

Safety data sheet

according to Regulation (EC) No 1907/2006, Article 31

Printing date 06.11.2024

Version number 7 (replaces version 6)

Revision: 06.11.2024

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

· 1.1 Product identifier

· Trade name: **Metalbond component B**

· Article number: 30306, 30307_B

· UFI: V5D4-W0FP-3007-X2PF

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

· Application of the substance / the mixture

No further relevant information available.

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.

* 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.
Eye 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

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



GHS05 GHS07 GHS08

· Signal word

Danger

· Hazard-determining components of labelling:

formaldehyde polymer with 1,3-benzenedimethanamine and phenol
m-phenylenebis(methylamine)
phenol

Benzylalkohol

N-(3-(trimethoxysilyl)propyl)ethylenediamine

H332 Harmful if inhaled.

H314 Causes severe skin burns and eye damage.

H317 May cause an allergic skin reaction.

H341 Suspected of causing genetic defects.

H412 Harmful to aquatic life with long lasting effects.

· Hazard statements

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· <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.
	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

· Determination of endocrine-disrupting properties

For information on endocrine disrupting properties see section 11.

SECTION 3: Composition/information on ingredients· **3.2 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; Eye Dam. 1, H318 Acute Tox. 4, H302; Acute Tox. 4, H332; Skin Sens. 1, H317 Aquatic Chronic 3, H412 EUH071	12.5-25%
CAS: 100-51-6 EINECS: 202-859-9 Index number: 603-057-00-5 Reg.nr.: 01-2119492630-38-0000	Benzylalkohol Acute Tox. 4, H302; Acute Tox. 4, H312; Acute Tox. 4, H332; Eye Irrit. 2, H319	<12.5%

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CAS: 1760-24-3 EINECS: 217-164-6 Reg.nr.: 01-2119970215-39	N-(3-(trimethoxysilyl)propyl)ethylenediamine Eye Dam. 1, H318 Skin Sens. 1, H317; STOT SE 3, H335 vPvB	1-5%
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 Specific concentration limits: Skin Corr. 1B; H314: C ≥ 3 % Skin Irrit. 2; H315: 1 % ≤ C < 3 % Eye Irrit. 2; H319: 1 % ≤ C < 3 %	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**

- 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.

· 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**

- Suitable extinguishing agents: 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

- Protective equipment: Wear fully protective suit.
 Wear self-contained respiratory protective device.
 Mount respiratory protective device.
 Collect contaminated fire fighting water separately. It must not enter the sewage system.
- Additional information

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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**: Wear protective equipment. Keep unprotected persons away.
- **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).
Use neutralising agent.
Dispose contaminated material as waste according to section 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 explosion protection**: No special measures required.
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage**: No special requirements.
- **Requirements to be met by storerooms and receptacles**: Not required.
- **Information about storage in one common storage facility**: Keep container tightly sealed.
- **Further information about storage conditions**: 8 A
- **Storage class**: No further relevant information available.
- **7.3 Specific end use(s)**

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

- **Ingredients with limit values that require monitoring at the workplace**:

108-95-2 phenol

IOELV	Short-term value: 16 mg/m ³ , 4 ppm Long-term value: 8 mg/m ³ , 2 ppm Skin
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- **DNELs**

1950616-36-0 formaldehyde polymer with 1,3-benzenedimethanamine and phenol

Oral	DNEL (Kurzzeit-akut)	3.33 mg/kg bw/day (BEV)
	DNEL (Langzeit-wiederhol)	3.33 mg/kg bw/day (BEV)
Dermal	DNEL (Kurzzeit-akut)	0.00385-2.8 mg/kg bw/day (ARB)

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Inhalative	DNEL (Langzeit-wiederholt)	0.000167-0.008 mg/kg bw/day (BEV) 0.000385-0.28 mg/kg bw/day (ARB) 0.000167-0.008 mg/kg bw/day (BEV)
	DNEL (Kurzzeit-akut)	2-6 mg/m ³ Air (ARB)
	DNEL (Langzeit-wiederholt)	0.02-0.6 mg/m ³ Air (ARB)

1477-55-0 m-phenylenebis(methylamine)

Dermal	DNEL (Langzeit-wiederholt)	0.33 mg/kg bw/day (ARB)
	DNEL (Kurzzeit-akut)	0.2 mg/m ³ Air (ARB)
	DNEL (Langzeit-wiederholt)	1.2 mg/m ³ Air (ARB)

