

e-mail info@akemi.de

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 05.10.2022 Version number 3 (replaces version 2) Revision: 05.10.2022

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

· 1.1 Product identifier

· Trade name: Akepox 2020 Component A

· Article number: 11647 (10620), 11648 (10621), 10567_A, 12235_A

· UFI: 4AW2-M0VP-H00X-QSH0

1.2 Relevant identified uses of the substance or mixture and

uses advised againstNo further relevant information available.

· Application of the substance / the

<u>mixture</u> Epoxy resin adhesive

· 1.3 Details of the supplier of the safety data sheet

• <u>Manufacturer/Supplier:</u> AKEMI chemisch technische Spezialfabrik GmbH Lechstrasse 28 Tel. +49(0)911-642960 Fax. +49(0)911-644456

Lechstrasse 28 D 90451 Nürnberg

· Further information obtainable

from: Laboratory

1.4 Emergency telephone

<u>number:</u> 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.

· 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

<u>labelling:</u> 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)

· 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.

• <u>Precautionary statements</u> 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 mist/vapours/spray.

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P273 Avoid release to the environment.

P280 Wear protective gloves/protective clothing/eye protection/face

protection/hearing 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

insing.

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.

· 2.3 Other hazards

· Results of PBT and vPvB assessment

 $\begin{array}{ccc} \cdot & \overline{\text{PBT:}} & \text{Not applicable.} \\ \cdot & \overline{\text{VPvB:}} & \text{Not applicable.} \end{array}$

SECTION 3: Composition/information on ingredients

· 3.2 Mixtures

· <u>Description:</u> Mixture of substances listed below with nonhazardous additions.

· Dangerous components:			
1675-54-3 bis[4-(2,3-epoxypropoxy)phenyl]propane			
	Aquatic Chronic 2, H411 Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317 EUH205 Specific concentration limits: Eye Irrit. 2; H319: C ≥ 5 % Skin Irrit. 2; H315: C ≥ 5 %		
	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	12.5-25%	
	Aquatic Chronic 2, H411 Skin Irrit. 2, H315; Skin Sens. 1, H317		
933999-84-9	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%	
13463-67-7	titanium dioxide Carc. 2, H351	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

· <u>General information:</u> 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.

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• 4.2 Most important symptoms and effects, both acute and

delayed

Breathing difficulty

Headache Dizziness Nausea

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:

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: Dispose of the m

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.

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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.

· Storage class:

7.3 Specific end use(s)

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.

	vaic	des that have to be memored at the workplace.	
· <u>DNELs</u>			
1675-54-3	bis[4-(2,3-epoxypropoxy)p	henyl]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)	
	DNEL (Langzeit-wiederholt)	0.75 mg/kg bw/day (ARB)	
		0.0893 mg/kg bw/day (BEV)	
Inhalative	DNEL (Kurzzeit-akut)	12.25 mg/m³ Air (ARB)	
	DNEL (Langzeit-wiederholt)	4.93 mg/m³ Air (ARB)	
		0.87 mg/m³ Air (BEV)	
Reaction mass of 2,2'-[methylenebis(4,1-phenyleneoxymethylene)]dioxirane and 2-({2-[4-(oxiran-2-			
ylmethox	y)benzyl]phenoxy}methyl)o	xirane 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)	
Inhalative	DNEL (Langzeit-wiederholt)	29.39 mg/m³ Air (ARB)	
		8.7 mg/m³ Air (BEV)	
933999-84	4-9 Reaction products of he	xane-1,6-diol with 2-(chloromethyl)oxirane (1:2)	
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		

1.7 mg/kg bw/day (BEV)

