

# Safety data sheet

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

Printing date 24.03.2021

Version number 11

Revision: 24.03.2021

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

#### 1.1 Product identifier

Trade name:

**COLOURING TINT LIQUID FOR AKEPOX**

Article number:

11270, 11271, 11272, 11273, 11274, 11275, 11276, 11277, 11278, 11279, 11280, 11281, 11282, 11283, 11284, 11285, 11286, 11287, 11288, 11289, 11290, 11291, 11235, 11236, 11237, 11238, 11239, 11240, 11241, 11242, 11251, 11252, 11253, 11254, 11255, 11256, 11257

UFI:

MMG4-502J-C000-ER01

#### 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

Stainer

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

Manufacturer/Supplier:

AKEMI chemisch technische Spezialfabrik GmbH  
Lechstrasse 28  
D 90451 NürnbergTel. +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.  
+44 (171) 635 91 91  
National Poison Inform. Centre  
Medical Toxicology Unit  
Avalonley Road  
London SE14 5ER

### 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.

#### 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  
 Reaction mass of 2,2'-[methylenebis(4,1-phenyleneoxymethylene)]dioxirane and [2-({2-[4-(oxiran-2-ylmethoxy)benzyl]phenoxy)methyl}oxirane and [2,2'-[methylenebis(2,1-phenyleneoxymethylene)]dioxirane  
 Reaction products of hexane-1,6-diol with 2-(chloromethyl)oxirane (1:2)  
 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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- Precautionary statements
  - P101 If medical advice is needed, have product container or label at hand.
  - P102 Keep out of reach of children.
  - P103 Read carefully and follow all instructions.
  - P261 Avoid breathing vapours.
  - P273 Avoid release to the environment.
  - P280 Wear protective gloves / eye protection.
  - P302+P352 IF ON SKIN: Wash with plenty of water.
  - P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
  - P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
  - P337+P313 If eye irritation persists: Get medical advice/attention.
  - P501 Dispose of contents/container in accordance with local/regional/national/international regulations.
- Additional information: Warning! Hazardous respirable droplets may be formed when sprayed. Do not breathe spray or mist.
- **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: consisting of the following components.

· Dangerous components:

CAS: 13463-67-7 EINECS: 236-675-5 Index number: 022-006-00-2 Reg.nr.: 01-2119489379-17-xxxx	titanium dioxide Carc. 2, H351	25-50%
CAS: 1675-54-3 EINECS: 216-823-5 Index number: 603-073-00-2 Reg.nr.: 01-2119456619-26-xxxx	bis[4-(2,3-epoxypropoxy)phenyl]propane Aquatic Chronic 2, H411 Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317	25-50%
EC number: 701-263-0 Reg.nr.: 01-2119454392-40-0003	Reaction mass of 2,2'-[methylenebis(4,1-phenyleneoxymethylene)]dioxirane and [2-({2-[4-(oxiran-2-ylmethoxy)benzyl]phenoxy)methyl}oxirane and [2,2'-[methylenebis(2,1-phenyleneoxymethylene)]dioxirane Aquatic Chronic 2, H411 Skin Irrit. 2, H315; Skin Sens. 1, H317	12.5-25%
CAS: 933999-84-9 EC number: 618-939-5 Reg.nr.: 01-2119463471-41-0005	Reaction products of hexane-1,6-diol with 2-(chloromethyl)oxirane (1:2) Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317 Aquatic Chronic 3, H412	<12.5%

- 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.
- 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.

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- After eye contact: Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
- After swallowing: If symptoms persist consult doctor.
- Information for doctor: The sensitizing effect of epoxide based resins is mainly caused by the concentration of epoxy resin polymers with a specific molecular weight  $\leq 300$ . The observed allergic dermal and respiratory appearances should be treated symptomatically in dependence of the severity. An epoxy resin based allergic disease belongs to a cell mediated (interaction of lymphocytes) type IV allergy.
- **4.2 Most important symptoms and effects, both acute and delayed** Allergic reactions
- Hazards Skin contact with polyester and epoxy resin solutions as ingredient of the product should be avoided due to risks of skin irritations or allergic skin appearances. If occasional hand contact can not be avoided, protection gloves, proper protection ointments and protective agents generating a protective layer on the skin were applied.
- **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 self-contained respiratory protective device.  
Do not inhale explosion gases or combustion gases.  
Wear fully protective suit.
- Additional information Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.  
Collect contaminated fire fighting water separately. It must not enter the sewage system.

