Safety data sheet according to Regulation (EC) No 1907/2006, Annex II

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

1.1 Product identifier

COSMO® EP-205.110

(COSMOFEN AL Komp. A-Härter)

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

Relevant identified uses of the substance or mixture:
Adhesive

Uses advised against:
No information available at present.

1.3 Details of the supplier of the safety data sheet

Weiss Chemie + Technik GmbH & Co. KG
Hansastrasse 2
35708 Haiger
Tel: +49 (0) 2773 / 815-0
msds@weiss-chemie.de
www.weiss-chemie.de

Qualified person's e-mail address: info@chemical-check.de, k.schnurbusch@chemical-check.de Please DO NOT use for requesting Safety Data Sheets.

1.4 Emergency telephone number

Emergency information services / official advisory body:

Telephone number of the company in case of emergencies:
+49 (0) 700 / 24 112 112 (WIC)
+1 872 5888271 (WIC)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) 1272/2008 (CLP)

Hazard class	Hazard category	Hazard statement
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.
Aquatic Chronic	3	H412-Harmful to aquatic life with long lasting effects.

2.2 Label elements

Labeling according to Regulation (EC) 1272/2008 (CLP)

Danger

H314-Causes severe skin burns and eye damage. H317-May cause an allergic skin reaction. H412-Harmful to aquatic life with long lasting effects.

P260-Do not breathe vapours or spray. P280-Wear protective gloves / protective clothing / eye protection / face protection.
P301+P330+P331-IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. P303+P361+P353-IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. P305+P351+P338-IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P310-Immediately call a POISON CENTER / doctor.

Trimethylhexamethylenediamine
3-aminomethyl-3,5,5-trimethylcyclohexylamine
Phenol, styrenated
Amines, polyethylenepoly-, triethylenetetramine fraction
4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with 3-aminomethyl-3,5,5-trimethylcyclohexylamine
Phenol, methylstyrenated
m-phenylenebis(methylamine)
Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine

2.3 Other hazards

The mixture contains a vPvB substance (vPvB = very persistent, very bioaccumulative).
The mixture does not contain any PBT substance (PBT = persistent, bioaccumulative, toxic) or is not included under XIII of the regulation (EC) 1907/2006 (< 0,1 %).

The mixture does not contain any substance with endocrine disrupting properties (< 0,1 %).

SECTION 3: Composition/information on ingredients

3.1 Substances

n.a.

3.2 Mixtures

Benzyl alcohol	
Registration number (REACH)	01-2119492630-38-XXXX
Index	603-057-00-5
EINECS, ELINCS, NLP, REACH-IT List-No.	202-859-9
CAS	100-51-6
content %	5-20
Classification according to Regulation (EC) 1272/2008 (CLP), M-factors	Acute Tox. 4, H302 Acute Tox. 4, H332 Eye Irrit. 2, H319
Specific Concentration Limits and ATE	ATE (oral): 1230 mg/kg ATE (as inhalation, Vapours): 11 mg/l/4h ATE (as inhalation, Aerosol): 4,178 mg/l/4h

3-aminomethyl-3,5,5-trimethylcyclohexylamine	
Registration number (REACH)	01-2119514687-32-XXXX
Index	612-067-00-9
EINECS, ELINCS, NLP, REACH-IT List-No.	220-666-8
CAS	2855-13-2
content %	1-10
Classification according to Regulation (EC) 1272/2008 (CLP), M-factors	Acute Tox. 4, H302 Skin Corr. 1B, H314 Eye Dam. 1, H318 Skin Sens. 1A, H317
Specific Concentration Limits and ATE	Skin Sens. 1A, H317: >=0,001 % ATE (oral): 1030 mg/kg

Fatty acids, tall-oil, dimers, polymers with tall-oil fatty acids and triethylenetetramine	
Registration number (REACH)	---
Index	---
EINECS, ELINCS, NLP, REACH-IT List-No.	---
CAS	68915-18-4
content %	1-10
Classification according to Regulation (EC) 1272/2008 (CLP), M-factors	Skin Irrit. 2, H315 Eye Irrit. 2, H319

