

# Safety data sheet

## according to 1907/2006/EC, Article 31

Printing date 03.08.2023

Version number 6 (replaces version 5)

Revision: 03.08.2023

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

#### 1.1 Product identifier

- Trade name: **Akepox 5010 Component A**
- Article number: 11637, 11638, 22912, 10684A, 10687A, 10685A, 10686A, 10568A, 11460A, 11561A, 11562A, 11563A, 11564A, 11565A, 11566A, 11567A, 11568A, 11569A, 11570A, 11724, 10325A
- UFI: AFNM-QHHN-8218-FWAD

#### 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: AKEMI chemisch technische Spezialfabrik GmbH  
Lechstrasse 28  
D 90451 Nürnberg
- Tel. +49(0)911-642960  
Fax. +49(0)911-644456  
e-mail info@akemi.de

#### Further information obtainable from:

Laboratory

#### 1.4 Emergency telephone number:

Product Safety Department AKEMI chemisch technische Spezialfabrik GmbH  
Tel. +49(0)911-64296-59  
Reachable during the following office hours:  
Monday – Thursday from 07:30 a.m. to 16:30 p.m.  
Friday from 07:30 a.m. to 13:30 p.m.

### 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.

- Response: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].  
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
IF INHALED: Remove person to fresh air and keep comfortable for breathing.  
Call a POISON CENTER/doctor if you feel unwell.
- Storage: Store in a well-ventilated place. Keep container tightly closed.

#### 2.2 Label elements

- Labelling according to Regulation (EC) No 1272/2008
- Hazard pictograms

The product is classified and labelled according to the CLP regulation.



GHS07 GHS09

#### Signal word

Warning

#### Hazard-determining components of labelling:

bis[4-(2,3-epoxypropoxy)phenyl]propane  
Cyclohexanedimethanol diglycidyl ether  
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.

#### Hazard statements

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|                                   |   |  |
|-----------------------------------|---|--|
| · <u>Precautionary statements</u> | P101<br>P102<br>P103<br>P261<br>P273<br>P280<br><br>P302+P352<br>P305+P351+P338<br><br>P333+P313<br>P337+P313<br>P501 | If medical advice is needed, have product container or label at hand.<br>Keep out of reach of children.<br>Read carefully and follow all instructions.<br>Avoid breathing vapours.<br>Avoid release to the environment.<br>Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.<br>IF ON SKIN: Wash with plenty of water.<br>IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.<br>If skin irritation or rash occurs: Get medical advice/attention.<br>If eye irritation persists: Get medical advice/attention.<br>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.· Determination of endocrine-disrupting properties

For information on endocrine disrupting properties see section 11.

**SECTION 3: Composition/information on ingredients****· 3.2 Mixtures**· Description: Mixture of substances listed below with nonhazardous additions.· Dangerous components:

|   |   |          |
|---|---|----------|
| CAS: 1675-54-3<br>EINECS: 216-823-5<br>Index number: 603-073-00-2<br>Reg.nr.: 01-2119456619-26-xxxx | bis[4-(2,3-epoxypropoxy)phenyl]propane<br>-----<br>Aquatic Chronic 2, H411<br>Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317<br>EUH205<br>Specific concentration limits: Eye Irrit. 2; H319: C ≥ 5 %<br>Skin Irrit. 2; H315: C ≥ 5 % | 50-100%  |
| CAS: 14228-73-0<br>EINECS: 238-098-4<br>Reg.nr.: 01-2120068066-56-xxxx                              | Cyclohexanedimethanol diglycidyl ether<br>-----<br>Acute Tox. 4, H302; Skin Irrit. 2, H315; Skin Sens. 1, H317<br>Aquatic Chronic 3, H412<br>EUH205   | 12.5-25% |
| CAS: 2530-83-8<br>EINECS: 219-784-2<br>Reg.nr.: 01-2119513212-58                                    | [3-(2,3-epoxypropoxy)propyl]trimethoxysilane<br>-----<br>Eye Dam. 1, H318   | 1-5%     |

· 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:Take affected persons out into the fresh air.  
Position and transport stably in side position.  
Immediately remove any clothing soiled by the product.· After inhalation:

Supply fresh air and to be sure call for a doctor.

