AKEMI®

according to 1907/2006/EC, Article 31

Printing date 09.03.2021 Version number 20 Revision: 09.03.2021

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

· 1.1 Product identifier

Akepox 2030 Component B · Trade name:

10601, 10614, 10602, 10566, 10612, 10605, 10613, 10565, 10563, 10600, · Article number:

10603, 10564, 10604, 10649

· UFI: TPF1-E0Y8-800M-R8GF

1.2 Relevant identified uses of the substance or mixture and uses advised against

No further relevant information available.

· Application of the substance / the

Epoxy resin adhesive mixture

· 1.3 Details of the supplier of the safety data sheet

· Manufacturer/Supplier: AKEMI chemisch technische Spezialfabrik GmbH

Laboratory

Lechstrasse 28 D 90451 Nürnberg

Tel. +49(0)911-642960 Fax. +49(0)911-644456 e-mail info@akemi.de

· Further information obtainable

from: 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

Acute Tox. 4 H332 Harmful if inhaled.

Skin Corr. 1B H314 Causes severe skin burns and eye damage.

Eve Dam. 1 H318 Causes serious eye damage. Skin Sens. 1 H317 May cause an allergic skin reaction. Muta. 2 H341 Suspected of causing genetic defects.

Aquatic Chronic 3 H412 Harmful 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.







GHS05 GHS07 GHS08

Danger

· Signal word

· Hazard-determining components of

formaldehyde polymer with 1,3-benzenedimethanamine and phenol labelling:

m-phenylenebis(methylamine)

phenol

Benzyl alcohol

N-(3-(trimethoxysilyl)propyl)ethylenediamine

H332 Harmful if inhaled. · Hazard statements

H314 Causes severe skin burns and eye damage.

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H317 May cause an allergic skin reaction. H341 Suspected of causing genetic defects.

H412 Harmful 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 carefully and follow all instructions.

P260 Do not breathe vapours.

P273 Avoid release to the environment.

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

protection/hearing protection.

P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated

clothing. Rinse skin with water [or shower].

P304+P340 IF INHALED: Remove person to fresh air and keep

comfortable for breathing.

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.

· 2.3 Other hazards

· Results of PBT and vPvB assessment

PBT: Not applicable.

· vPvB:

1760-24-3 N-(3-(trimethoxysilyl)propyl)ethylenediamine

SECTION 3: Composition/information on ingredients

· 3.2 Chemical characterisation: Mixtures

· Description: Mixture of substances listed below with nonhazardous additions.

· Dangerous components:		
CAS: 1950616-36-0 EC number: 701-207-5 Reg.nr.: 01-2119966906-20	formaldehyde polymer with 1,3-benzenedimethanamine and phenol Skin Corr. 1B, H314; Eye Dam. 1, H318 Skin Sens. 1, H317 Aquatic Chronic 3, H412	25-50%
CAS: 1477-55-0 EINECS: 216-032-5 Reg.nr.: 01-2119480150-50-xxxx	m-phenylenebis(methylamine) Skin Corr. 1B, H314 Acute Tox. 4, H302; Acute Tox. 4, H332; Skin Sens. 1, H317 Aquatic Chronic 3, H412	12.5-25%
CAS: 100-51-6 EINECS: 202-859-9 Index number: 603-057-00-5 Reg.nr.: 01-2119492630-38-0000	Benzyl alcohol Acute Tox. 4, H302; Acute Tox. 4, H312; Acute Tox. 4, H332; Eye Irrit. 2, H319	<12.5%
CAS: 108-95-2 EINECS: 203-632-7 Index number: 604-001-00-2 Reg.nr.: 01-2119471329-32	phenol Acute Tox. 3, H301; Acute Tox. 3, H311; Acute Tox. 3, H331 Muta. 2, H341; STOT RE 2, H373 Skin Corr. 1B, H314; Eye Dam. 1, H318 Aquatic Chronic 2, H411	1-5%
CAS: 1760-24-3 EINECS: 217-164-6 Reg.nr.: 01-2119970215-39	N-(3-(trimethoxysilyl)propyl)ethylenediamine STOT RE 2, H373 Eye Dam. 1, H318 Acute Tox. 4, H332; Skin Sens. 1, H317 vPvB	1-5%

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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: Immediately remove any clothing soiled by the product.