### 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 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:** 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.

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**SECTION 7: Handling and storage****7.1 Precautions for safe handling**

Keep receptacles tightly sealed.  
Store in cool, dry place in tightly closed receptacles.  
Use only in well ventilated areas.  
Ensure good ventilation/exhaustion at the workplace.

**Information about fire - and explosion protection:**

No special measures required.

**7.2 Conditions for safe storage, including any incompatibilities****Storage:****Requirements to be met by storerooms and receptacles:**

Store only in the original receptacle.  
Prevent any seepage into the ground.

**Information about storage in one common storage facility:**

Store away from reducing agents.  
Store away from foodstuffs.

**Further information about storage conditions:**

Store receptacle in a well ventilated area.  
Protect from frost.  
Keep container tightly sealed.

**Storage class:**

12

**7.3 Specific end use(s)**

No further relevant information available.

**SECTION 8: Exposure controls/personal protection****8.1 Control parameters****Additional information about design of technical facilities:**

No further data; see item 7.

**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****13463-67-7 titanium dioxide**

Oral	DNEL (Langzeit-wiederholt)	700 mg/kg bw/day (BEV)
Inhalative	DNEL (Langzeit-wiederholt)	10 mg/m <sup>3</sup> Air (ARB)

**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)
	DNEL (Langzeit-wiederholt)	3.571 mg/kg bw/day (BEV)
Inhalative	DNEL (Kurzzeit-akut)	0.75 mg/kg bw/day (ARB)
	DNEL (Langzeit-wiederholt)	0.0893 mg/kg bw/day (BEV)
Inhalative	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)

**Reaction mass of 2,2'-[methylenebis(4,1-phenyleneoxymethylene)]dioxirane and [2-({2-[4-(oxiran-2-ylmethoxy)benzyl]phenoxy)methyl}oxirane and [2,2'-[methylenebis(2,1-phenyleneoxymethylene)]dioxirane**

Oral	DNEL (Langzeit-wiederholt)	6.25 mg/kg bw/day (BEV)
Dermal	DNEL (Langzeit-wiederholt)	104.15 mg/kg bw/day (ARB)
		62.5 mg/kg bw/day (BEV)

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Inhalative	DNEL (Langzeit-wiederholt)	29.39 mg/m <sup>3</sup> Air (ARB) 8.7 mg/m <sup>3</sup> Air (BEV)
<b>933999-84-9 Reaction products of hexane-1,6-diol with 2-(chloromethyl)oxirane (1:2)</b>		
Oral	DNEL (Kurzzeit-akut)	0.83 mg/kg bw/day (BEV)
	DNEL (Langzeit-wiederholt)	0.83 mg/kg bw/day (BEV)
Dermal	DNEL (Kurzzeit-akut)	1.7 mg/kg bw/day (BEV)
	DNEL (Langzeit-wiederholt)	2.8 mg/kg bw/day (ARB) 1.7 mg/kg bw/day (BEV)
Inhalative	DNEL (Kurzzeit-akut)	4.9 mg/m <sup>3</sup> Air (ARB) 2.9 mg/m <sup>3</sup> Air (BEV)
	DNEL (Langzeit-wiederholt)	4.9 mg/m <sup>3</sup> Air (ARB) 2.9 mg/m <sup>3</sup> Air (BEV)

## · PNECs

**13463-67-7 titanium dioxide**

PNEC (wässrig)	100 mg/l (KA)
	1 mg/l (MW)
	0.127 mg/l (SW)
PNEC (fest)	100 mg/kg Trockengew (BO)
	100 mg/kg Trockengew (MWS)
	1,000 mg/kg Trockengew (SWS)

**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)

**Reaction mass of 2,2'-[methylenebis(4,1-phenyleneoxymethylene)]dioxirane and [2-({2-[4-(oxiran-2-ylmethoxy)benzyl]phenoxy)methyl}oxirane and [2,2'-[methylenebis(2,1-phenyleneoxymethylene)]dioxirane**

PNEC (wässrig)	10 mg/l (KA)
	0.0003 mg/l (MW)
	0.003 mg/l (SW)
	0.025 mg/l (WAS)
PNEC (fest)	0.237 mg/kg Trockengew (BO)
	0.029 mg/kg Trockengew (MWS)
	0.294 mg/kg Trockengew (SWS)

**933999-84-9 Reaction products of hexane-1,6-diol with 2-(chloromethyl)oxirane (1:2)**

PNEC (wässrig)	1 mg/l (KA)
	0.00115 mg/l (MW)
	0.0115 mg/l (SW)
	0.115 mg/l (WAS)
PNEC (fest)	0.223 mg/kg Trockengew (BO)
	0.0283 mg/kg Trockengew (MWS)
	0.283 mg/kg Trockengew (SWS)

## · Additional information:

The lists valid during the making were used as basis.