In case of unconsciousness place patient stably in side position for transportation.

· After skin contact:

If skin irritation continues, consult a doctor.

Immediately wash with water and soap and rinse thoroughly.

· After eye contact:

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

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- After swallowing: Rinse out mouth and then drink plenty of water.
- **4.2 Most important symptoms and effects, both acute and delayed** Breathing difficulty  
Coughing  
Allergic reactions
- Hazards Danger of impaired breathing.
- **4.3 Indication of any immediate medical attention and special treatment needed** If swallowed, gastric irrigation with added, activated carbon.

#### SECTION 5: Firefighting measures

- **5.1 Extinguishing media**
- Suitable extinguishing agents: CO<sub>2</sub>, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **5.2 Special hazards arising from the substance or mixture** Formation of toxic gases is possible during heating or in case of fire. In case of fire, the following can be released:  
Carbon monoxide (CO)  
Under certain fire conditions, traces of other toxic gases cannot be excluded.
- **5.3 Advice for firefighters**
- Protective equipment: Wear fully protective suit.  
Wear self-contained respiratory protective device.  
Do not inhale explosion gases or combustion gases.
- Additional information Collect contaminated fire fighting water separately. It must not enter the sewage system.  
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  
Use respiratory protective device against the effects of fumes/dust/aerosol.
- **6.2 Environmental precautions:** Do not allow to penetrate the ground/soil.  
Do not allow product to reach sewage system or any water course.  
Inform respective authorities in case of seepage into water course or sewage system.  
Do not allow to enter sewers/ surface or ground water.
- **6.3 Methods and material for containment and cleaning up:** Dispose of the material collected according to regulations.  
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).  
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 disposal information.

#### SECTION 7: Handling and storage

- **7.1 Precautions for safe handling** Keep receptacles tightly sealed.  
Store in cool, dry place in tightly closed receptacles.

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- Information about fire - and explosion protection: Use only in well ventilated areas.  
Ensure good ventilation/exhaustion at the workplace.
- **7.2 Conditions for safe storage, including any incompatibilities**
- Storage:
- Requirements to be met by storerooms and receptacles: No special measures required.
- Information about storage in one common storage facility: Store only in the original receptacle.  
Prevent any seepage into the ground.
- Further information about storage conditions: Store away from reducing agents.
- Storage class: Store receptacle in a well ventilated area.  
Keep container tightly sealed.
- **7.3 Specific end use(s)** 12  
No further relevant information available.

**SECTION 8: Exposure controls/personal protection**

- **8.1 Control parameters**
- Ingredients with limit 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.

## · DNELs

**1675-54-3 bis[4-(2,3-epoxypropoxy)phenyl]propane**

|            |                             |                                   |
|------------|-----------------------------|-----------------------------------|
| Oral       | DNEL (Kurzzeit-akut)        | 0.5 mg/kg bw/day (BEV)            |
|            | DNEL (Langzeit-wiederholt)  | 0.5 mg/kg bw/day (BEV)            |
| Dermal     | DNEL (Kurzzeit-akut)        | 8.33 mg/kg bw/day (ARB)           |
|            |                             | 3.571 mg/kg bw/day (BEV)          |
| Inhalative | DNEL ( Langzeit-wiederholt) | 0.75 mg/kg bw/day (ARB)           |
|            |                             | 0.0893 mg/kg bw/day (BEV)         |
|            | DNEL (Kurzzeit-akut)        | 12.25 mg/m <sup>3</sup> Air (ARB) |
|            | DNEL (Langzeit-wiederholt)  | 4.93 mg/m <sup>3</sup> Air (ARB)  |
|            |                             | 0.87 mg/m <sup>3</sup> Air (BEV)  |

**14228-73-0 Cyclohexanedimethanol diglycidyl ether**

|            |                             |                                  |
|------------|-----------------------------|----------------------------------|
| Oral       | DNEL (Langzeit-wiederholt)  | 0.5 mg/kg bw/day (BEV)           |
| Dermal     | DNEL ( Langzeit-wiederholt) | 1 mg/kg bw/day (ARB)             |
|            |                             | 0.5 mg/kg bw/day (BEV)           |
| Inhalative | DNEL (Langzeit-wiederholt)  | 3.52 mg/m <sup>3</sup> Air (ARB) |
|            |                             | 0.86 mg/m <sup>3</sup> Air (BEV) |