Symptoms of poisoning may even occur after several hours; therefore medical

observation for at least 48 hours after the accident.

· 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: Immediately wash with water and soap and rinse thoroughly.

After eye contact: Rinse opened eye for several minutes under running water. Then consult a

doctor.

· After swallowing: Call for a doctor immediately.

Drink plenty of water and provide fresh air. Call for a doctor immediately.

Information for doctor: The symptoms of phenol based poisoning appearances are white coloured

mouth scabs, shock condition, insensibility, bradycardia and renal dysfunction and damage of renal tissue. Appropriate therapy measures: Administration of an adequate volume of liquid, gastrolavage in application of carbo medicinalis, sodium sulphate with plenty of water, infusion of glucose solution (5%);

maesures against state of shock, hemodialysis.

 4.2 Most important symptoms and effects, both acute and

delayed

Headache

Dizziness Dizziness Nausea

Allergic reactions

 4.3 Indication of any immediate medical attention and special

treatment needed No further relevant information available.

SECTION 5: Firefighting measures

5.1 Extinguishing media

· <u>Suitable extinguishing agents:</u> Use fire extinguishing methods suitable to surrounding conditions.

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) Nitrogen oxides (NOx)

5.3 Advice for firefighters

· <u>Protective equipment:</u> Wear fully protective suit.

Wear self-contained respiratory protective device.

Mount respiratory protective device.

· 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 proceduresWear protective equipment. Keep unprotected persons away.

• 6.2 Environmental precautions: Do not allow to penetrate the ground/soil.

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

Inform respective authorities in case of seepage into water course or sewage

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). Use neutralising agent.

Dispose contaminated material as waste according to item 13.

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 Ensure good ventilation/exhaustion at the workplace.

· Information about fire - and

No special measures required. explosion protection:

· 7.2 Conditions for safe storage, including any incompatibilities

· Requirements to be met by

storerooms and receptacles: No special requirements.

· Information about storage in one

Not required. common storage facility:

· Further information about storage

Keep container tightly sealed. conditions:

Storage class:

· 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:

108-95-2 phenol

WEL Short-term value: 16 mg/m³, 4 ppm

Long-term value: 7.8 mg/m³, 2 ppm

· DNELs

1950616-36-0 formaldehyde polyn	mer with 1.3-benzenedimethanamine and phenol	
13300 10-30-0 IOIIIIAIUEIIVUE DOIVII		

DNEL (Kurzzeit-akut) 3.33 mg/kg bw/day (BEV) Oral DNEL (Langzeit-wiederholt) 3.33 mg/kg bw/day (BEV) Dermal

DNEL (Kurzzeit-akut) 0.00385-2.8 mg/kg bw/day (ARB)

0.000167-0.008 mg/kg bw/day (BEV) DNEL (Langzeit-wiederholt) 0.000385-0.28 mg/kg bw/day (ARB)

0.000167-0.008 mg/kg bw/day (BEV)

Inhalative DNEL (Kurzzeit-akut) 2-6 mg/m³ Air (ARB)

DNEL (Langzeit-wiederholt) | 0.02 mg/m³ Air (ARB)

1477-55-0 m-phenylenebis(methylamine)

Dermal DNEL (Langzeit-wiederholt) 0.33 mg/kg bw/day (ARB)