Phenol, methylstyrenated	**vPvB-substance** **SVHC-substance**
Registration number (REACH)	01-2119555274-38-XXXX
Index	---
EINECS, ELINCS, NLP, REACH-IT List-No.	270-966-8
CAS	68512-30-1
content %	1-5
Classification according to Regulation (EC) 1272/2008 (CLP), M-factors	Skin Irrit. 2, H315 Skin Sens. 1, H317 Aquatic Chronic 3, H412

Trimethylhexamethylenediamine	
Registration number (REACH)	---
Index	---
EINECS, ELINCS, NLP, REACH-IT List-No.	247-134-8
CAS	25620-58-0
content %	1-5
Classification according to Regulation (EC) 1272/2008 (CLP), M-factors	Acute Tox. 4, H302 Skin Corr. 1B, H314 Eye Dam. 1, H318 Skin Sens. 1, H317 Aquatic Chronic 3, H412

Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine	
Registration number (REACH)	01-2119972320-44-XXXX
Index	---
EINECS, ELINCS, NLP, REACH-IT List-No.	500-191-5
CAS	68082-29-1
content %	1-5
Classification according to Regulation (EC) 1272/2008 (CLP), M-factors	Skin Irrit. 2, H315 Eye Dam. 1, H318 Skin Sens. 1A, H317 Aquatic Chronic 2, H411

Isophorone diamine, reaction products with epoxy resin	
Registration number (REACH)	---
Index	---
EINECS, ELINCS, NLP, REACH-IT List-No.	614-657-1
CAS	68609-08-5
content %	1-<5
Classification according to Regulation (EC) 1272/2008 (CLP), M-factors	Skin Corr. 1B, H314 Eye Dam. 1, H318

4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with 3-aminomethyl-3,5,5-trimethylcyclohexylamine	
Registration number (REACH)	---
Index	---
EINECS, ELINCS, NLP, REACH-IT List-No.	500-101-4
CAS	38294-64-3
content %	1-2,5
Classification according to Regulation (EC) 1272/2008 (CLP), M-factors	Acute Tox. 4, H302 Acute Tox. 4, H312 Skin Corr. 1B, H314 Eye Dam. 1, H318 Skin Sens. 1, H317 Aquatic Chronic 2, H411

m-phenylenebis(methylamine)	
Registration number (REACH)	---
Index	---
EINECS, ELINCS, NLP, REACH-IT List-No.	216-032-5
CAS	1477-55-0
content %	0,1-2,5

Classification according to Regulation (EC) 1272/2008 (CLP), M-factors	Acute Tox. 3, H331 Acute Tox. 4, H302 Acute Tox. 4, H312 Skin Corr. 1A, H314 Eye Dam. 1, H318 Skin Sens. 1, H317 Aquatic Chronic 3, H412

Amines, polyethylenepoly-, triethylenetetramine fraction	
Registration number (REACH)	01-2119487919-13-XXXX
Index	---
EINECS, ELINCS, NLP, REACH-IT List-No.	292-588-2
CAS	90640-67-8
content %	0,1-<2,5
Classification according to Regulation (EC) 1272/2008 (CLP), M-factors	Acute Tox. 4, H302 Acute Tox. 4, H312 Skin Corr. 1B, H314 Eye Dam. 1, H318 Skin Sens. 1, H317 Aquatic Chronic 3, H412

Salicylic acid	
Registration number (REACH)	---
Index	607-732-00-5
EINECS, ELINCS, NLP, REACH-IT List-No.	200-712-3
CAS	69-72-7
content %	0,1-2,5
Classification according to Regulation (EC) 1272/2008 (CLP), M-factors	Acute Tox. 4, H302 Skin Irrit. 2, H315 Eye Dam. 1, H318 Repr. 2, H361d STOT SE 3, H335

Phenol, styrenated	
Registration number (REACH)	01-2119979575-18-XXXX
Index	---
EINECS, ELINCS, NLP, REACH-IT List-No.	262-975-0
CAS	61788-44-1
content %	0,1-<2,5
Classification according to Regulation (EC) 1272/2008 (CLP), M-factors	Skin Irrit. 2, H315 Skin Sens. 1A, H317 Aquatic Chronic 2, H411

For the text of the H-phrases and classification codes (GHS/CLP), see Section 16.
The substances named in this section are given with their actual, appropriate classification!
For substances that are listed in appendix VI, table 3.1 of the regulation (EC) no. 1272/2008 (CLP regulation) this means that all notes that may be given here for the named classification have been taken into account.
The addition of the highest concentrations listed here can result in a classification. Only when this classification is listed in Section 2 does it apply. In all other cases the total concentration is below the classification.

