

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 21.05.2019

Version number 8

Revision: 21.05.2019

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

1.1 Product identifier

- Trade name: **Akepox 1004 Component A**
- Article number: 11288, 11667, 11668, 11670, 11671, 11672, 11673, 11687, 11688, 12670, 12671, 12672, 12687, 11300

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

Reaction resin

1.3 Details of the supplier of the safety data sheet

- Manufacturer/Supplier: AKEMI chemisch technische Spezialfabrik GmbH Tel. +49(0)911-642960
Lechstrasse 28 Fax. +49(0)911-644456
D 90451 Nürnberg 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



GHS08 health hazard

Muta. 2 H341 Suspected of causing genetic defects.

Repr. 2 H361fd Suspected of damaging fertility. Suspected of damaging the unborn child.



GHS05 corrosion

Eye Dam. 1 H318 Causes serious eye damage.



GHS09 environment

Aquatic Acute 1 H400 Very toxic to aquatic life.

Aquatic Chronic 1 H410 Very toxic to aquatic life with long lasting effects.



GHS07

Skin Irrit. 2 H315 Causes skin irritation.

Skin Sens. 1 H317 May cause an allergic skin reaction.

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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.



GHS05 GHS07 GHS08 GHS09

· Signal word

Danger

· Hazard-determining components of labelling:

reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight = 700)
 2,3-epoxypropyl o-tolyl ether
 4-nonylphenol, branched

· Hazard statements

H315 Causes skin irritation.
 H318 Causes serious eye damage.
 H317 May cause an allergic skin reaction.
 H341 Suspected of causing genetic defects.
 H361fd Suspected of damaging fertility. Suspected of damaging the unborn child.

· Precautionary statements

H410 Very toxic to aquatic life with long lasting effects.
 P101 If medical advice is needed, have product container or label at hand.
 P102 Keep out of reach of children.
 P103 Read label before use.
 P261 Avoid breathing vapours.
 P273 Avoid release to the environment.
 P280 Wear protective gloves/protective clothing/eye protection/face protection.
 P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
 P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 P310 Immediately call a POISON CENTER/doctor.
 P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
 P405 Store locked up.
 P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

· Additional information:

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 substances listed below with nonhazardous additions.

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· Dangerous components:		
CAS: 25068-38-6 NLP: 500-033-5 Index number: 603-074-00-8 Reg.nr.: 01-2119456619-26-0000	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	50-100%
CAS: 2210-79-9 EINECS: 218-645-3 Index number: 603-056-00-X Reg.nr.: 01-2119966907-18	2,3-epoxypropyl o-tolyl ether ----- ☠ Muta. 2, H341 ☠ Aquatic Chronic 2, H411 ☠ Skin Irrit. 2, H315; Skin Sens. 1, H317	12.5-25%
CAS: 84852-15-3 EINECS: 284-325-5 Index number: 601-053-00-8 Reg.nr.: 01-2119510715-45-xxxx	4-nonylphenol, branched ----- ☠ Acute Tox. 3, H331 ☠ Repr. 2, H361fd ☠ Skin Corr. 1B, H314; Eye Dam. 1, H318 ☠ Aquatic Acute 1, H400; Aquatic Chronic 1, H410 ☠ Acute Tox. 4, H302	1-5%

· SVHC

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· Additional information: For the wording of the listed hazard phrases refer to section 16.

SECTION 4: First aid measures**4.1 Description of first aid measures**

- General information: 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.
- After swallowing: Rinse out mouth and then drink plenty of water.