100-51-6 Benzylalkohol

Oral	DNEL (Kurzzeit-akut)	20 mg/kg bw/day (BEV)
	DNEL (Langzeit-wiederholt)	4 mg/kg bw/day (BEV)
Dermal	DNEL (Kurzzeit-akut)	40 mg/kg bw/day (ARB)
	DNEL (Langzeit-wiederholt)	20 mg/kg bw/day (BEV)
Inhalative	DNEL (Kurzzeit-akut)	8 mg/kg bw/day (ARB)
	DNEL (Langzeit-wiederholt)	4 mg/kg bw/day (BEV)
	DNEL (Kurzzeit-akut)	110 mg/m ³ Air (ARB)
	DNEL (Langzeit-wiederholt)	27 mg/m ³ Air (BEV)
	DNEL (Langzeit-wiederholt)	22 mg/m ³ Air (ARB)
		5.4 mg/m ³ Air (BEV)

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

Oral	DNEL (Langzeit-wiederholt)	2.5 mg/kg bw/day (BEV)
	DNEL (Kurzzeit-akut)	5 mg/kg bw/day (ARB)
	DNEL (Langzeit-wiederholt)	17 mg/kg bw/day (BEV)
Dermal	DNEL (Langzeit-wiederholt)	5 mg/kg bw/day (ARB)
		2.5 mg/kg bw/day (BEV)
Inhalative	DNEL (Langzeit-wiederholt)	35.5 mg/m ³ Air (ARB)
		8.7 mg/m ³ Air (BEV)

108-95-2 phenol

Oral	DNEL (Langzeit-wiederholt)	0.4 mg/kg bw/day (BEV)
	DNEL (Langzeit-wiederholt)	0.4 mg/kg bw/day (BEV)
	DNEL (Langzeit-wiederholt)	8 mg/m ³ Air (ARB)
Dermal	DNEL (Langzeit-wiederholt)	1.32 mg/m ³ Air (BEV)
Inhalative	DNEL (Langzeit-wiederholt)	

PNECs**1950616-36-0 formaldehyde polymer with 1,3-benzenedimethanamine and phenol**

PNEC (wässrig)	30 mg/l (KA)
	0.002 mg/l (MW)
PNEC (fest)	0.02 mg/l (SW)
	0.0236 mg/kg Trockengew (BO)
0.01 mg/kg Trockengew (MWS)	
0.1001 mg/kg Trockengew (SWS)	

1477-55-0 m-phenylenebis(methylamine)

PNEC (wässrig)	10 mg/l (KA)
	0.0094 mg/l (MW)
	0.094 mg/l (SW)

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PNEC (fest)	0.152 mg/l (WAS) 2.44 mg/kg Trockengew (BO) 1.24 mg/kg Trockengew (MWS) 12.4 mg/kg Trockengew (SWS)
100-51-6 Benzylalkohol	
PNEC (wässrig)	39 mg/l (KA) 0.1 mg/l (MW) 1 mg/l (SW) 2.3 mg/l (WAS)
PNEC (fest)	0.456 mg/kg Trockengew (BO) 0.527 mg/kg Trockengew (MWS) 5.27 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)
108-95-2 phenol	
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)

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

8.2 Exposure controls

· Appropriate engineering controls No further data; see section 7.

· Individual protection measures, such as 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.

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.

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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 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>).

· Material of gloves

Butyl rubber, BR

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.

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.

· Penetration time of glove material

· 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



Tightly sealed goggles

· Eye/face protection

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· Body protection: Protective work clothing

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

· <u>Colour:</u>	Grey
· <u>Odour:</u>	Characteristic
· <u>Melting point/freezing point:</u>	Undetermined.
· <u>Boiling point or initial boiling point and boiling range</u>	205 °C
· <u>Lower and upper explosion limit</u>	
· <u>Lower:</u>	1.3 Vol %
· <u>Upper:</u>	13 Vol %
· <u>Flash point:</u>	101 °C
· <u>Auto-ignition temperature:</u>	435 °C
· <u>pH</u>	Not determined. Not applicable
· <u>Viscosity:</u>	
· <u>Kinematic viscosity</u>	Not determined.
· <u>Dynamic at 20 °C:</u>	80,000 mPas
· <u>Solubility</u>	
· <u>water:</u>	Not miscible or difficult to mix.
· <u>Vapour pressure at 20 °C:</u>	0.1 hPa
· <u>Density and/or relative density</u>	
· <u>Density at 20 °C:</u>	1.5 g/cm³