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	Akepo	x 2030 Component B		
				(Contd. of pa
	1	(Langzeit-wiederholt)	1.2 mg/m³ Air (ARB)	
100-51-6 E	_			
Oral	DNEL	(Kurzzeit-akut)	25 mg/kg bw/day (BEV)	
	DNEL	(Langzeit-wiederholt)	5 mg/kg bw/day (BEV)	
Dermal	DNEL	(Kurzzeit-akut)	47 mg/kg bw/day (ARB)	
			28.5 mg/kg bw/day (BEV)	
	DNEL	(Langzeit-wiederholt)	9.5 mg/kg bw/day (ARB)	
			5.7 mg/kg bw/day (BEV)	
Inhalative	DNEL	(Kurzzeit-akut)	450 mg/m³ Air (ARB)	
			40.55 mg/m³ Air (BEV)	
	DNEL	(Langzeit-wiederholt)	90 mg/m³ Air (ARB)	
			8.11 mg/m³ Air (BEV)	
108-95-2 բ				
Oral	1	` '	0.4 mg/kg bw/day (BEV)	
Dermal	DNEL	(Langzeit-wiederholt)	0.4 mg/kg bw/day (BEV)	
Inhalative	DNEL	(Langzeit-wiederholt)	8 mg/m³ Air (ARB)	
			1.32 mg/m³ Air (BEV)	
1760-24-3	N-(3-(trimethoxysilyl)propy	l)ethylenediamine	
Oral	DNEL	(Langzeit-wiederholt)	2.5 mg/kg bw/day (BEV)	
Dermal	DNEL	(Kurzzeit-akut)	5 mg/kg bw/day (ARB)	
			17 mg/kg bw/day (BEV)	
	DNEL	(Langzeit-wiederholt)	5 mg/kg bw/day (ARB)	
			2.5 mg/kg bw/day (BEV)	
Inhalative	DNEL	(Langzeit-wiederholt)	35.3 mg/m³ Air (ARB)	
			8.7 mg/m³ Air (BEV)	
PNECs				
1950616-3	36-0 fo	rmaldehyde polymer	with 1,3-benzenedimethanamine and phenol	
	issria)	30 mg/L(KA)		
PNEC (wä	1001197	00 mg/1 (10 t)		
PNEC (wä	,5511g)	0.002 mg/l (MW)		
PNEC (wä	σ,	• ,		
,	37	0.002 mg/l (MW)	gew (BO)	
,	st)	0.002 mg/l (MW) 0.02 mg/l (SW)		
·	st)	0.002 mg/l (MW) 0.02 mg/l (SW) 0.0236 mg/kg Trocken	w (MWS)	
PNEC (fes	st)	0.002 mg/l (MW) 0.02 mg/l (SW) 0.0236 mg/kg Trocken 0.01 mg/kg Trockenge	w (MWS) gew (SWS)	
PNEC (fes	st)	0.002 mg/l (MW) 0.02 mg/l (SW) 0.0236 mg/kg Trocken 0.01 mg/kg Trockenge 0.1001 mg/kg Trocken	w (MWS) gew (SWS)	
PNEC (fes	st) 0 m-ph e àssrig)	0.002 mg/l (MW) 0.02 mg/l (SW) 0.0236 mg/kg Trocken 0.01 mg/kg Trockenge 0.1001 mg/kg Trocken enylenebis(methylami	w (MWS) gew (SWS)	
PNEC (fes	st) m-ph e issrig)	0.002 mg/l (MW) 0.02 mg/l (SW) 0.0236 mg/kg Trocken 0.01 mg/kg Trockenge 0.1001 mg/kg Trocken enylenebis(methylami	w (MWS) gew (SWS)	
PNEC (fes	ot) O m-pho issrig)	0.002 mg/l (MW) 0.02 mg/l (SW) 0.0236 mg/kg Trocken 0.01 mg/kg Trockenge 0.1001 mg/kg Trocken enylenebis(methylami 10 mg/l (KA) 0.0094 mg/l (MW)	w (MWS) gew (SWS)	
PNEC (fes 1477-55-0 PNEC (wä	st)) m-ph o issrig)	0.002 mg/l (MW) 0.02 mg/l (SW) 0.0236 mg/kg Trocken 0.01 mg/kg Trockenge 0.1001 mg/kg Trocken enylenebis(methylami 10 mg/l (KA) 0.0094 mg/l (MW) 0.094 mg/l (SW)	w (MWS) gew (SWS) ine)	
PNEC (fes 1477-55-0 PNEC (wä	om-pho om-pho ossrig)	0.002 mg/l (MW) 0.02 mg/l (SW) 0.0236 mg/kg Trocken 0.01 mg/kg Trockenge 0.1001 mg/kg Trocken enylenebis(methylami 10 mg/l (KA) 0.0094 mg/l (SW) 0.152 mg/l (WAS)	w (MWS) gew (SWS) ine)	
PNEC (fes 1477-55-0 PNEC (wä	o m-pho issrig)	0.002 mg/l (MW) 0.02 mg/l (SW) 0.0236 mg/kg Trockenge 0.01 mg/kg Trockenge 0.1001 mg/kg Trockenge enylenebis(methylami 10 mg/l (KA) 0.0094 mg/l (MW) 0.094 mg/l (WAS) 0.045 mg/kg Trockeng	ew (BO) ew (MWS)	
PNEC (fes	om-pho m-pho dissrig)	0.002 mg/l (MW) 0.02 mg/l (SW) 0.0236 mg/kg Trockenge 0.01 mg/kg Trockenge 0.1001 mg/kg Trockenge enylenebis(methylami 10 mg/l (KA) 0.0094 mg/l (MW) 0.094 mg/l (SW) 0.152 mg/l (WAS) 0.045 mg/kg Trockeng 0.043 mg/kg Trockenge	ew (BO) ew (MWS)	
PNEC (fes 1477-55-0 PNEC (wä PNEC (fes	st) m-pho assrig)	0.002 mg/l (MW) 0.02 mg/l (SW) 0.0236 mg/kg Trockenge 0.01 mg/kg Trockenge 0.1001 mg/kg Trockenge enylenebis(methylami 10 mg/l (KA) 0.0094 mg/l (MW) 0.094 mg/l (SW) 0.152 mg/l (WAS) 0.045 mg/kg Trockeng 0.043 mg/kg Trockenge	ew (BO) ew (MWS)	
PNEC (fes 1477-55-0 PNEC (wä PNEC (fes	m-phoassrig) st) Benzyl	0.002 mg/l (MW) 0.02 mg/l (SW) 0.0236 mg/kg Trockenge 0.01 mg/kg Trockenge 0.1001 mg/kg Trockenge enylenebis(methylami 10 mg/l (KA) 0.0094 mg/l (MW) 0.094 mg/l (WAS) 0.045 mg/kg Trockeng 0.043 mg/kg Trockeng 0.43 mg/kg Trockenge	ew (BO) ew (MWS)	
PNEC (wä	m-phoassrig) st) Benzyl	0.002 mg/l (MW) 0.02 mg/l (SW) 0.0236 mg/kg Trocken 0.01 mg/kg Trockenge 0.1001 mg/kg Trockenge enylenebis(methylami 10 mg/l (KA) 0.0094 mg/l (MW) 0.094 mg/l (SW) 0.152 mg/l (WAS) 0.045 mg/kg Trockeng 0.043 mg/kg Trockeng 0.43 mg/kg Trockenge alcohol 39 mg/l (KA)	ew (BO) ew (MWS)	