4.2 Most important symptoms and effects, both acute and delayed

- Information for doctor: Breathing difficulty
Allergic reactions
Asthma attacks
The sensitizing effect of epoxide based resins is mainly caused by the concentration of epoxy resin polymers with a specific molecular weight ≤ 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. Bisphenol-A based resins: Inhalation, swallowing or dermal incorporation may cause health damage. Irritates respiratory tract, digestion system, eyes and skin: e.g., cough, dyspnea, lacrimation, burning. May cause health interferences such as dermal changes, renal, hepatic damage, and blood count changes. May provoke skin allergies. Sensitized users can react towards very low concentrations of Bisphenol-A-Epichlorhydrine and should avoid any further contact with this chemical.
Nonylphenol based exposition: causes corrosive burns, damages respiratory tract, eyes, skin and digestive system up to complete tissue destruction. Temporary dysfunctions such as dizziness, headache, nausea and diarrhea may occur. Can cause health disturbances like dermal bleaching, renal and hepatic damage.

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- Hazards Danger of impaired breathing.
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: CO2, 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:** Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Dispose contaminated material as waste according to item 13.
Ensure adequate ventilation.
- **6.4 Reference to other sections** See Section 13 for disposal information.
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.

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.
Prevent formation of aerosols.

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- 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 foodstuffs.
- Further information about storage conditions: Store receptacle in a well ventilated area.
Keep container tightly sealed.
- **7.3 Specific end use(s)** No further relevant information available.

SECTION 8: Exposure controls/personal protection

- Additional information about design of technical facilities: No further data; see item 7.
- **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**25068-38-6 reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight = 700)**

Oral	DNEL (Kurzzeit-akut)	0.75 mg/kg bw/day (BEV)
	DNEL (Langzeit-wiederholt)	0.75 mg/kg bw/day (BEV)
Dermal	DNEL (Kurzzeit-akut)	8.33 mg/kg bw/day (ARB)
		3.571 mg/kg bw/day (BEV)
	DNEL (Langzeit-wiederholt)	8.33 mg/kg bw/day (ARB)
		3.571 mg/kg bw/day (BEV)
Inhalative	DNEL (Kurzzeit-akut)	12.25 mg/m ³ Air (ARB)
	DNEL (Langzeit-wiederholt)	12.25 mg/m ³ Air (ARB)

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Dermal	DNEL (Langzeit-wiederholt)	7.5 mg/kg bw/day (ARB)
Inhalative	DNEL (Langzeit-wiederholt)	0.5 mg/m ³ Air (ARB)

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

PNEC (wässrig)	10 mg/l (KA)
	0.0006 mg/l (MW)
	0.006 mg/l (SW)
	0.018 mg/l (WAS)
PNEC (fest)	0.0478 mg/kg Trockengew (BO)
	0.00627 mg/kg Trockengew (MWS)
	0.0627 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.
 Use skin protection cream for skin protection.
 Keep away from foodstuffs, beverages and feed.
 Immediately remove all soiled and contaminated clothing
 Wash hands before breaks and at the end of work.
 Avoid contact with the eyes and skin.

· Respiratory protection:

Not necessary if room is well-ventilated.

Short term filter device:

Filter A/P2

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 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

Chloroprene rubber, CR

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 materialValue for the permeation: Level ≤ 6 , ≥ 480

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

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- For the permanent contact gloves made of the following materials are suitable:
 - Butyl rubber, BR
 - Butoject (KCL, Art_No. 897, 898)
 - Nitrile rubber, NBR
 - Camatril (KCL, Art_No. 730, 731, 732, 733)
 - Dermatril (Art_No. 740, 741, 742)
 - Chloroprene rubber, CR
 - Camapren (KCL, Art_No. 720, 722, 726)
- As protection from splashes gloves made of the following materials are suitable:
 - Nitrile rubber, NBR
 - Dermatril (KCL, Art_No. 740, 741, 742)
 - Camatril (KCL, 730, 731, 732, 733)
 - Chloroprene rubber, CR
 - Camapren (KCL, Art_No. 720, 722, 726)
- Not suitable are gloves made of the following materials:
 - Leather gloves
 - Strong material gloves
- Eye 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****Appearance:**

<u>Form:</u>	Fluid
<u>Colour:</u>	Light yellow
<u>Odour:</u>	Characteristic

· pH-value: Not applicable

Change in condition

<u>Melting point/freezing point:</u>	Undetermined.
<u>Initial boiling point and boiling range:</u>	Undetermined.