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**· 8.2 Exposure controls**· Personal protective equipment:· General protective and hygienic measures:

Do not eat, drink, smoke or sniff while working.  
 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:

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.

· Protection of hands:

Preventive skin protection by use of skin-protecting agents is recommended.  
 After use of gloves apply skin-cleaning agents and skin cosmetics.  
 Skin protection agent recommendation for preventive skin shelter without use of protective gloves:

ARRETIL (<http://www.stoko.com>)

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>).

**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

· Material of gloves

Butyl rubber, BR

Nitrile rubber, NBR

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

· Penetration time of glove material

Value for the permeation: Level  $\leq 2$ , 30 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:

Fluorocarbon rubber (Viton)

Vitoject (KCL, Art\_No. 890)

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- |  |  |
|--|--|
| <p>· As protection from splashes gloves made of the following materials are suitable:</p> <p>· Not suitable are gloves made of the following materials:</p> <p>· Eye protection:</p> <p>· Body protection:</p> | <p>Butoject (KCL, Art_No. 897, 898)<br/>Nitrile rubber, NBR<br/>Camatril (KCL, Art_No. 730, 731, 732, 733)<br/>Butyl rubber, BR</p> <p>Butoject (KCL, Art_No. 897, 898)<br/>Nitrile rubber, NBR<br/>Camatril (KCL, 730, 731, 732, 733)<br/>Butoject (KCL, Art_No. 897, 898)<br/>Butyl rubber, BR</p> <p>Leather gloves<br/>Strong material gloves<br/>Nitrile rubber, NBR</p> <div style="text-align: center;">  </div> <p>Tightly sealed goggles</p> <p>Protective work clothing</p> |
|--|--|

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

- |                           |                                    |
|---------------------------|------------------------------------|
| · <u>Form:</u>            | Fluid                              |
| · <u>Colour:</u>          | According to product specification |
| · <u>Odour:</u>           | Specific type                      |
| · <u>Odour threshold:</u> | Not determined.                    |

· pH-value: Not applicable**Change in condition**

- |   |               |
|---|---------------|
| · <u>Melting point/freezing point:</u>            | Undetermined. |
| · <u>Initial boiling point and boiling range:</u> | >200 °C       |

· Flash point: Not applicable.· Flammability (solid, gas): Not applicable.· Decomposition temperature: Not determined.· Auto-ignition temperature: Product is not selfigniting.· Explosive properties: Product does not present an explosion hazard.**Explosion limits:**

- |                 |                 |
|-----------------|-----------------|
| · <u>Lower:</u> | Not determined. |
| · <u>Upper:</u> | Not determined. |

· Vapour pressure at 20 °C: 2 hPa· Density at 20 °C: 1.55 g/cm<sup>3</sup> ([1.30 - 1.73 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.· Partition coefficient: n-octanol/water: Not determined.

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· <u>Viscosity:</u>	
Dynamic at 20 °C:	10,000 mPas
Kinematic:	Not determined.
· <u>Solvent content:</u>	
Solids content:	46.0 %
· <b>9.2 Other information</b>	
No further relevant information available.	

**SECTION 10: Stability and reactivity**

- **10.1 Reactivity** No further relevant information available.
- **10.2 Chemical stability**
- Thermal decomposition / conditions to be avoided: No decomposition if used and stored according to specifications.
- **10.3 Possibility of hazardous reactions**
  - Reacts with reducing agents.
  - Reacts with strong acids.
  - Reacts with strong alkali.
  - Violent reactions with -NH<sub>x</sub>, -OH and -SH- groups.
- **10.4 Conditions to avoid** No further relevant information available.
- **10.5 Incompatible materials:** No further relevant information available.
- **10.6 Hazardous decomposition products:**
  - Carbon monoxide and carbon dioxide
  - Possible in traces.

