revision: 20.08.2021

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

- 1.1 Product identifier
- Trade name: **CRISTALLFUGE-EPOX (A-Komp.)**
- 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 Epoxy resin adhesive
- 1.3 Details of the supplier of the safety data sheet
- **Manufacturer/Supplier:**  
SCHOMBURG GmbH & Co. KG  
Aquafinstr. 2-8  
D-32760 Detmold  
Germany
- Tel: ++49 (0)5231/953-00  
email: info@schomburg.de
- **Informing department:**  
Product Safety Department
- Tel: ++49 (0)5231/953-770  
email: SDB@schomburg.de

**SECTION 2: Hazards identification**

- 2.1 Classification of the substance or mixture
- **Classification according to Regulation (EC) No 1272/2008**



environment

Aquatic Chronic 2 H411 Toxic to aquatic life with long lasting effects.



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.

- 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:**  
2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane  
Reaction products of 2,2-dimethylpropane-1,3-diol with 1-chloro-2,3-epoxypropane  
oxirane, mono[(C12-14-alkyloxy)methyl] derivs
- **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.

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GB

**Trade name: CRISTALLFUGE-EPOX (A-Komp.)**

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**Precautionary statements**

- P261 Avoid breathing dust/fume/gas/mist/vapours/spray.  
 P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing 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.  
 P363 Wash contaminated clothing before reuse.  
 P405 Store locked up.  
 P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

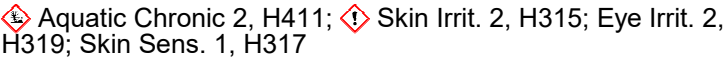
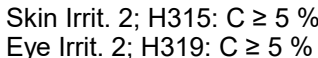
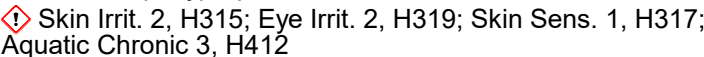
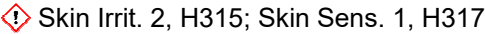
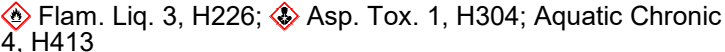
**2.3 Other hazards****Results of PBT and vPvB assessment**

- **PBT:** Not applicable.
- **vPvB:** Not applicable.

**SECTION 3: Composition/information on ingredients****3.2 Chemical characterisation: Mixtures****Description:**

Solvent- free preparation based on Bisphenol-A-Epichlorhydrin resin molecular weight  $\leq 700$ .

**Dangerous components:**

CAS: 1675-54-3	2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)] bisoxirane	50-100%
EINECS: 216-823-5		
Index number: 603-073-00-2	 Aquatic Chronic 2, H411;  Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317 Specific concentration limits: Skin Irrit. 2; H315: C $\geq$ 5 % Eye Irrit. 2; H319: C $\geq$ 5 %	
EC number: 701-333-0	Reaction products of 2,2-dimethylpropane-1,3-diol with 1-chloro-2,3-epoxypropane	25-50%
		
CAS: 68609-97-2	oxirane, mono[(C12-14-alkyloxy)methyl] derivs	10-25%
EINECS: 271-846-8		
Index number: 603-103-00-4		
CAS: 64741-65-7	Naphtha (petroleum), heavy alkylate	<2.5%
EINECS: 265-067-2		
Index number: 649-275-00-4		

- **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**

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

Personal protection for the First Aider.

It is possible to choke in case of vomiting in unconsciousness.

Bring unconscious persons into a stable position on side.

Keep the respiratory tract free (remove dentures and vomiting).

Check the pulse. In case of heart failure you have to make a cardiac massage. In case of stoppage of breathing: artificial respiration.

Take up a doctor immediately!

- **After inhalation** Supply fresh air or oxygen; call for doctor.

- **After skin contact** Instantly wash with water and soap and rinse thoroughly.

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**Trade name: CRISTALLFUGE-EPOX (A-Komp.)**

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- **After eye contact**  
Rinse opened eye for several minutes under running water. If symptoms persist, consult doctor.
- **After swallowing**  
Drink copious amounts of water and provide fresh air. Instantly call for doctor.  
Show the pack or the label to the doctor.
- **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**  
CO<sub>2</sub>, extinguishing powder or water jet. Fight larger fires with water jet.
- **5.2 Special hazards arising from the substance or mixture**  
Formation of poisonous gases during heating or in fires.
- **5.3 Advice for firefighters**
- **Protective equipment:** Wear self-contained breathing apparatus.
- **Additional information**  
Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.  
Follow the emergency-plan.

### SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**  
Wear protective clothing.  
Bring persons out of danger.  
Wear protective equipment. Keep unprotected persons away.
- **6.2 Environmental precautions:** Do not allow product to reach sewage system or water bodies.
- **6.3 Methods and material for containment and cleaning up:**  
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).  
Pick up the product mechanically, avoid dust formation.
- **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**  
Ensure good ventilation/exhaustion at the workplace.  
Prevent formation of aerosols.  
Keep away from children.
- **Information about protection against explosions and fires:** No special measures required.
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage**
- **Requirements to be met by storerooms and containers:** No special requirements.
- **Information about storage in one common storage facility:**  
Store away from foodstuffs.  
Please follow the rules of the VCI-Storage-Concept for chemicals.
- **Further information about storage conditions:** Keep container tightly sealed.
- **7.3 Specific end use(s)** No further relevant information available.

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### SECTION 8: Exposure controls/personal protection

- **8.1 Control parameters**
  - **Additional information about design of technical systems:**  
It must be possible to wash the skin in the working area.  
Eye-wash bottle must be available.
  - **Components with critical values that require monitoring at the workplace:**  
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
  - **Additional information:** The lists that were valid during the compilation were used as basis.
  - **8.2 Exposure controls**
  - **Personal protective equipment**
  - **General protective and hygienic measures**  
Clean skin only with cleaning agent especially for epoxy resin.  
Don't use solvent for skin cleaning!  
Clean clothes which are contaminate with epoxi resin before unusing again.  
The usual precautionary measures should be adhered to in handling the chemicals.  
Instantly remove any soiled and impregnated garments.  
Avoid contact with the eyes and skin.  
Be sure to clean skin thoroughly after work and before breaks.
  - **Breathing equipment:** When the product is sprayed use respiration filter P2.
  - **Protection of hands:** Hand Protection: Nitril-rubber-latex-gloves.
  - **Material of gloves**  
Nitril-rubber-latex-gloves II R: Thickness  $\geq 0,5\text{mm}$ ; Penetration time  $\geq 480$  min
- 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 exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.
  - **Eye protection:** Safety glasses
  - **Body protection:**  
Protective work clothing.  
Contaminated protection clothes must be cleaned carefully before reuse.

### SECTION 9: Physical and chemical properties

- **9.1 Information on basic physical and chemical properties**
- **General Information**
- **Appearance:**

<b>Form:</b>	Liquid
<b>Colour:</b>	According to product specification
<b>Smell:</b>	Weak, characteristic
<b>Odour threshold:</b>	Not determined.
- **pH-value:** Not determined.
- **Change in condition**

<b>Melting point/freezing point:</b>	Not determined
<b>Initial boiling point and boiling range:</b>	Not determined
- **Flash point:** Not applicable
- **Inflammability (solid, gaseous)** Not applicable.
- **Decomposition temperature:** Not determined.

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Trade name: **CRISTALLFUGE-EPOX (A-Komp.)**

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· <b>Self-inflammability:</b>	Product is not selfigniting.
· <b>Explosive properties:</b>	Product is not explosive.
· <b>Critical values for explosion:</b>	
<b>Lower:</b>	Not determined.
<b>Upper:</b>	Not determined.
· <b>Steam pressure:</b>	Not determined.
· <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>Evaporation rate</b>	Not determined.
· <b>Solubility in / Miscibility with Water:</b>	Not miscible or difficult to mix
· <b>Partition coefficient: n-octanol/water:</b>	Not determined.
· <b>Viscosity:</b>	
<b>dynamic at 20 °C:</b>	169 mPas
<b>kinematic:</b>	Not determined.
· <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 used according to specifications.
- **10.3 Possibility of hazardous reactions** Reacts with strong acids and oxidizing 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:** No dangerous decomposition products known

### 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:**

#### 1675-54-3 2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane

Oral LD50 &gt;15,000 mg/kg (rats)

Dermal LD50 23,000 mg/kg (Kan)

#### Reaction products of 2,2-dimethylpropane-1,3-diol with 1-chloro-2,3-epoxypropane

Oral LD50 3,595 mg/kg (rats)

Dermal LD50 &gt;2,000 mg/kg (rats) (OECD 402)

#### 68609-97-2 oxirane, mono[(C12-14-alkyloxy)methyl] derivs

Oral LD50 &gt;5,000 mg/kg (rats)

Dermal LD50 &gt;4,500 mg/kg (rabbit)

#### 64741-65-7 Naphtha (petroleum), heavy alkylate

Oral LD50 &gt;5,000 mg/kg (rats) (OECD 401)

Dermal LD50 &gt;5,000 mg/kg (rabbit) (OECD 402)

Inhalative LC50/4 h &gt;4,951 mg/l (rats) (OECD 403)

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**Trade name: CRISTALLFUGE-EPOX (A-Komp.)**

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- **Primary irritant effect:**
- **Skin corrosion/irritation**  
The product has an irritate-effect.  
Causes skin irritation.
- **Serious eye damage/irritation**  
Causes serious eye irritation.
- **Respiratory or skin sensitisation**  
May cause an allergic skin reaction.
- **Additional toxicological information:** Sensitizing
- **CMR effects (carcinogenity, 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:**