**2530-83-8 [3-(2,3-epoxypropoxy)propyl]trimethoxysilane**

|            |                             |                                  |
|------------|-----------------------------|----------------------------------|
| Oral       | DNEL (Langzeit-wiederholt)  | 12.5 mg/kg bw/day (BEV)          |
| Dermal     | DNEL (Kurzzeit-akut)        | 21 mg/kg bw/day (ARB)            |
|            |                             | 12.5 mg/kg bw/day (BEV)          |
|            | DNEL ( Langzeit-wiederholt) | 21 mg/kg bw/day (ARB)            |
| Inhalative |                             | 5 mg/kg bw/day (BEV)             |
|            | DNEL (Kurzzeit-akut)        | 147 mg/m <sup>3</sup> Air (ARB)  |
|            |                             | 43.5 mg/m <sup>3</sup> Air (BEV) |

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|  |                            |   |
|--|----------------------------|---|
|  | DNEL (Langzeit-wiederholt) | 147 mg/m <sup>3</sup> Air (ARB)<br>43.5 mg/m <sup>3</sup> Air (BEV) |
|--|----------------------------|---|

· **PNECs****1675-54-3 bis[4-(2,3-epoxypropoxy)phenyl]propane**

|                |                              |
|----------------|------------------------------|
| PNEC (wässrig) | 10 mg/l (KA)                 |
|                | 0.0006 mg/l (MW)             |
|                | 0.006 mg/l (SW)              |
|                | 0.018 mg/l (WAS)             |
| PNEC (fest)    | 0.065 mg/kg Trockengew (BO)  |
|                | 0.034 mg/kg Trockengew (MWS) |
|                | 0.341 mg/kg Trockengew (SWS) |

**14228-73-0 Cyclohexanedimethanol diglycidyl ether**

|                |                              |
|----------------|------------------------------|
| PNEC (wässrig) | 0.6 mg/l (KA)                |
|                | 0.012 mg/l (MW)              |
|                | 0.117 mg/l (SW)              |
| PNEC (fest)    | 0.24 mg/kg Trockengew (BO)   |
|                | 0.047 mg/kg Trockengew (MWS) |
|                | 0.47 mg/kg Trockengew (SWS)  |

**2530-83-8 [3-(2,3-epoxypropoxy)propyl]trimethoxysilane**

|                |                             |
|----------------|-----------------------------|
| PNEC (wässrig) | 8.2 mg/l (KA)               |
|                | 0.1 mg/l (MW)               |
|                | 1 mg/l (SW)                 |
|                | 1 mg/l (WAS)                |
| PNEC (fest)    | 0.14 mg/kg Trockengew (BO)  |
|                | 0.36 mg/kg Trockengew (MWS) |
|                | 3.6 mg/kg Trockengew (SWS)  |

· **Additional information:** The lists valid during the making were used as basis.· **8.2 Exposure controls**

- **Appropriate engineering controls** No further data; see section 7.
- **Individual protection measures, such as personal protective equipment**
- **General protective and hygienic measures:**

Do not eat, drink, smoke or sniff while working.  
 Use skin protection cream for skin protection.  
 Clean skin thoroughly immediately after handling the product.  
 Keep away from foodstuffs, beverages and feed.  
 Immediately remove all soiled and contaminated clothing  
 Wash hands before breaks and at the end of work.  
 Do not inhale gases / fumes / aerosols.  
 Avoid contact with the eyes and skin.

- **Respiratory protection:** Not necessary if room is well-ventilated.

Short term filter device:  
 Filter A/P2

- **Hand protection**

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.  
 Preventive skin protection by use of skin-protecting agents is recommended.  
 After use of gloves apply skin-cleaning agents and skin cosmetics.