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0.456 mg/kg Trockengew (BO) (Contd. of page 5)

0.527 mg/kg Trockengew (MWS) 5.27 mg/kg Trockengew (SWS)

108-95-2 phenol

PNEC (fest)

PNEC (wässrig) 2.1 mg/l (KA)

0.00077 mg/l (MW) 0.0077 mg/l (SW)

PNEC (fest) 0.136 mg/kg Trockengew (BO)

0.00915 mg/kg Trockengew (MWS) 0.0915 mg/kg Trockengew (SWS)

1760-24-3 N-(3-(trimethoxysilyl)propyl)ethylenediamine

PNEC (wässrig) 25 mg/l (KA)

0.0062 mg/l (MW) 0.062 mg/l (SW) 0.62 mg/l (WAS)

PNEC (fest) 0.0075 mg/kg Trockengew (BO)

0.005 mg/kg Trockengew (MWS) 0.05 mg/kg Trockengew (SWS)

· Additional information:

The lists valid during the making were used as basis.

· 8.2 Exposure controls

· Protection of hands:

· Personal protective equipment:

· General protective and hygienic

measures:

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: 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.



Protective gloves

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

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

Selection of the glove material on consideration of the penetration

times, rates of diffusion and the degradation

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

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

Skin protection recommendation for skin cleaning after product handling:

Kresto Classic (http://debstoko.com)

Skin protection agent recommendation for skin aftercare:

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

The protection gloves to be used have to comply with the specifications of the directive 89/686/EC and the directive derived decree EN374, respectively, e.g. the above listed protection glove type. The mentioned permeation times' data were generated and verified

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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).