SECTION 4: First aid measures

4.1 Description of first aid measures
First-aiders should ensure they are protected!
Never pour anything into the mouth of an unconscious person!
Medical supervision necessary due to possibility of delayed reaction.

Inhalation
Remove person from danger area.
Supply person with fresh air and consult doctor according to symptoms.
If the person is unconscious, place in a stable side position and consult a doctor.

Skin contact
Remove polluted, soaked clothing immediately, wash thoroughly with plenty of water and soap, in case of irritation of the skin (flare), consult a doctor.
Cauterizations not treated lead to wounds difficult to heal.

Eye contact
Remove contact lenses.
Wash thoroughly for several minutes using copious water - call doctor immediately, have Data Sheet available.
Protect uninjured eye.
Follow-up examination by an ophthalmologist.

Ingestion
Rinse the mouth thoroughly with water.
Do not induce vomiting - give copious water to drink. Consult doctor immediately.

4.2 Most important symptoms and effects, both acute and delayed
If applicable delayed symptoms and effects can be found in section 11 and the absorption route in section 4.1.
In certain cases, the symptoms of poisoning may only appear after an extended period / after several hours.
The following may occur:
Corrosive burns on skin as well as mucous membrane possible.
Necrosis
Risk of serious damage to eyes.
Corneal damage.
Danger of blindness.
Ingestion:
Pain in the mouth and throat
stomach pain
Oesophageal perforation
Gastric perforation

4.3 Indication of any immediate medical attention and special treatment needed
Symptomatic treatment.

SECTION 5: Firefighting measures

5.1 Extinguishing media
Suitable extinguishing media
Water jet spray/foam/CO2/dry extinguisher
Unsuitable extinguishing media
High volume water jet
5.2 Special hazards arising from the substance or mixture
In case of fire the following can develop:
Oxides of carbon
Oxides of nitrogen
Toxic gases

5.3 Advice for firefighters
For personal protective equipment see Section 8.
In case of fire and/or explosion do not breathe fumes.
Protective respirator with independent air supply.
According to size of fire
Full protection, if necessary.
Dispose of contaminated extinction water according to official regulations.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures
6.1.1 For non-emergency personnel
In case of spillage or accidental release, wear personal protective equipment as specified in section 8 to prevent contamination.
Ensure sufficient ventilation, remove sources of ignition.
Avoid dust formation with solid or powder products.
Leave the danger zone if possible, use existing emergency plans if necessary.
Keep non-essential personnel away.
Ensure sufficient supply of air.
Avoid inhalation, and contact with eyes or skin.
If applicable, caution - risk of slipping.
6.1.2 For emergency responders
See section 8 for suitable protective equipment and material specifications.
6.2 Environmental precautions
If leakage occurs, dam up.
Resolve leaks if this possible without risk.
Prevent surface and ground-water infiltration, as well as ground penetration.
Prevent from entering drainage system.
If accidental entry into drainage system occurs, inform responsible authorities.
6.3 Methods and material for containment and cleaning up
Soak up with absorbent material (e.g. universal binding agent, sand, diatomaceous earth, sawdust) and dispose of according to Section 13.
Neutralising is possible (only from a specialist).
6.4 Reference to other sections
For personal protective equipment see Section 8 and for disposal instructions see Section 13.

