

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 18.01.2019

Version number 6

Revision: 18.01.2019

*

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

1.1 Product identifier

Trade name: **Akepox 2020 Component A**

Article number: 10610, 10620, 10621, 10567

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.
+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



GHS09 environment

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



GHS07

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

Hazard pictograms

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



GHS07 GHS09

Signal word

Warning

Hazard-determining components of labelling:

reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight = 700)
phenol, polymer with formaldehyde, glycidyl ether
1,6-hexanediol diglycidyl ether
N,N'-ethane-1,2-diylbis(12-hydroxyoctadecan-1-amide)

(Contd. on page 2)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 18.01.2019

Version number 6

Revision: 18.01.2019

Trade name: Akepox 2020 Component A

(Contd. of page 1)

- Hazard statements
 - H315 Causes skin irritation.
 - H319 Causes serious eye irritation.
 - H317 May cause an allergic skin reaction.
 - H411 Toxic to aquatic life with long lasting effects.
- Precautionary statements
 - 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 mist/vapours/spray.
 - P273 Avoid release to the environment.
 - P280 Wear protective gloves/protective clothing/eye protection/face 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: 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.

· 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	25-50%
CAS: 28064-14-4 EC number: 608-164-0 Reg.nr.: 01-2119454392-40-xxxx	phenol, polymer with formaldehyde, glycidyl ether ⚠ Aquatic Chronic 2, H411 ⚠ Skin Irrit. 2, H315; Skin Sens. 1, H317	12.5-25%
CAS: 16096-31-4 EINECS: 240-260-4 Reg.nr.: 01-2119463471-41	1,6-hexanediol diglycidyl ether ⚠ Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317 Aquatic Chronic 3, H412	<12.5%
CAS: 123-26-2 EINECS: 204-613-6 Reg.nr.: 01-2120783565-42-xxxx	N,N'-ethane-1,2-diylbis(12-hydroxyoctadecan-1-amide) ⚠ Skin Sens. 1B, H317 Aquatic Chronic 3, H412	<1%

- 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.

(Contd. on page 3)

GB

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 18.01.2019

Version number 6

Revision: 18.01.2019

Trade name: Akepox 2020 Component A

(Contd. of page 2)

- 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**
 - Breathing difficulty
 - Headache
 - Dizziness
 - Nausea
 - Allergic reactions
- Information for doctor: 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.
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.
- 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.

(Contd. on page 4)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 18.01.2019

Version number 6

Revision: 18.01.2019

Trade name: Akepox 2020 Component A

(Contd. of page 3)

- **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.
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.
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)

(Contd. on page 5)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 18.01.2019

Version number 6

Revision: 18.01.2019

Trade name: Akepox 2020 Component A

(Contd. of page 4)

Inhalative	DNEL (Kurzzeit-akut)	12.25 mg/m ³ Air (ARB)
	DNEL (Langzeit-wiederholt)	12.25 mg/m ³ Air (ARB)
28064-14-4 phenol, polymer with formaldehyde, glycidyl ether		
Dermal	DNEL (Langzeit-wiederholt)	104.15 mg/kg bw/day (ARB)
Inhalative	DNEL (Langzeit-wiederholt)	29.39 mg/m ³ Air (ARB)
16096-31-4 1.6-hexanediol diglycidyl ether		
Dermal	DNEL (Langzeit-wiederholt)	2.8 mg/kg bw/day (ARB)
Inhalative	DNEL (Langzeit-wiederholt)	2.9 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)	0.196 mg/kg Trockengew (BO)	
	0.0996 mg/kg Trockengew (MWS)	
	0.996 mg/kg Trockengew (SWS)	
28064-14-4 phenol, polymer with formaldehyde, glycidyl ether		
PNEC (wässrig)	0.0003 mg/l (MW)	
	0.003 mg/l (SW)	
16096-31-4 1.6-hexanediol diglycidyl ether		
PNEC (wässrig)	0.00115 mg/l (MW)	
	0.0115 mg/l (SW)	

· Additional information: The lists valid during the making were used as basis.

· **8.2 Exposure controls**

· Personal protective equipment:

· General protective and hygienic measures:

Use skin protection cream for skin protection.
Be sure to clean skin thoroughly after work and before breaks.
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.

· Respiratory protection:

Avoid contact with the eyes and skin.
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

(Contd. on page 6)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 18.01.2019

Version number 6

Revision: 18.01.2019

Trade name: Akepox 2020 Component A

(Contd. of page 5)

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

Chloroprene rubber, CR

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 ≤ 6, 480 min

The exact break through 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)

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

(Contd. on page 7)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 18.01.2019

Version number 6

Revision: 18.01.2019

Trade name: Akepox 2020 Component A

(Contd. of page 6)

SECTION 9: Physical and chemical properties

· **9.1 Information on basic physical and chemical properties**

· General Information

· Appearance:

Form:

Viscous

Colour:

Light grey

· Odour:

Characteristic

· pH-value:

Not applicable

· Change in condition

Melting point/freezing point:

Undetermined.

Initial boiling point and boiling range: > 200 °C

· 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:

1.55 g/cm³

· Solubility in / Miscibility with water:

Not miscible or difficult to mix.

· Viscosity:

Dynamic at 20 °C:

35,000 mPas

Kinematic:

Not determined.

· Solvent content:

Organic solvents:

0.0 %

· **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.