Butyl rubber, BR · Material of gloves

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

· Penetration time of glove material Value for the permeation: Level \leq 6, 480 min

The exact break trough time has to be found out by the manufacturer of the

protective gloves and has to be observed.

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

suitable:

Butyl rubber, BR

Butoject (KCL, Art_No. 897, 898)

Nitrile rubber, NBR

Dermatril (Art_No. 740, 741, 742)

Camatril (KCL, Art_No. 730, 731, 732, 733)

Chloroprene rubber, CR

Camapren (KCL, Art No. 720, 722, 726)

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

suitable:

Butyl rubber, BR

Nitrile rubber, NBR

Camatril (KCL, 730, 731, 732, 733)

· 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:

Form: Pasty Colour: Grev

· Odour: Characteristic

· pH-value: Not applicable

· Change in condition

Melting point/freezing point: Undetermined.

Initial boiling point and boiling range: 205 °C

· Flash point: 101 °C

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· <u>Ignition temperature:</u>	435 °C	
· Auto-ignition temperature:	Product is not selfigniting.	
· Explosive properties:	Product does not present an explosion hazard.	
· <u>Explosion limits:</u> <u>Lower:</u> <u>Upper:</u>	1.3 Vol % 13 Vol %	
· Vapour pressure at 20 °C:	0.1 hPa	
· Density at 20 °C:	1.5 g/cm³	
· Solubility in / Miscibility with water:	Not miscible or difficult to mix.	
· <u>Viscosity:</u> Dynamic at 20 °C: <u>Kinematic:</u>	80,000 mPas Not determined.	
· <u>Solvent content:</u> Organic solvents:	12.0 %	
Solids content:	56.9 %	
· 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:

products:

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

Corrosive gases/vapours

10.3 Possibility of hazardous

reactions
10.4 Conditions to avoid

Strong exothermic reaction with acids. No further relevant information available. No further relevant information available.

10.5 Incompatible materials:

· 10.6 Hazardous decomposition

SECTION 11: Toxicological information

· 11.1 Information on toxicological effects

· Acute toxicity Harmful if inhaled.

· <u>LD/LC50</u> values relevant for classification:			
ATE (Acute Toxicity Estimates)			
Oral	LD50	<3,779 mg/kg	
Dermal	LD50	9,895 mg/kg	
Inhalative	LC50/4 h	13.6 mg/l (rat)	
1950616-3	1950616-36-0 formaldehyde polymer with 1,3-benzenedimethanamine and phenol		
Oral	LD50	>2,000 mg/kg (rat)	
Dermal	LD50	>2,020 mg/kg (rat)	
1477-55-0	1477-55-0 m-phenylenebis(methylamine)		
Oral	LD50	<2,000 mg/kg (rat)	
	NOEL	150 mg/kg (rat)	
Dermal	LD50	3,100 mg/kg (rabbit)	

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			(Contd. of pag
Inhalative	LC50/4 h	2.4 mg/l (rat)	(-
	LC50/1h	3.89 mg/l (rat)	
100-51-6 I	Benzyl alco	phol	
Oral	LD50	1,040 mg/kg (mouse)	
		1,040 mg/kg (rabbit)	
		1,620 mg/kg (rat)	
	NOEL	400 mg/kg (rat)	
	NOAEL	200 mg/kg (mouse)	
	1107122	400 mg/kg (rat)	
Dermal	LD50	2,000 mg/kg (rabbit)	
Inhalative		1,000 ppm (rat)	
IIIIIaiaiive	LC50/611 LC50/4 h		
		11 mg/l (rat)	
	LC50/48n	360 mg/l (daphnia magna)	
		645 mg/l (goo)	
108-95-2			
Oral	LD50	300 mg/kg (mouse)	
		317 mg/kg (rat)	
Dermal	LD50	630 mg/kg (rat)	
Inhalative	LC50/4 h	316 mg/l (rat)	
	LC50/8h	0.9 mg/l (rat)	
1760-24-3	N-(3-(trim	ethoxysilyl)propyl)ethylenediamine	
Oral	LD50	2,995 mg/kg (rat)	
	NOEL	≥500 mg/kg (rat) (OECD 422)	
	NOAEL	≥500 mg/kg (rat)	
Dermal	LD50	>2,000 mg/kg (rat)	
Inhalative		1.49 mg/l (rat)	
	itant effect		
	sion/irritation		
Serious ey	∕e damage/		
		ensitisation May cause an allergic skin reaction.	
		al information:	
		genity, mutagenicity and toxicity for reproduction) ty Suspected of causing genetic defects.	
Carcinoge	mutagenici	Based on available data, the classification criteria are not met.	
	ive toxicity	Based on available data, the classification criteria are not met.	
	gle exposui		
	eated expo		
Aspiration		Based on available data, the classification criteria are not met.	