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### Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

Skin protection agent recommendation for preventive skin shelter in application and combination of protective gloves:

STOKO EMULSION (<http://www.stoko.com>)

Skin protection recommendation for skin cleaning after product handling:

Kresto Classic (<http://debstoko.com>)

Skin protection agent recommendation for skin aftercare:

STOKO VITAN (<http://www.stoko.com>)

The protection gloves to be used have to comply with the specifications of the directive 89/686/EC and the directive derived decree EN374, respectively, e.g. the above listed protection glove type. The mentioned permeation times' data were generated and verified with material samples of the recommended protection glove type in the scope of laboratory analyses of the company KCL GmbH in compliance with EN374.

This recommendation refers exclusively to the material safety data sheet referenced product delivered by Akemi and the indicated field of application. In case of product dilution or in case of mixture with different substances or chemicals, and in condition of EN374 deviation the producer of CE-approved protection gloves must be contacted for detailed information (e.g., KCL GmbH, Germany, 36124 Eichenzell, internet: <http://www.kcl.de>).

· Material of gloves

Butyl rubber, BR

Fluorocarbon rubber (Viton)

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

Value for the permeation: Level  $\leq$  6, 480 min

The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.

· For the permanent contact gloves made of the following materials are suitable:

Butyl rubber, BR

Butoject (KCL, Art\_No. 897, 898)

Fluorocarbon rubber (Viton)

Vitoject (KCL, Art\_No. 890)

· As protection from splashes gloves made of the following materials are suitable:

Nitrile rubber, NBR

Dermatril (KCL, Art\_No. 740, 741, 742)

Chloroprene rubber, CR

Camapren (KCL, Art\_No. 720, 722, 726)

· Not suitable are gloves made of the following materials:

Leather gloves

Strong material gloves

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· Eye/face protection

Tightly sealed goggles

· Body protection:

Protective work clothing

**SECTION 9: Physical and chemical properties****9.1 Information on basic physical and chemical properties**· General Information

|   |                                   |
|---|-----------------------------------|
| · <u>Colour:</u>  | Colourless                        |
| · <u>Odour:</u>   | Characteristic                    |
| · <u>Melting point/freezing point:</u>                            | Undetermined.                     |
| · <u>Boiling point or initial boiling point and boiling range</u> | Undetermined.                     |
| · <u>Flash point:</u>   | Not applicable.                   |
| · <u>pH</u>   | Not determined.<br>Not applicable |
| · <u>Viscosity:</u>   |                                   |
| · <u>Kinematic viscosity</u>                                      | Not determined.                   |
| · <u>Dynamic:</u>   | Not determined.                   |
| · <u>Solubility</u>   |                                   |
| · <u>water:</u>   | Not miscible or difficult to mix. |
| · <u>Vapour pressure at 20 °C:</u>                                | 2 hPa                             |
| · <u>Density and/or relative density</u>                          |                                   |
| · <u>Density at 20 °C:</u>  | 1.17 g/cm <sup>3</sup>            |

**9.2 Other information**

|  |   |
|--|---|
| · <u>Appearance:</u>   |   |
| · <u>Form:</u>   | Pasty   |
| · <u>Important information on protection of health and environment, and on safety.</u> |   |
| · <u>Ignition temperature:</u>   | Product is not selfigniting.                  |
| · <u>Explosive properties:</u>   | Product does not present an explosion hazard. |
| · <u>Solvent separation test:</u>  | Not applicable                                |
| · <u>Solvent content:</u>  |   |
| · <u>Solids content:</u>   | 6.9 %   |

· Information with regard to physical hazard classes

|  |      |
|--|------|
| · <u>Explosives</u>  | Void |
| · <u>Flammable gases</u>   | Void |
| · <u>Aerosols</u>  | Void |
| · <u>Oxidising gases</u>   | Void |
| · <u>Gases under pressure</u>  | Void |
| · <u>Flammable liquids</u>   | Void |
| · <u>Flammable solids</u>  | Void |
| · <u>Self-reactive substances and mixtures</u>                                     | Void |
| · <u>Pyrophoric liquids</u>  | Void |
| · <u>Pyrophoric solids</u>   | Void |
| · <u>Self-heating substances and mixtures</u>                                      | Void |
| · <u>Substances and mixtures, which emit flammable gases in contact with water</u> | Void |
| · <u>Oxidising liquids</u>   | Void |
| · <u>Oxidising solids</u>  | Void |
| · <u>Organic peroxides</u>   | Void |
| · <u>Corrosive to metals</u>   | Void |

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· Desensitised explosives 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 used 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.  
Strong exothermic reaction with acids.  
Reacts with reducing 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:** Irritant 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.