· Flash point: Not applicable.

· Ignition temperature: >300 °C

· Decomposition temperature: > 200 °C °C

· Auto-ignition temperature: Product is not selfigniting.

· Explosive properties: Product does not present an explosion hazard.

· Vapour pressure at 20 °C: 2 hPa

· Density at 20 °C: 1.13 g/cm³

· Solubility in / Miscibility with water: Not miscible or difficult to mix.

Viscosity:

<u>Dynamic at 20 °C:</u>	2,200 mPas
<u>Kinematic:</u>	Not determined.

Solvent content:

Organic solvents: 0.9 %

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Solids content:	20.2 %
· 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 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.
Reacts with strong acids.
- **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 toxicological effects**
- **Acute toxicity** Based on available data, the classification criteria are not met.

· LD/LC50 values relevant for classification:
--

ATE (Acute Toxicity Estimates)

Oral	LD50	27,178 mg/kg (rat)
Inhalative	LC50/4 h	22.8 mg/l

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

Oral	LD50	20,000 mg/kg (mouse)
		19,800 mg/kg (rabbit)
		11,400 mg/kg (rat)
Dermal	NOEL	540 mg/kg (rat) (OECD 416)
	LD50	20,000 mg/kg (rabbit)

2210-79-9 2,3-epoxypropyl o-tolyl ether

Oral	LD50	3,700 mg/kg (rat)
Dermal	LD50	>2,000 mg/kg (rabbit)
Inhalative	LC50/4 h	6.09 mg/l (rat)

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Oral	LD50	1,210 mg/kg (rat)
Dermal	LD50	>2,000 mg/kg (rabbit)
Inhalative	LC50/4 h	3.636 mg/l (mouse)

- **Primary irritant effect:**
- **Skin corrosion/irritation** Causes skin irritation.
- **Serious eye damage/irritation** Causes serious eye damage.
- **Respiratory or skin sensitisation** May cause an allergic skin reaction.
- **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**
- **Germ cell mutagenicity** Suspected of causing genetic defects.
- **Carcinogenicity** Based on available data, the classification criteria are not met.
- **Reproductive toxicity** Suspected of damaging fertility. Suspected of damaging the unborn child.
- **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.

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Trade name: Akepox 1004 Component A· Aspiration hazard

Based on available data, the classification criteria are not met.

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SECTION 12: Ecological information· **12.1 Toxicity**· Aquatic toxicity:**25068-38-6 reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight = 700)**

EC50/24h	1.1-3.6 mg/l (daphnia magna)
EC50/96h	3.6 mg/l (Leuciscus idus) 220 mg/l (Scenedesmus subspicatus)
IC50	>100 mg/l (bacteria)
EC50/48h	1.8 mg/l (daphnia magna) (OECD 202)
NOEC	0.3 mg/kg (daphnia magna) (OECD 211)
EC50/72h	11 mg/l (Desmodesmus subspicatus) 9.4 mg/l (senastrum capricornutum)
LC50/96h	1.3 mg/l (piscis) 2 mg/l (Leuciscus idus) 1.5 mg/l (Oncorhynchus mykiss) (OECD 203) 1.5-7.7 mg/l (rainbow trout)
LC50/72h	>11 mg/l (green alge)

2210-79-9 2,3-epoxypropyl o-tolyl ether

EC50/48h	3.3 mg/l (daphnia magna)
EC50/72h	5.1 mg/l (senastrum capricornutum)
LC50/96h	2.8 mg/l (Oncorhynchus mykiss)

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EC50/96h	0.41 mg/l (green alge)
EC50/48h	0.14 mg/l (daphnia magna)
NOEC/21d	0.024 mg/l (daphnia magna)
EC50/72h	1.3 mg/l (Scenedesmus subspicatus)
LC50/96h	0.135 mg/l (Pimephales promelas)

· **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 3 (German Regulation) (Self-assessment): extremely hazardous for water

Do not allow product to reach ground water, water course or sewage system, even in small quantities.