SECTION 7: Handling and storage

In addition to information given in this section, relevant information can also be found in section 8 and 6.1.
7.1 Precautions for safe handling
7.1.1 General recommendations
Ensure good ventilation.
Keep away from sources of ignition - Do not smoke.
Avoid contact with eyes or skin.
Handle and open container with care.
Eating, drinking, smoking, as well as food-storage, is prohibited in work-room.
Observe directions on label and instructions for use.
Use working methods according to operating instructions.
7.1.2 Notes on general hygiene measures at the workplace
General hygiene measures for the handling of chemicals are applicable.
Wash hands before breaks and at end of work.
Keep away from food, drink and animal feedingstuffs.
Remove contaminated clothing and protective equipment before entering areas in which food is consumed.
7.2 Conditions for safe storage, including any incompatibilities
Keep out of access to unauthorised individuals.
Not to be stored in gangways or stair wells.
Store product closed and only in original packing.
Under all circumstances prevent penetration into the soil.
Do not store with acids.
Store cool.
Store in a dry place.
Observe special storage conditions.
7.3 Specific end use(s)
Adhesive
Observe the instructions for good working practice and the recommendations for risk assessment.
Consult hazardous substance information systems, e.g. from the professional associations, the chemical industry or different industries,
depending on the application (building materials, wood, chemistry, laboratory, leather, metal).

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

GB **Chemical Name**	Calcium carbonate	
WEL-TWA: 4 mg/m3 (respirable dust), 10 mg/m3 (total inhalable dust)	WEL-STEL: ---	---
Monitoring procedures: ---		
BMGV: ---	Other information: ---	

Benzyl alcohol						
Area of application	**Exposure route / Environmental compartment**	**Effect on health**	**Descriptor**	**Value**	**Unit**	**Note**
	Environment - soil		PNEC	0,456	mg/kg	
	Environment - sewage treatment plant		PNEC	39	mg/l	
	Environment - sediment, freshwater		PNEC	5,27	mg/kg	
	Environment - sediment, marine		PNEC	0,527	mg/kg	
	Environment - marine		PNEC	0,1	mg/l	
	Environment - periodic release		PNEC	2,3	mg/l	
	Environment - freshwater		PNEC	1	mg/l	
Consumer	Human - dermal	Short term, systemic effects	DNEL	20	mg/kg bw/d	
Consumer	Human - dermal	Long term, systemic effects	DNEL	4	mg/kg bw/d	
Consumer	Human - oral	Short term, systemic effects	DNEL	20	mg/kg bw/d	
Consumer	Human - oral	Long term, systemic effects	DNEL	4	mg/kg bw/d	
Consumer	Human - inhalation	Short term, systemic effects	DNEL	27	mg/m3	
Consumer	Human - inhalation	Long term, systemic effects	DNEL	5,4	mg/m3	

Workers / employees	Human - dermal	Short term, systemic effects	DNEL	40	mg/kg bw/d	
Workers / employees	Human - dermal	Long term, systemic effects	DNEL	8	mg/kg bw/d	
Workers / employees	Human - inhalation	Short term, systemic effects	DNEL	110	mg/m3	
Workers / employees	Human - inhalation	Long term, systemic effects	DNEL	22	mg/m3	

3-aminomethyl-3,5,5-trimethylcyclohexylamine

Area of application	Exposure route / Environmental compartment	Effect on health	Descriptor	Value	Unit	Note
	Environment - freshwater		PNEC	0,06	mg/l	
	Environment - marine		PNEC	0,006	mg/l	
	Environment - sewage treatment plant		PNEC	3,18	mg/l	
	Environment - soil		PNEC	1,121	mg/kg	
	Environment - sporadic (intermittent) release		PNEC	0,23	mg/l	
	Environment - sediment, freshwater		PNEC	5,784	mg/kg	
	Environment - sediment, marine		PNEC	0,578	mg/kg	
Consumer	Human - oral	Long term, systemic effects	DNEL	0,523	mg/kg bw/d	
Workers / employees	Human - inhalation	Short term, systemic effects	DNEL	20,1	mg/m3	
Workers / employees	Human - inhalation	Short term, local effects	DNEL	20,1	mg/m3	