**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 relevant for classification:**13463-67-7 titanium dioxide**

Oral	LD50	>5,010 mg/kg (rat)
	NOAEL	24,000 mg/kg (rat)
Dermal	LD50	>10,010 mg/kg (rbt)
	NOAEL	10 mg/m <sup>3</sup> (rat)
Inhalative	LC50/48h	>100 mg/l (daphnia magna)

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

Oral	LD50	15,000 mg/kg (rat)
Dermal	LD50	23,000 mg/kg (rabbit)

**Reaction mass of 2,2'-[methylenebis(4,1-phenyleneoxymethylene)]dioxirane and [2-({2-[4-(oxiran-2-ylmethoxy)benzyl]phenoxy)methyl}oxirane and [2,2'-[methylenebis(2,1-phenyleneoxymethylene)]dioxirane**

Oral	LD50	>5,000 mg/kg (rat)
Dermal	LD50	>2,000 mg/kg (rat)

**933999-84-9 Reaction products of hexane-1,6-diol with 2-(chloromethyl)oxirane (1:2)**

Oral	LD50	2,190 mg/kg (rat)
Dermal	LD50	>2,000 mg/kg (rabbit)

- Primary irritant effect:
- Skin corrosion/irritation Causes skin irritation.
- Serious eye damage/irritation Causes serious eye irritation.
- Respiratory or skin sensitisation May cause an allergic skin reaction.
- Additional toxicological information:
- CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)
- Germ cell mutagenicity Based on available data, the classification criteria are not met.

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- |                                 |   |
|---------------------------------|---|
| · <u>Carcinogenicity</u>        | Based on available data, the classification criteria are not met. |
| · <u>Reproductive toxicity</u>  | Based on available data, the classification criteria are not met. |
| · <u>STOT-single exposure</u>   | Based on available data, the classification criteria are not met. |
| · <u>STOT-repeated exposure</u> | Based on available data, the classification criteria are not met. |
| · <u>Aspiration hazard</u>      | Based on available data, the classification criteria are not met. |

**SECTION 12: Ecological information****12.1 Toxicity**Aquatic toxicity:**13463-67-7 titanium dioxide**

EC50	>1,000 mg/l (bacteria)
EC50/48h	>100 mg/l (daphnia magna)
EC50/72h	16 mg/l (Pseudokirchneriella subcapitata)
LC50/96h	>100 mg/l (Oncorhynchus mykiss)
	>1,000 mg/l (pimephales promelas)

**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)

**Reaction mass of 2,2'-[methylenebis(4,1-phenyleneoxymethylene)]dioxirane and [2-({2-[4-(oxiran-2-ylmethoxy)benzyl]phenoxy)methyl}oxirane and [2,2'-[methylenebis(2,1-phenyleneoxymethylene)]dioxirane**

EC50/48h	2.55 mg/l (daphnia magna)
EC50/72h	1.8 mg/l (green alge)
LC50/96h	2.54 mg/l (piscis)

**933999-84-9 Reaction products of hexane-1,6-diol with 2-(chloromethyl)oxirane (1:2)**

EC50/48h	23.1 mg/l (green alge)
	47 mg/l (daphnia magna)
LC50/96h	30 mg/l (Leuciscus idus)

**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:

Also poisonous for fish and plankton in water bodies.

Toxic for aquatic organisms

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

**12.5 Results of PBT and vPvB assessment**PBT:

Not applicable.

vPvB:

Not applicable.

**12.6 Other adverse effects**

No further relevant information available.

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**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.
  
- Uncleaned packaging:
- Recommendation:                      Disposal must be made according to official regulations.
- Recommended cleansing agents:    Alcohol

**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. (bis[4-(2,3-epoxypropoxy)phenyl]propane, Reaction mass of 2,2'-[methylenebis(4,1-phenyleneoxymethylene)]dioxirane and [2-({2-[4-(oxiran-2-ylmethoxy)benzyl]phenoxy)methyl]oxirane and [2,2'-[methylenebis(2,1-phenyleneoxymethylene)]dioxirane)

· IMDG

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (bis[4-(2,3-epoxypropoxy)phenyl]propane, Reaction mass of 2,2'-[methylenebis(4,1-phenyleneoxymethylene)]dioxirane and [2-({2-[4-(oxiran-2-ylmethoxy)benzyl]phenoxy)methyl]oxirane and [2,2'-[methylenebis(2,1-phenyleneoxymethylene)]dioxirane), MARINE POLLUTANT

· IATA

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (bis[4-(2,3-epoxypropoxy)phenyl]propane, Reaction mass of 2,2'-[methylenebis(4,1-phenyleneoxymethylene)]dioxirane and [2-({2-[4-(oxiran-2-ylmethoxy)benzyl]phenoxy)methyl]oxirane and [2,2'-[methylenebis(2,1-phenyleneoxymethylene)]dioxirane)