· 9.2 Other information

· <u>Appearance:</u>	Pasty
· <u>Form:</u>	
· <u>Important information on protection of health and environment, and on safety.</u>	
· <u>Ignition temperature:</u>	Product is not selfigniting.
· <u>Explosive properties:</u>	Product does not present an explosion hazard.
· <u>Solvent content:</u>	
· <u>Organic solvents:</u>	12.0 %
· <u>Solids content:</u>	56.9 %

· Information with regard to physical hazard classes

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

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· Desensitised explosives	Void
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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 according to specifications.
· 10.3 Possibility of hazardous reactions	Strong exothermic reaction with 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:	Corrosive gases/vapours

SECTION 11: Toxicological information

· 11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008	
· Acute toxicity	Harmful if inhaled.

· LD/LC50 values relevant for classification:	
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ATE (Acute Toxicity Estimates)

Oral	LD50	3,456 mg/kg
Dermal	LD50	12,766 mg/kg
Inhalative	LC50/4 h	>8.14 mg/l (rat)

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 m-phenylenebis(methylamine)

Oral	LD50	930 mg/kg (rat) (OECD 401)
	NOEL	150 mg/kg (rat)
Dermal	LD50	3,100 mg/kg (rabbit)
Inhalative	LC50/4 h	1.34 mg/l (rat) (OECD 403)
	LC50/1h	3.89 mg/l (rat)

100-51-6 Benzylalkohol

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)
Dermal	LD50	1,045 mg/kg (rat)
Inhalative	LC50/8h	2,000 mg/kg (rabbit)
	LC50/4 h	1,000 ppm (rat)
	LC50/48h	>4.178 mg/l (rat) (OECD 403) 360 mg/l (daphnia magna) 645 mg/l (goo)

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

Oral	LD50	2,995 mg/kg (rat)
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Dermal	NOEL NOAEL LD50	≥500 mg/kg (rat) (OECD 422) ≥500 mg/kg (rat) >2,000 mg/kg (rat)
Inhalative	LC50/4 h	1.49 mg/l (rat)

108-95-2 phenol

Oral	LD50	300 mg/kg (mouse) 317 mg/kg (rat)
Dermal	LD50	630 mg/kg (rat)
Inhalative	LC50/4 h LC50/8h	316 mg/l (rat) 0.9 mg/l (rat)

· Primary irritant effect:

- Skin corrosion/irritation Causes severe skin burns and eye damage.
- Serious eye damage/irritation Causes serious eye damage.
- Respiratory or skin sensitisation May cause an allergic skin reaction.
- Germ cell mutagenicity Suspected of causing genetic defects.
- 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.

· **11.2 Information on other hazards**

· Endocrine disrupting properties

None of the ingredients is listed.

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

· Aquatic toxicity:

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)

1477-55-0 m-phenylenebis(methylamine)

EC50/24h	35.1 mg/l (daphnia magna)
EC50/48h	15.2 mg/l (daphnia magna) (OECD 202)
EC50/30min	>1,000 mg/l (BES)
NOEC/21d	4.7 mg/l (daphnia magna) (OECD 211)
EC50/72h	12 mg/l (Scenedesmus subspicatus)
	32.1 mg/l (selenastrum capricornutum) (OECD 201)
LC50/96h	>100 mg/l (Oncorhynchus mykiss)
	87.6 mg/l (Oryzias latipes) (OECD 203)
	>100 mg/l (Zebrafärbling)

100-51-6 Benzylalkohol

EC50/24h	55-400 mg/l (daphnia magna)
EC50/96h	640 mg/l (Scenedesmus pluvialis)
EC50	2,100 mg/l (BES) (OECD 209)

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EC10/16h	79 mg/l (Scenedesmus quadricauda)
EC50/48h	658 mg/l (pseudomonas putida)
ErC50/72h	230 mg/l (daphnia magna) (OECD 202)
EC0	770 mg/l (Pseudokirchneriella subcapitata) (OECD 201)
EC50/16h	640 mg/l (Scenedesmus quadricauda)
EC50/30min	658 mg/l (pseudomonas putida)
	71.4 mg/l (Photobac. phosphoreum)
	400 mg/l (pseudomonas putida)
IC5/96h	640 mg/l (Scenedesmus quadricauda)
NOEC	310 mg/kg (Pseudokirchneriella subcapitata) (OECD 201)
NOEC/21d	51 mg/l (daphnia magna) (OECD211)
EC50/72h	770 mg/l (algae) (OECD 201)
	500 mg/l (Pseudokirchneriella subcapitata) (OECD 201)
LC50/96h	645 mg/l (goo)
	10 mg/l (lepisomis macrochirus)
	8.9 mg/l (Oncorhynchus mykiss)
	460 mg/l (Pimephales promelas) (EPA OPP 72-1)