Phenol, methylstyrenated

Area of application	Exposure route / Environmental compartment	Effect on health	Descriptor	Value	Unit	Note
	Environment - freshwater		PNEC	14	µg/l	
	Environment - water, sporadic (intermittent) release		PNEC	140	µg/l	
	Environment - marine		PNEC	1,4	µg/l	
	Environment - sediment, freshwater		PNEC	1064	mg/kg dw	
	Environment - sediment, marine		PNEC	106,4	mg/kg dw	
	Environment - soil		PNEC	212	mg/kg dw	
	Environment - sewage treatment plant		PNEC	2,4	mg/kg	
Consumer	Human - oral	Long term, systemic effects	DNEL	0,2	mg/kg bw/day	
Consumer	Human - dermal	Long term, systemic effects	DNEL	1,7	mg/kg bw/day	
Consumer	Human - inhalation	Long term, systemic effects	DNEL	0,35	mg/m3	
Workers / employees	Human - dermal	Long term, systemic effects	DNEL	3,5	mg/kg bw/day	
Workers / employees	Human - inhalation	Long term, systemic effects	DNEL	1,4	mg/m3	

Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine

Area of application	Exposure route / Environmental compartment	Effect on health	Descriptor	Value	Unit	Note
	Environment - freshwater		PNEC	0,004	mg/l	
	Environment - marine		PNEC	0	mg/l	
	Environment - sediment, freshwater		PNEC	434,02	mg/kg dw	
	Environment - sediment, marine		PNEC	43,4	mg/kg dw	
	Environment - soil		PNEC	86,78	mg/kg dw	
	Environment - sewage treatment plant		PNEC	3,84	mg/l	
Consumer	Human - oral	Long term, systemic effects	DNEL	0,97	mg/m3	
Consumer	Human - dermal	Long term, systemic effects	DNEL	0,56	mg/kg bw/day	
Consumer	Human - oral	Long term, systemic effects	DNEL	0,56	mg/kg bw/day	
Workers / employees	Human - inhalation	Long term, systemic effects	DNEL	3,9	mg/m3	
Workers / employees	Human - dermal	Long term, systemic effects	DNEL	1,1	mg/kg bw/day	

m-phenylenebis(methylamine)

Area of application	Exposure route / Environmental compartment	Effect on health	Descriptor	Value	Unit	Note
	Environment - water		PNEC	0,094	mg/l	
	Environment - marine		PNEC	0,00094	mg/l	

Amines, polyethylenepoly-, triethylenetetramine fraction

Area of application	Exposure route / Environmental compartment	Effect on health	Descriptor	Value	Unit	Note
	Environment - freshwater		PNEC	0,027	mg/l	
	Environment - marine		PNEC	0,003	mg/l	
	Environment - sediment, freshwater		PNEC	8,572	mg/kg dry weight	
	Environment - sediment, marine		PNEC	0,857	mg/kg dry weight	
	Environment - soil		PNEC	1,25	mg/kg dry weight	
	Environment - sewage treatment plant		PNEC	0,13	mg/l	
	Environment - sporadic (intermittent) release		PNEC	0,2	mg/l	
Consumer	Human - inhalation	Long term, systemic effects	DNEL	0,096	mg/m3	
Consumer	Human - dermal	Short term, systemic effects	DNEL	8	mg/kg bw/day	
Consumer	Human - oral	Short term, systemic effects	DNEL	20	mg/kg bw/day	
Consumer	Human - oral	Long term, systemic effects	DNEL	0,14	mg/kg bw/day	
Consumer	Human - dermal	Long term, systemic effects	DNEL	0,25	mg/kg bw/day	
Consumer	Human - dermal	Long term, systemic effects	DNEL	0,29	mg/m3	
Consumer	Human - oral	Long term, systemic effects	DNEL	0,41	mg/kg bw/day	
Consumer	Human - dermal	Long term, local effects	DNEL	0,43	mg/cm2	
Workers / employees	Human - dermal	Long term, systemic effects	DNEL	0,57	mg/kg bw/day	
Workers / employees	Human - inhalation	Long term, systemic effects	DNEL	0,54	mg/m3	
Workers / employees	Human - dermal	Long term, local effects	DNEL	0,028	mg/cm2	