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ade name:	kepox 2020 Component A	
		(Contd. of page
Inhalative	DNEL (Kurzzeit-akut) 4.9 mg/m³ Air (ARB)	(02
	2.9 mg/m³ Air (BEV)	
	DNEL (Langzeit-wiederholt) 4.9 mg/m³ Air (ARB)	
	2.9 mg/m³ Air (BEV)	
13463-67-	titanium dioxide	
Oral	DNEL (Langzeit-wiederholt) 700 mg/kg bw/day (BEV)	
Inhalative	DNEL (Langzeit-wiederholt) 10 mg/m³ Air (ARB)	
· PNECs		
1675-54-3	pis[4-(2,3-epoxypropoxy)phenyl]propane	
PNEC (wä	srig) 10 mg/l (KA)	
	0.0006 mg/l (MW)	
	0.006 mg/l (SW)	
	0.018 mg/l (WAS)	
PNEC (fes	0.065 mg/kg Trockengew (BO)	
•	0.034 mg/kg Trockengew (MWS)	
	0.341 mg/kg Trockengew (SWS)	
Reaction	nass of 2,2'-[methylenebis(4,1-phenyleneoxymethylene)]dioxirane an	d 2-({2-[4-(oxiran-2-
•	benzyl]phenoxy}methyl)oxirane and 2,2'-[methylenebis(2,1-phenylersrig) 10 mg/l (KA)	ieoxymethylene)jaloxirane
T INLO (Wa	0.0003 mg/l (MW)	
	0.003 mg/l (SW)	
	0.025 mg/l (WAS)	
PNEC (fes		
1 1420 (103	0.029 mg/kg Trockengew (MWS)	
	0.294 mg/kg Trockengew (SWS)	
033000-8/	9 Reaction products of hexane-1,6-diol with 2-(chloromethyl)oxirane	(1.2)
	srig) 1 mg/l (KA)	(1.2)
11120 (Wa	0.00115 mg/l (MW)	
	0.0115 mg/l (SW)	
	0.115 mg/l (WAS)	
PNEC (fes		
11120 (100	0.0283 mg/kg Trockengew (MWS)	
	0.283 mg/kg Trockengew (SWS)	
13463-67-	titanium dioxide	
	srig) 100 mg/l (KA)	
`	1 mg/l (MW)	
	0.127 mg/l (SW)	
PNEC (fes		
`	100 mg/kg Trockengew (MWS)	
	1,000 mg/kg Trockengew (SWS)	
	nformation: The lists valid during the making were used as ba	

· 8.2 Exposure controls

- · Appropriate engineering controls No further data; see item 7.
- Individual protection measures, such as personal protective equipment

· General protective and hygienic

measures: Use skin protection cream for skin protection.

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· Respiratory protection:

· Hand protection

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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. 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. 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 anylyses 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

· <u>Material of gloves</u> 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 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)

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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/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

· Colour: Light grey · Odour: Characteristic · Melting point/freezing point: Undetermined.

· Boiling point or initial boiling point and boiling range >200 °C

· Flash point: Not applicable. · Ignition temperature: >300 °C Decomposition temperature: > 200 °C °C · pH Not determined.

Not applicable

· Viscosity:

 Kinematic viscosity Not determined. Dynamic at 20 °C: 35,000 mPas

 Solubility · water:

· Vapour pressure at 20 °C:

Not miscible or difficult to mix. 2 hPa

· Density and/or relative density

· Density at 20 °C: 1.55 g/cm³

· 9.2 Other information

· Appearance:

· Form: Viscous

· Important information on protection of health and

environment, and on safety.

· Auto-ignition temperature: Product is not selfigniting.

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

· Information with regard to physical hazard classes

Explosives

Void

· Flammable gases

Void

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· <u>Aerosols</u>	Void		
· <u>Oxidising gases</u>			
· Gases under pressure	Void		
· Flammable liquids	Void		
· <u>Flammable solids</u>	Void		
· Self-reactive substances and	Void <u>mixtures</u>		
· Pyrophoric liquids	Void		
· Pyrophoric solids	Void		
· Self-heating substances and ı	Void <u>nixtures</u>		
· Substances and mixtures, w gases in contact with water	Void hich emit flammable		
0.11.1	Void		
· Oxidising liquids	Void		
· Oxidising solids	Void		
· <u>Organic peroxides</u>			
· Corrosive to metals	Void		
· Desensitised explosives	Void		
	Void		

SECTION 10: Stability and reactivity

· <u>10.1 Reactivity</u> No further relevant information available.