##### **1675-54-3 2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane**

LC50/96h	2 mg/l (for)
EC50 (48h) (static)	1.8 mg/l (Daphnia magna)
ERC50 (static)	11 mg/l /72h (Scenedesmus capricornutum)
IC50	>42.6 mg/l /18h (bacterial toxicity)

##### **Reaction products of 2,2-dimethylpropane-1,3-diol with 1-chloro-2,3-epoxypropane**

LC50/96h	101 mg/l (fish toxicity) (QSAR)
EC50 (48h)	10-100 mg/l (Daphnia magna)
EC50 (96h)	1,073.67 mg/l (algae toxicity) (QSAR)

##### **68609-97-2 oxirane, mono[(C12-14-alkyloxy)methyl] derivs**

LC50/96h	>5,000 mg/l (rainbow trout)
EC50 (48h) (static)	7.2 mg/l (Daphnia magna) (OECD 202)
EC/LC50 (72h)	844 mg/l (algae toxicity)
IC50 (static)	>100 mg/l /3h (activated sludge bacteria) (OECD 209)
NOEC	500 mg/l /72h (Pseudokirchneriella subcapitata)

##### **64741-65-7 Naphtha (petroleum), heavy alkylate**

EC/LC50 (48h) (static)	>1,000 mg/l (Daphnia magna) (OECD 202)
EL 50 (static)	>1,000 mg/l /72h (Pseudokirchneriella subcapitata)
LL50 (static)	>1,000 mg/l /96h (rainbow trout) (OECD 203)
NOEL	0.192 mg/l (fish toxicity)

- **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.

#### · **Additional ecological information:**

##### · **General notes:**

Water hazard class 2 (Self-assessment): hazardous for water.  
Do not allow product to reach ground water, water bodies or sewage system.  
Danger to drinking water if even small quantities leak into soil.

##### · **12.5 Results of PBT and vPvB assessment**

- **PBT:** Not applicable.
- **vPvB:** Not applicable.

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- **12.6 Other adverse effects** No further relevant information available.

## SECTION 13: Disposal considerations

- **13.1 Waste treatment methods**
- **Recommendation**  
Can be deposited with household garbage after solidification following consultation with the operator of the waste disposal facility and the pertinent authorities and under adherence to the necessary technical regulations.  
Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.

## SECTION 14: Transport information

- |   |  |
|---|--|
| <ul style="list-style-type: none"> <li>· <b>14.1 UN-Number</b></li> <li>· <b>ADR, IMDG, IATA</b></li> </ul>   | UN3082   |
| <ul style="list-style-type: none"> <li>· <b>14.2 UN proper shipping name</b></li> <li>· <b>ADR</b></li> <li>· <b>IMDG</b></li> <li>· <b>IATA</b></li> </ul>   | 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane)<br>ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane), MARINE POLLUTANT<br>ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane) |
| <ul style="list-style-type: none"> <li>· <b>14.3 Transport hazard class(es)</b></li> <li>· <b>ADR, IMDG, IATA</b></li> </ul> <div style="display: flex; align-items: center; gap: 10px;">   </div> <ul style="list-style-type: none"> <li>· <b>Class</b></li> <li>· <b>Label</b></li> </ul> | 9 Miscellaneous dangerous substances and articles.<br>9  |
| <ul style="list-style-type: none"> <li>· <b>14.4 Packing group</b></li> <li>· <b>ADR, IMDG, IATA</b></li> </ul>   | III  |
| <ul style="list-style-type: none"> <li>· <b>14.5 Environmental hazards:</b></li> <li>· <b>Marine pollutant:</b></li> <li>· <b>Special marking (ADR):</b></li> <li>· <b>Special marking (IATA):</b></li> </ul>   | Yes<br>Symbol (fish and tree)<br>Symbol (fish and tree)<br>Symbol (fish and tree)  |
| <ul style="list-style-type: none"> <li>· <b>14.6 Special precautions for user</b></li> <li>· <b>Kemler Number:</b></li> <li>· <b>EMS Number:</b></li> <li>· <b>Stowage Category</b></li> </ul>  | Warning: Miscellaneous dangerous substances and articles.<br>90<br>F-A,S-F<br>A  |

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· <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
· <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. (2,2'-[(1-METHYLETHYLIDENE)BIS(4,1-PHENYLENEOXYMETHYLENE)]BISOXIRANE), 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
- **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

## SECTION 16: Other information

These data are based on our present knowledge. However, they shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- **Relevant phrases**  
H226 Flammable liquid and vapour.  
H304 May be fatal if swallowed and enters airways.  
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.  
H413 May cause long lasting harmful effects to aquatic life.
- **Department issuing data specification sheet:** Environment protection department.
- **Contact:** Environment protection department.
- **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

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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

Flam. Liq. 3: Flammable liquids – Category 3

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

Asp. Tox. 1: Aspiration 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

Aquatic Chronic 4: Hazardous to the aquatic environment - long-term aquatic hazard – Category 4

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