· LD/LC50 values relevant for classification:**ATE (Acute Toxicity Estimates)**

|      |      |                   |
|------|------|-------------------|
| Oral | LD50 | 5,984 mg/kg (rat) |
|------|------|-------------------|

**1675-54-3 bis[4-(2,3-epoxypropoxy)phenyl]propane**

|        |      |                                  |
|--------|------|----------------------------------|
| Oral   | LD50 | >2,000 mg/kg (rat) (OECD 420)    |
| Dermal | LD50 | >2,000 mg/kg (rabbit) (OECD 402) |

**14228-73-0 Cyclohexanedimethanol diglycidyl ether**

|        |      |                       |
|--------|------|-----------------------|
| Oral   | LD50 | 1,098 mg/kg (rat)     |
| Dermal | LD50 | >2,000 mg/kg (rabbit) |

**2530-83-8 [3-(2,3-epoxypropoxy)propyl]trimethoxysilane**

|            |             |   |
|------------|-------------|---|
| Oral       | LD50        | 8,025 mg/kg (rat) (OECD 401)  |
|            | NOAEL-Werte | ≥5 mg/kg (mouse)<br>200 mg/kg (rabbit) (OECD 414)<br>500 mg/kg (rat) (OECD 415) |
|            | Dermal      | LD50  |
| Inhalative | LC50/4 h    | >5.3 mg/l (rat) (OECD 403)  |
|            | NOAEC       | 0.225 mg/l (rat) (OECD 412)   |

- Skin corrosion/irritation Causes skin irritation.
- Serious eye damage/irritation Causes serious eye irritation.
- Respiratory or skin 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.

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**· 11.2 Information on other hazards**

· Endocrine disrupting properties

None of the ingredients is listed.

**SECTION 12: Ecological information****· 12.1 Toxicity**

· Aquatic toxicity:

**1675-54-3 bis[4-(2,3-epoxypropoxy)phenyl]propane**

|          |                                     |
|----------|-------------------------------------|
| IC50     | >100 mg/l (BES)                     |
| EC10/16h | 100 mg/l (pseudomonas putida)       |
| EC50/48h | 1.8 mg/l (daphnia magna)            |
| NOEC/21d | 0.3 mg/l (daphnia magna)            |
| EC50/72h | 11 mg/l (selenastrum capricornutum) |
| LC50/96h | 2 mg/l (Oncorhynchus mykiss)        |

**14228-73-0 Cyclohexanedimethanol diglycidyl ether**

|          |   |
|----------|---|
| EC50/48h | 16.3 mg/l (daphnia magna)                           |
| LC0/96h  | 10 mg/l (piscis)                                    |
| EC50/72h | 36.6 mg/l (Pseudokirchneriella subcapitata)         |
| LC50/96h | 13 mg/l (piscis)<br>10.1 mg/l (Oncorhynchus mykiss) |

**2530-83-8 [3-(2,3-epoxypropoxy)propyl]trimethoxysilane**

|           |  |
|-----------|--|
| EC50/96h  | 350 mg/l (Pseudokirchneriella subcapitata) (OECD 201)<br>>100 mg/l (salmon)              |
| EC50      | 119 mg/l (algae)   |
| IC50      | 255 mg/l (Scenedesmus subspicatus)   |
| EC50/48h  | 324 mg/l (daphnia magna)   |
| EC10/5h   | 1,500 mg/l (pseudomonas putida)  |
| ErC50/72h | 350 mg/l (Selenastrum capricornutum)   |
| ECO/96h   | 44 mg/l (Cyprinus carpio)  |
| NOEC      | >100 mg/kg (Klärschlamm: Atmungs-/Vermehrungshemmung) (OECD 209)                         |
| NOEC/21d  | ≥100 mg/l (daphnia magna) (OECD 211)   |
| EC50/48h  | 324-710 mg/l (daphnia magna) (OECD 202)  |
| EC50/72h  | 255 mg/l (Scenedesmus subspicatus)   |
| LC50/96h  | 55 mg/l (Cyprinus carpio) (OECD 203)<br>276 mg/l (lem)<br>237 mg/l (Oncorhynchus mykiss) |

**· 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

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· Additional ecological information:· General notes:

Toxic for aquatic organisms

Do not allow product to reach ground water, water course or sewage system.