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 toxicological effects**

· Acute toxicity

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

(Contd. on page 8)

GB

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 18.01.2019

Version number 6

Revision: 18.01.2019

Trade name: Akepox 2020 Component A

(Contd. of page 7)

· LD/LC50 values relevant for classification:

ATE (Acute Toxicity Estimates)

Oral	LD50	13,462 mg/kg
------	------	--------------

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)
	NOEL	540 mg/kg (rat) (OECD 416)
Dermal	LD50	20,000 mg/kg (rabbit)

28064-14-4 phenol, polymer with formaldehyde, glycidyl ether

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

16096-31-4 1.6-hexanediol diglycidyl ether

Oral	LD50	1,400 mg/kg (mouse)
		8,500 mg/kg (rat)
Dermal	LD50	>4,900 mg/kg (rat)
Inhalative	LC50/4 h	>100 mg/l (mouse)
	LC50/48h	23.1 mg/l (green alge)

- 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.
- CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)
- Germ cell mutagenicity Based on available data, the classification criteria are not met.
- Carcinogenicity Based on available data, the classification criteria are not met.
- Reproductive toxicity Based on available data, the classification criteria are not met.
- STOT-single exposure Based on available data, the classification criteria are not met.
- STOT-repeated exposure Based on available data, the classification criteria are not met.
- Aspiration hazard Based on available data, the classification criteria are not met.

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

· Aquatic toxicity:

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	2.7 mg/l (daphnia magna) (OECD 202)
NOEC	0.3 mg/kg (daphnia magna) (OECD 211)
EC50/72h	9.4 mg/l (selenastrum capricornutum)
LC50/96h	1.3 mg/l (piscis)
	1.5 mg/l (Oncorhynchus mykiss) (OECD 203)
	1.5-7.7 mg/l (rainbow trout)

(Contd. on page 9)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 18.01.2019

Version number 6

Revision: 18.01.2019

Trade name: Akepox 2020 Component A

(Contd. of page 8)

LC50/72h	>11 mg/l (green alge)
28064-14-4 phenol, polymer with formaldehyde, glycidyl ether	
EC50/96h	3.6 mg/l (Leuciscus idus) 220 mg/l (Scenedesmus subspicatus)
EC50	>1-<10 mg/l (Selenastrum capricornutum)
EC50/48h	2.55 mg/l (daphnia magna)
LC50/96h	2.54 mg/l (piscis)
16096-31-4 1.6-hexanediol diglycidyl ether	
EC50/48h	67 mg/l (daphnia magna)
LC50/96h	1.1 mg/l (goo) 17-31 mg/l (Oncorhynchus mykiss)
LC50/72h	30 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.

· **Ecotoxicological effects:**

· **Remark:**

Toxic for fish

· **Additional ecological information:**

· **General notes:**

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

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.

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))

(Contd. on page 10)

GB

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 18.01.2019

Version number 6

Revision: 18.01.2019

Trade name: Akepox 2020 Component A

(Contd. of page 9)

· <u>IMDG</u> · <u>IATA</u>	epoxy resin (number average molecular weight = 700), phenol, polymer with formaldehyde, glycidyl ether) ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight = 700), phenol, polymer with formaldehyde, glycidyl ether), MARINE POLLUTANT ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight = 700), phenol, polymer with formaldehyde, glycidyl ether)
· 14.3 Transport hazard class(es) · <u>ADR</u>  · <u>Class</u> · <u>Label</u>	9 (M6) Miscellaneous dangerous substances and articles. 9
· <u>IMDG, IATA</u>  · <u>Class</u> · <u>Label</u>	9 Miscellaneous dangerous substances and articles. 9
· 14.4 Packing group · <u>ADR, IMDG, IATA</u>	III
· 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)
· 14.6 Special precautions for user · <u>Danger code (Kemler):</u> · <u>Stowage Category</u>	Warning: Miscellaneous dangerous substances and articles. 90 A
· 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code	Not applicable.
· <u>Transport/Additional information:</u>	
· <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
· <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
· <u>UN "Model Regulation":</u>	UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (REACTION PRODUCT: BISPHENOL-A-

(Contd. on page 11)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 18.01.2019

Version number 6

Revision: 18.01.2019

Trade name: Akepox 2020 Component A

(Contd. of page 10)

(EPICHLORHYDRIN) EPOXY RESIN (NUMBER AVERAGE MOLECULAR WEIGHT = 700), PHENOL, POLYMER WITH FORMALDEHYDE, GLYCIDYL 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
 - Seveso category
 - Qualifying quantity (tonnes) for the application of lower-tier requirements
 - Qualifying quantity (tonnes) for the application of upper-tier requirements
 - REGULATION (EC) No 1907/2006 ANNEX XVII
 - National regulations:
 - Information about limitation of use:
 - Waterhazard class:
 - VOC EU
 - 15.2 Chemical safety assessment:
- None of the ingredients is listed.
- E2 Hazardous to the Aquatic Environment
- 200 t
- 500 t
- Conditions of restriction: 3
- Employment restrictions concerning juveniles must be observed.
Employment restrictions concerning pregnant and lactating women must be observed.
- Water hazard class 2 (Self-assessment): hazardous for water.
0.0 g/l
- 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
 - Recommended restriction of use
 - Department issuing SDS:
 - Contact:
 - Abbreviations and acronyms:
- 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.
- refer to Technical Data Sheet (TDS)
- Laboratory
Dieter Zimmermann
- 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 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
vPvB: very Persistent and very Bioaccumulative

(Contd. on page 12)

GB

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 18.01.2019

Version number 6

Revision: 18.01.2019

Trade name: Akepox 2020 Component A

(Contd. of page 11)

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

Skin Sens. 1B: Skin sensitisation – Category 1B

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

· * Data compared to the previous
version altered.

Adaptation in accordance with REACH directive 1907/2006/EC

GB