**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

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

III

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## Safety data sheet

according to 1907/2006/EC, Article 31

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**· 14.5 Environmental hazards:**

- |                                  |                               |
|----------------------------------|-------------------------------|
| · <u>Marine pollutant:</u>       | Yes<br>Symbol (fish and tree) |
| · <u>Special marking (ADR):</u>  | Symbol (fish and tree)        |
| · <u>Special marking (IATA):</u> | Symbol (fish and tree)        |

**· 14.6 Special precautions for user**

- |  |   |
|--|---|
| · <u>Hazard identification number (Kemler code):</u> | Warning: Miscellaneous dangerous substances and articles.<br>90 |
| · <u>EMS Number:</u>                                 | F-A,S-F   |
| · <u>Stowage Category</u>                            | A   |

**· 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code**

Not applicable.

· Transport/Additional information:

- |   |  |
|---|--|
| · <u>ADR</u><br>· <u>Excepted quantities (EQ)</u> | Code: E1<br>Maximum net quantity per inner packaging: 30 ml<br>Maximum net quantity per outer packaging: 1000 ml |
|---|--|

- |  |  |
|--|--|
| · <u>IMDG</u><br>· <u>Limited quantities (LQ)</u><br>· <u>Excepted quantities (EQ)</u> | 5L<br>Code: E1<br>Maximum net quantity per inner packaging: 30 ml<br>Maximum net quantity per outer packaging: 1000 ml |
|--|--|

- |                                 |   |
|---------------------------------|---|
| · <u>UN "Model Regulation":</u> | UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (BIS[4-(2,3-EPOXYPROPOXY)PHENYL]PROPANE, REACTION MASS OF 2,2'-[METHYLENEBIS(4,1-PHENYLENEOXYMETHYLENE)]DIOXIRANE AND [2-({2-[4-(OXIRAN-2-YLMETHOXY)BENZYL]PHENOXY}METHYL)OXIRANE AND [2,2'-[METHYLENEBIS(2,1-PHENYLENEOXYMETHYLENE)]DIOXIRANE), 9, III |
|---------------------------------|---|

**SECTION 15: Regulatory information****· 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**

- |  |   |
|--|---|
| · <u>Directive 2012/18/EU</u>  |   |
| · <u>Named dangerous substances - ANNEX I</u>  | None of the ingredients is listed.  |
| · <u>Seveso category</u>   | E2 Hazardous to the Aquatic Environment   |
| · <u>Qualifying quantity (tonnes) for the application of lower-tier requirements</u> | 200 t   |
| · <u>Qualifying quantity (tonnes) for the application of upper-tier requirements</u> | 500 t   |
| · <u>National regulations:</u>   |   |
| · <u>Information about limitation of use:</u>  | Employment restrictions concerning pregnant and lactating women must be observed.<br>Employment restrictions concerning juveniles must be observed. |
| · <u>Waterhazard class:</u>  | Water hazard class 2 (Self-assessment): hazardous for water.  |
| · <u>VOC EU</u>  | 0.0 g/l   |

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· **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.

· Relevant phrases

H315 Causes skin irritation.  
 H317 May cause an allergic skin reaction.  
 H319 Causes serious eye irritation.  
 H351 Suspected of causing cancer.  
 H411 Toxic to aquatic life with long lasting effects.  
 H412 Harmful to aquatic life with long lasting effects.  
 refer to Technical Data Sheet (TDS)

· Recommended restriction of use

· Department issuing SDS:

Laboratory

· Contact:

Elke Hake  
 Fon ++49 (0)911 64296-59  
 @mail E.Hake@akemi.de

· 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)  
 IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)  
 ICAO: International Civil Aviation Organisation  
 ICAO-TI: Technical Instructions by the "International Civil Aviation Organisation" (ICAO)  
 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  
 vPvB: very Persistent and very Bioaccumulative  
 Skin Irrit. 2: Skin corrosion/irritation – Category 2  
 Eye Irrit. 2: Serious eye damage/eye irritation – Category 2  
 Skin Sens. 1: Skin sensitisation – Category 1  
 Carc. 2: Carcinogenicity – Category 2  
 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  
 REACH directive 1907/2006/EC

· Sources

· \* Data compared to the previous version altered.

Adaptation in accordance with REACH directive 1907/2006/EC