SECTION 12: Ecological information

· 12.1 Toxicity

12.1 TOXICIE	1
· Aquatic toxic	city:
1950616-36-	-0 formaldehyde polymer with 1,3-benzenedimethanamine and phenol
EC50	491.3 mg/l (BES)
EC50/48h	29.8 mg/l (daphnia magna)
EC50/72h	20.4 mg/l (Pseudokirchneriella subcapitata)
LC50/96h	25.9 mg/l (Oncorhynchus mykiss)

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	-phenylenebis(methylamine)
EC50/48h	15.2 mg/l (daphnia magna)
EC50/30min	>1,000 mg/l (BES)
NOEC/21d	4.7 mg/l (daphnia magna)
EC50/72h	12 mg/l (Scenedesmus subspicatus)
	32.1 mg/l (selenastrum capricornutum)
LC50/96h	>100 mg/l (Oncorhynchus mykiss)
	87.6 mg/l (Oryzias latipes)
	>100 mg/l (Zebrabärbling)
100-51-6 Ber	nzyl alcohol
EC50/24h	55-400 mg/l (daphnia magna)
EC50/96h	640 mg/l (Scenedesmus pluvialis)
EC50	2,100 mg/l (BES) (OECD 209)
	79 mg/l (Scenedesmus quadricauda)
EC10/16h	658 mg/l (pseudomonas putida)
EC50/48h	230 mg/l (daphnia magna) (OECD 202)
EC0	640 mg/l (Scenedesmus quadricauda)
EC50/16h	658 mg/l (pseudomonas putida)
	71.4 mg/l (Photobac. phosphoreum)
2000/00111111	400 mg/l (pseudomonas putida)
IC5/96h	640 mg/l (Scenedesmus quadricauda)
NOEC	310 mg/kg (Pseudokirchneriella subcapitata)
NOEC/21d	51 mg/l (daphnia magna) (OECD211)
EC50/72h	770 mg/l (green alge) (OECD 201)
EC30/1211	770 mg/l (Pseudokirchneriella subcapitata)
LC50/96h	
LC50/96H	645 mg/l (goo)
	10 mg/l (lepomis macrochirus)
400.05.0	460 mg/l (Pimephales promelas)
108-95-2 phe	
	21 mg/l (BO)
EC50/96h	61.1 mg/l (green alge)
EC50/48h	3.1 mg/l (daphnia magna)
LC50/96h	8.9 mg/l (Oncorhynchus mykiss)
	(3-(trimethoxysilyl)propyl)ethylenediamine
EC50	435 mg/l (Klärschlamm: Atmungs-/Vermehrungshemmung)
IC50/72h	8.8 mg/l (green alge) (OECD 201)
EC50/48h	81 mg/l (daphnia magna)
EC50/16h	67 mg/l (pseudomonas putida)
NOEC	3.1 mg/kg (green alge) (OECD 201)
	≥1,000 mg/kg (Eisenia fetida (Regenwürmer)) (OECD 207)
NOEC/21d	>1 mg/l (daphnia magna)
EC50/48h	87.4 mg/l (daphnia magna)
EC50/72h	5 mg/l (green alge)
	126 mg/l (Scenedesmus subspicatus)
LC50/96h	344 mg/l (Brachydanio rerio)
	597 mg/l (Danio rerio.)