10.2 Chemical stability

Thermal decomposition /

conditions to be avoided: No decomposition if used and stored according to specifications.

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· 10.3 Possibility of hazardous

<u>reactions</u> May produce violent reactions with bases and numerous organic substances

No further relevant information available.

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:
 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.

· <u>LD/LC50 \</u>	∕alues relev	/ant for cla	ssif	icat	tion:	
1675-54-3 bis[4-(2,3-epoxypropoxy)phenyl]propane						
<u> </u>		4 = 000	- /1	,	1)	

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
 8,500 mg/kg (rat)

 Dermal
 LD50
 >4,900 mg/kg (rabbit)

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)

 Inhalative
 NOAEL
 10 mg/m³ (rat)

 LC50/48h
 >100 mg/l (daphnia magna)

Skin corrosion/irritation
 Serious eye damage/irritation
 Causes skin irritation.
 Causes serious eye irritation.

Respiratory or skin sensitisation

May cause an allergic skin reaction.

- Germ cell mutagenicity
- Carcinogenicity
- Reproductive toxicity
- STOT-single exposure
- STOT-repeated exposure
- Aspiration hazard
- Germ cell mutagenicity
- Based on available data, the classification criteria are not met.
- Based on available data, the classification criteria are not met.
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- Based on available data, the classification criteria are not met.

· 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]propa

IC50 >100 mg/l (BES)

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C10/16h	100 mg/l (pseudomonas putida)	

	100 mg/i (pseudomonas pulid
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-2ylmethoxy)benzyl]phenoxy}methyl)oxirane and 2,2'-[methylenebis(2,1-phenyleneoxymethylene)]dioxirane

EC50/48h	2.55 mg/l	(daphnia	magna)
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EC50/72h 1.8 mg/l (Selenastrum capricornutum)

LC50/96h 2.54 mg/l (Leuciscus idus)

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

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

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)

· 12.2 Persistence and

No further relevant information available. degradability No further relevant information available. 12.3 Bioaccumulative potential · 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

· 12.7 Other adverse effects

Toxic for fish · Remark:

· Additional ecological information:

· General notes: Also poisonous for fish and plankton in water bodies.

Toxic for aquatic organisms

Do not allow product to reach ground water, water course or sewage system. Water hazard class 2 (German Regulation) (Self-assessment): hazardous for

The product does not contain substances with endocrine disrupting properties.

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.

3 ,			
· European waste catalogue			
	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		
	20 00 00		

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· <u>Uncleaned packaging:</u> · <u>Recommendation:</u> Empty contaminated packagings thoroughly. They may be recycled after

thorough and proper cleaning.

· Recommended cleansing agents: Alcohol

SECTION 44. T.

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, 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)		
· <u>IMDG</u>	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		
· <u>IATA</u>	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 · Label	9 (M6) Miscellaneous dangerous substances and articles.		
· IMDG, IATA			
· Class · Label	9 Miscellaneous dangerous substances and articles.9		
· 14.4 Packing group · ADR, IMDG, IATA	III		
· 14.5 Environmental hazards: · Marine pollutant:	Yes Symbol (fish and tree)		
· Special marking (ADR): · Special marking (IATA):	Symbol (fish and tree) Symbol (fish and tree) Symbol (fish and tree)		
	(Contd. on page 12		



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• <u>14.6 Special precautions for user</u> Warning: Miscellaneous dangerous substances and articles.

Hazard identification number (Kemler code):
 EMS Number:
 Stowage Category
 90
 F-A,S-F
 A

14.7 Maritime transport in bulk according to IMO

<u>instruments</u> Not applicable.

· Transport/Additional information:

· <u>ADR</u> · Limited quantities (LQ)

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

<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

· Directive 2012/18/EU

· Named dangerous substances -

ANNEX I None of the ingredients is listed.

· <u>Seveso category</u> 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.

· 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.

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· 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.

· Department issuing SDS: Laboratory

· Contact: Elke Hake

Fon ++49 (0)911 64296-59 @mail E.Hake@akemi.de 28.02.2022

· Date of previous version:

· Version number of previous

version:

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de Abbreviations and acronyms:

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 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