Danger to drinking water if even small quantities leak into the ground.

· **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.

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.

Recommended cleansing agents:

Alcohol
acetone

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), 2,3-epoxypropyl o-tolyl ether)

IMDG

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight = 700), 2,3-epoxypropyl o-tolyl ether), MARINE POLLUTANT

IATA

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight = 700), 2,3-epoxypropyl o-tolyl ether)

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**

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<ul style="list-style-type: none"> · 14.5 Environmental hazards: · <u>Marine pollutant:</u> · <u>Special marking (ADR):</u> · <u>Special marking (IATA):</u> 	Product contains environmentally hazardous substances: Yes Symbol (fish and tree) Symbol (fish and tree) Symbol (fish and tree)
<ul style="list-style-type: none"> · 14.6 Special precautions for user · <u>Danger code (Kemler):</u> · <u>Stowage Category</u> 	Warning: Miscellaneous dangerous substances and articles. 90 A
<ul style="list-style-type: none"> · 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code 	Not applicable.
<ul style="list-style-type: none"> · <u>Transport/Additional information:</u> 	
<ul style="list-style-type: none"> · <u>ADR</u> · <u>Limited quantities (LQ)</u> · <u>Excepted quantities (EQ)</u> · <u>Transport category</u> 	5L Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml 3
<ul style="list-style-type: none"> · <u>IMDG</u> · <u>Limited quantities (LQ)</u> · <u>Excepted quantities (EQ)</u> 	5L Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
<ul style="list-style-type: none"> · <u>UN "Model Regulation":</u> 	UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (REACTION PRODUCT: BISPHENOL-A-(EPICHLORHYDRIN) EPOXY RESIN (NUMBER AVERAGE MOLECULAR WEIGHT = 700), 2,3-EPOXYPROPYL O-TOLYL ETHER), 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 E1 Hazardous to the Aquatic Environment
- Qualifying quantity (tonnes) for the application of lower-tier requirements 100 t
- Qualifying quantity (tonnes) for the application of upper-tier requirements 200 t
- REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 3

Regulation (EU) No 649/2012

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Annex I Part 1
Annex I Part 2

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

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· Waterhazard class: Water hazard class 3 (Self-assessment): extremely hazardous for water.

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

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· VOC EU 10.1 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.

· Relevant phrases

H302 Harmful if swallowed.
 H314 Causes severe skin burns and eye damage.
 H315 Causes skin irritation.
 H317 May cause an allergic skin reaction.
 H318 Causes serious eye damage.
 H319 Causes serious eye irritation.
 H331 Toxic if inhaled.
 H341 Suspected of causing genetic defects.
 H361fd Suspected of damaging fertility. Suspected of damaging the unborn child.
 H400 Very toxic to aquatic life.
 H410 Very toxic to aquatic life with long lasting effects.
 H411 Toxic to aquatic life with long lasting effects.

· Recommended restriction of use

refer to Technical Data Sheet (TDS)

· Department issuing SDS:

Laboratory

· Contact:

Dieter Zimmermann

· 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 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)
 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
 Acute Tox. 3: Acute toxicity – Category 3
 Skin Corr. 1B: Skin corrosion/irritation – Category 1B
 Skin Irrit. 2: Skin corrosion/irritation – Category 2
 Eye Dam. 1: Serious eye damage/eye irritation – Category 1
 Eye Irrit. 2: Serious eye damage/eye irritation – Category 2
 Skin Sens. 1: Skin sensitisation – Category 1
 Muta. 2: Germ cell mutagenicity – Category 2
 Repr. 2: Reproductive toxicity – Category 2
 Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard – Category 1
 Aquatic Chronic 1: Hazardous to the aquatic environment - long-term aquatic hazard – Category 1
 Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard – Category 2

· * Data compared to the previous version altered.

Adaptation in accordance with REACH directive 1907/2006/EC