Also poisonous for fish and plankton in water bodies.

Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water

**SECTION 13: Disposal considerations**· **13.1 Waste treatment methods**· Recommendation

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

· European waste catalogue

|           |   |
|-----------|---|
| 20 00 00  | MUNICIPAL WASTES (HOUSEHOLD WASTE AND SIMILAR COMMERCIAL, INDUSTRIAL AND INSTITUTIONAL WASTES) INCLUDING SEPARATELY COLLECTED FRACTIONS |
| 20 01 00  | separately collected fractions (except 15 01)   |
| 20 01 27* | paint, inks, adhesives and resins containing hazardous substances   |

· Uncleaned packaging:· Recommendation:

Empty contaminated packagings thoroughly. They may be recycled after thorough and proper cleaning.

**SECTION 14: Transport information**· **14.1 UN number or ID number**· ADR, IMDG, IATA

UN3082

· **14.2 UN proper shipping name**· ADR

3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (bis[4-(2,3-epoxypropoxy)phenyl]propane)

· IMDG

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (bis[4-(2,3-epoxypropoxy)phenyl]propane), MARINE POLLUTANT

· IATA

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (bis[4-(2,3-epoxypropoxy)phenyl]propane)

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

9 (M6) Miscellaneous dangerous substances and articles.

· Label

9

· IMDG, IATA· Class

9 Miscellaneous dangerous substances and articles.

· Label

9

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EU

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**· 14.4 Packing group**

· ADR, IMDG, IATA III

**· 14.5 Environmental hazards:**

· Marine pollutant: Yes  
Symbol (fish and tree)

· Special marking (ADR): Symbol (fish and tree)

· Special marking (IATA): Symbol (fish and tree)

**· 14.6 Special precautions for user**

Warning: Miscellaneous dangerous substances and articles.

· Hazard identification number (Kemler code): 90

· EMS Number: F-A,S-F

· Stowage Category A

**· 14.7 Maritime transport in bulk according to IMO instruments**

Not applicable.

**· Transport/Additional information:**

· ADR

· Limited quantities (LQ) 5L

· Excepted quantities (EQ) Code: E1  
Maximum net quantity per inner packaging: 30 ml  
Maximum net quantity per outer packaging: 1000 ml

· Transport category 3

· Tunnel restriction code (-)

**· IMDG**

· Limited quantities (LQ) 5L

· Excepted quantities (EQ) Code: E1  
Maximum net quantity per inner packaging: 30 ml  
Maximum net quantity per outer packaging: 1000 ml

**· UN "Model Regulation":**

UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (BIS[4-(2,3-EPOXYPROPOXY)PHENYL]PROPANE), 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.

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· 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.

· Regulation (EC) No 273/2004 on drug precursors

None of the ingredients is listed.

· Regulation (EC) No 111/2005 laying down rules for the monitoring of trade between the Community and third countries in drug precursors

None of the ingredients is listed.

· National regulations:

· Information about limitation of use: Employment restrictions concerning juveniles must be observed.  
Employment restrictions concerning pregnant and lactating women must be observed.

· Waterhazard class: Water hazard class 2 (Self-assessment): hazardous for water.

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

None of the ingredients is listed.

· VOC EU 0.0 g/l

· **15.2 Chemical safety assessment:**

A Chemical Safety Assessment has not been carried out.

**SECTION 16: Other information**

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

This Safety Data Sheet is in compliance with Regulation (EC) No 1907/2006, Article 31 as amended by Regulation (EU) 2020/878.

· Department issuing SDS: Laboratory· Date of previous version: 06.06.2023· Version number of previous version: 5

· Abbreviations and acronyms:

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)  
 ICAO: International Civil Aviation Organisation  
 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)  
 DNEL: Derived No-Effect Level (REACH)  
 PNEC: Predicted No-Effect Concentration (REACH)  
 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 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  
 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