Phenol, styrenated

Area of application	Exposure route / Environmental compartment	Effect on health	Descriptor	Value	Unit	Note
	Environment - freshwater		PNEC	0,03	mg/l	
	Environment - marine		PNEC	0,003	mg/l	

Calcium carbonate

Area of application	Exposure route / Environmental compartment	Effect on health	Descriptor	Value	Unit	Note
	Environment - sewage treatment plant		PNEC	100	mg/l	
Consumer	Human - oral	Long term, systemic effects	DNEL	6,1	mg/kg bw/day	
Consumer	Human - inhalation	Long term, systemic effects	DNEL	10	mg/m3	
Consumer	Human - inhalation	Long term, local effects	DNEL	1,06	mg/m3	
Consumer	Human - oral	Short term, systemic effects	DNEL	6,1	mg/kg bw/day	
Workers / employees	Human - inhalation	Long term, local effects	DNEL	4,26	mg/m3	
Workers / employees	Human - inhalation	Long term, systemic effects	DNEL	10	mg/m3	

GB - United Kingdom | WEL-TWA = Workplace Exposure Limit - Long-term exposure limit - 8-hour TWA (= time weighted average) reference period (EH40/2005 Workplace exposure limits (Fourth Edition 2020)).
(EU) = Directive 91/322/EEC, 98/24/EC, 2000/39/EC, 2004/37/EC, 2006/15/EC, 2009/161/EU, 2017/164/EU or 2019/1831/EU:
(8) = Inhalable fraction (2004/37/CE, 2017/164/EU). (9) = Respirable fraction (2004/37/CE, 2017/164/EU).
(11) = Inhalable fraction (2004/37/CE). (12) = Inhalable fraction. Respirable fraction in those Member States that implement, on the date of the entry into force of this Directive, a biomonitoring system with a biological limit value not exceeding 0,002 mg Cd/g creatinine in urine (2004/37/CE). |
| WEL-STEL = Workplace Exposure Limit - Short-term exposure limit - 15-minute reference period (EH40/2005 Workplace exposure limits (Fourth Edition 2020)).
(EU) = Directive 91/322/EEC, 98/24/EC, 2000/39/EC, 2004/37/EC, 2006/15/EC, 2009/161/EU, 2017/164/EU or 2019/1831/EU:
(8) = Inhalable fraction (2004/37/EC, 2017/164/EU). (9) = Respirable fraction (2004/37/EC, 2017/164/EU).
(10) = Short-term exposure limit value in relation to a reference period of 1 minute (2017/164/EU). |
| BMGV = Biological monitoring guidance value (EH40/2005 Workplace exposure limits (Fourth Edition 2020)).
(EU) = Directive 98/24/EC or 2004/37/EC or SCOEL (Biological Limit Value - BLV, Recommendation from the Scientific Committee on Occupational Exposure Limits (SCOEL)) |
| Other information (EH40/2005 Workplace exposure limits (Fourth Edition 2020)): Sen = Capable of causing occupational asthma. Sk = Can be absorbed through skin. Carc = Capable of causing cancer and/or heritable genetic damage.
(EU) = Directive 91/322/EEC, 98/24/EC, 2000/39/EC, 2004/37/EC, 2006/15/EC, 2009/161/EU, 2017/164/EU or 2019/1831/EU:
(13) = The substance can cause sensitisation of the skin and of the respiratory tract (2004/37/CE), (14) = The substance can cause sensitisation of the skin (2004/37/CE). |

8.2 Exposure controls

8.2.1 Appropriate engineering controls

Ensure good ventilation. This can be achieved by local suction or general air extraction.
If this is insufficient to maintain the concentration under the WEL or AGW values, suitable breathing protection should be worn.
Applies only if maximum permissible exposure values are listed here.
Suitable assessment methods for reviewing the effectiveness of protection measures adopted include metrological and non-metrological investigative techniques.
These are specified by e.g. EN 14042.
EN 14042 "Workplace atmospheres. Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents".

8.2.2 Individual protection measures, such as personal protective equipment

General hygiene measures for the handling of chemicals are applicable.
Wash hands before breaks and at end of work.
Keep away from food, drink and animal feedingstuffs.
Remove contaminated clothing and protective equipment before entering areas in which food is consumed.