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

EC50	435 mg/l (Klärschlamm: Atmungs-/Vermehrungshemmung) 67 mg/l (pseudomonas putida) (DIN 38412 part 8)
IC50/72h	8.8 mg/l (algae) (OECD 201)
EC50/48h	23 mg/l (daphnia magna) (OECD 202)
ErC50/72h	8.8 mg/l (Pseudokirchneriella subcapitata) (OECD 201)
EC50/16h	67 mg/l (pseudomonas putida)
NOEC	3.1 mg/kg (algae) (OECD 201) ≥1,000 mg/kg (Eisenia fetida (Regenwürmer)) (OECD 207)
NOELR/72h	3.1 mg/l (Pseudokirchneriella subcapitata) (OECD 201)
NOEC/21d	>1 mg/l (daphnia magna)
EC50/48h	87.4 mg/l (daphnia magna)
EC50/72h	5 mg/l (algae) 126 mg/l (Scenedesmus subspicatus)
LC50/96h	344 mg/l (Brachydanio rerio) 597 mg/l (Danio rerio.) (OECD 203) 168 mg/l (pimephales promelas)

108-95-2 phenol

EC50/24h	21 mg/l (BO)
EC50/96h	61.1 mg/l (algae)
EC50/48h	3.1 mg/l (daphnia magna)
LC50/96h	8.9 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.
- **12.5 Results of PBT and vPvB assessment**
- **PBT:** Not applicable.

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· vPvB:

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

· **12.6 Endocrine disrupting properties**

The product does not contain substances with endocrine disrupting properties.

· **12.7 Other adverse effects**· Additional ecological information:· General notes:Do not allow product to reach ground water, water course or sewage system.
Water hazard class 2 (German Regulation) (Self-assessment): hazardous for 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.

· 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.

SECTION 14: Transport information· **14.1 UN number or ID number**· ADR, IMDG, IATA

UN2735

· **14.2 UN proper shipping name**· ADR

2735 AMINES, LIQUID, CORROSIVE, N.O.S. (formaldehyde polymer with 1,3-benzenedimethanamine and phenol, m-phenylenebis(methylamine))

· IMDG, IATA

AMINES, LIQUID, CORROSIVE, N.O.S. (formaldehyde polymer with 1,3-benzenedimethanamine and phenol, m-phenylenebis(methylamine))

· **14.3 Transport hazard class(es)**· ADR· Class· Label

8 (C7) Corrosive substances.

8

· IMDG, IATA· Class

8 Corrosive substances.

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· <u>Label</u>	8
· 14.4 Packing group	III
· ADR, IMDG, IATA	
· 14.5 Environmental hazards:	
· Marine pollutant:	No
· 14.6 Special precautions for user	Warning: Corrosive substances.
· Hazard identification number (Kemler code):	80
· EMS Number:	F-A, S-B
· Segregation groups	(SGG18) Alkalies
· Stowage Category	A
· Segregation Code	SG35 Stow "separated from" SGG1-acids
· 14.7 Maritime transport in bulk according to IMO instruments	Not applicable.
· <u>Transport/Additional information:</u>	
· ADR	
· 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
· Transport category	3
· Tunnel restriction code	E
· 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
· UN "Model Regulation":	UN 2735 AMINES, LIQUID, CORROSIVE, N.O.S. (FORMALDEHYDE POLYMER WITH 1,3-BENZENEDIMETHANAMINE AND PHENOL, M-PHENYLENEBIS(METHYLAMINE)), 8, 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.

· 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.

· Annex II - REPORTABLE EXPLOSIVES PRECURSORS

None of the ingredients is listed.

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- 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 180.9 g/l

- **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

This Safety Data Sheets is in compliance with Regulation (EC) No 1907/2006, Article 31 as amended by Regulation (EU) 2020/878.

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

- Date of previous version:

16.11.2023

- Version number of previous version:

6

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: 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

ATE: Acute toxicity estimate values

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 SE 3: Specific target organ toxicity (single exposure) – Category 3

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

EU