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• <u>12.2 Persistence and</u> <u>degradability</u> No further relevant information available.

• 12.3 Bioaccumulative potential No further relevant information available.

No further relevant information available.

· <u>Additional ecological information:</u> · <u>General notes:</u> Do not allow product to reach ground water, water course or sewage system.

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

water

· 12.5 Results of PBT and vPvB assessment

· PBT: Not applicable.

· vPvB:

1760-24-3 N-(3-(trimethoxysilyl)propyl)ethylenediamine

• 12.6 Other adverse effects No further relevant information available.

SECTION 13: Disposal considerations

· 13.1 Waste treatment methods

• <u>Recommendation</u> Must not be disposed together with household garbage. Do not allow product to

reach sewage system.

Uncleaned packaging:

· Recommendation: Empty contaminated packagings thoroughly. They may be recycled after

thorough and proper cleaning.

SECTION 14: Transport information

· <u>14.1 UN-Number</u> · <u>ADR, IMDG, IATA</u>	UN2735
· 14.2 UN proper shipping name	
· <u>ADR</u>	2735 POLYAMINES, LIQUID, CORROSIVE, N.O.S. (formaldehyde polymer with 1,3-benzenedimethanamine and phenol, m-phenylenebis(methylamine))
· <u>IMDG, IATA</u>	POLYAMINES, LIQUID, CORROSIVE, N.O.S. (formaldehyde polymer with 1,3-benzenedimethanamine and phenol, m-phenylenebis(methylamine))

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· 14.3 Transport hazard class(es)

· <u>ADR</u>



· Class 8 (C7) Corrosive substances. · Label 8

· IMDG, IATA



· <u>Class</u> 8 Corrosive substances.

· Label 8

· 14.4 Packing group

· ADR, IMDG, IATA

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<u> </u>	
	(Contd. of page 11)
· 14.5 Environmental hazards: · Marine pollutant:	No
 14.6 Special precautions for user Hazard identification number (Kemler code): EMS Number: Segregation groups Stowage Category Segregation Code 	Warning: Corrosive substances. 80 F-A,S-B Alkalis A SG35 Stow "separated from" SGG1-acids
14.7 Transport in bulk according to Annex II of Marpo and the IBC Code	Not applicable.
· Transport/Additional information:	
· <u>ADR</u> · <u>Excepted quantities (EQ)</u>	Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
· IMDG · Limited quantities (LQ) · Excepted quantities (EQ)	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 2735 POLYAMINES, LIQUID, CORROSIVE, N.O.S. (FORMALDEHYDE POLYMER WITH 1,3-BENZENEDIMETHANAMINE AND PHENOL, M-

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.

· National regulations:

· Information about limitation of use: Employment restrictions concerning juveniles must be observed.

Employment restrictions concerning pregnant and lactating women must be

PHENYLENEBIS(METHYLAMINE)), 8, III

observed.

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

· <u>VOC EU</u> 181.0 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.

· <u>Relevant phrases</u> H301 Toxic if swallowed.

H302 Harmful if swallowed. H311 Toxic in contact with skin. H312 Harmful in contact with skin.

H314 Causes severe skin burns and eye damage.

H317 May cause an allergic skin reaction. H318 Causes serious eye damage. H319 Causes serious eye irritation.

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H331 Toxic if inhaled. H332 Harmful if inhaled.

H341 Suspected of causing genetic defects.

H373 May cause damage to organs through prolonged or repeated exposure.

H411 Toxic to aquatic life with long lasting effects. H412 Harmful to aquatic life with long lasting effects.

· Recommended restriction of use refer to Technical Data Sheet (TDS)

Department issuing SDS:Contact:LaboratoryElke 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)

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 Desired No Effect Level (DEAGLE)

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 Acute Tox. 3: Acute toxicity – Category 3 Acute Tox. 4: Acute toxicity – Category 4

Skin Corr. 1B: Skin corrosion/irritation – Category 1B
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

STOT RE 2: Specific target organ toxicity (repeated exposure) – 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

• * Data compared to the previous version altered.

Adaptation in accordance with REACH directive 1907/2006/EC

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