Eye/face protection:
Tight fitting protective goggles with side protection (EN 166).

Skin protection - Hand protection:
Chemical resistant protective gloves (EN ISO 374).
Recommended
Protective nitrile gloves (EN ISO 374).
Minimum layer thickness in mm:
>= 0,5
Permeation time (penetration time) in minutes:
240
The breakthrough times determined in accordance with EN 16523-1 were not obtained under practical conditions.
The recommended maximum wearing time is 50% of breakthrough time.
Protective hand cream recommended.

Skin protection - Other:
Protective working garments (e.g. safety shoes EN ISO 20345, long-sleeved protective working garments).

Respiratory protection:
Normally not necessary.
If air supply is not sufficient, wear protective breathing apparatus.
Filter A P2 (EN 14387), code colour brown, white
Observe wearing time limitations for respiratory protection equipment.

Thermal hazards:
Not applicable

Additional information on hand protection - No tests have been performed.
In the case of mixtures, the selection has been made according to the knowledge available and the information about the contents.
Selection of materials derived from glove manufacturer's indications.
Final selection of glove material must be made taking the breakthrough times, permeation rates and degradation into account.
Selection of a suitable glove depends not only on the material but also on other quality characteristics and varies from manufacturer to manufacturer.
In the case of mixtures, the resistance of glove materials cannot be predicted and must therefore be tested before use.
The exact breakthrough time of the glove material can be requested from the protective glove manufacturer and must be observed.

8.2.3 Environmental exposure controls

No information available at present.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state:	Paste, liquid.
Colour:	Grey
Odour:	Characteristic
Melting point/freezing point:	There is no information available on this parameter.
Boiling point or initial boiling point and boiling range:	There is no information available on this parameter.
Flammability:	Combustible.
Lower explosion limit:	There is no information available on this parameter.
Upper explosion limit:	There is no information available on this parameter.
Flash point:	There is no information available on this parameter.
Auto-ignition temperature:	n.a.
Decomposition temperature:	There is no information available on this parameter.
pH:	Mixture is non-soluble (in water).
Kinematic viscosity:	44000-50000 mPas (Dynamic viscosity)
Solubility:	Not miscible
Partition coefficient n-octanol/water (log value):	Does not apply to mixtures.
Vapour pressure:	There is no information available on this parameter.
Density and/or relative density:	~1,53 g/cm3 (20°C)
Relative vapour density:	There is no information available on this parameter.
Particle characteristics:	Does not apply to liquids.

9.2 Other information

Explosives:	Product is not explosive.
Oxidising liquids:	No
Bulk density:	n.a.

SECTION 10: Stability and reactivity

10.1 Reactivity

The product has not been tested.

10.2 Chemical stability

Stable with proper storage and handling.

10.3 Possibility of hazardous reactions

No dangerous reactions are known.

10.4 Conditions to avoid

Strong heat

10.5 Incompatible materials

Avoid contact with strong alkalis.
Avoid contact with strong oxidizing agents.
Avoid contact with strong acids.

10.6 Hazardous decomposition products

No decomposition when used as directed.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Possibly more information on health effects, see Section 2.1 (classification).

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Toxicity / effect	Endpoint	Value	Unit	Organism	Test method	Notes
Acute toxicity, by oral route:	ATE	>2000	mg/kg			calculated value
Acute toxicity, by dermal route:	ATE	>2000	mg/kg			calculated value
Acute toxicity, by inhalation:	ATE	>20	mg/l/4h			calculated value, Vapours
Skin corrosion/irritation:						n.d.a.
Serious eye damage/irritation:						n.d.a.
Respiratory or skin sensitisation:						n.d.a.
Germ cell mutagenicity:						n.d.a.
Carcinogenicity:						n.d.a.
Reproductive toxicity:						n.d.a.
Specific target organ toxicity - single exposure (STOT-SE):						n.d.a.
Specific target organ toxicity - repeated exposure (STOT-RE):						n.d.a.
Aspiration hazard:						n.d.a.
Symptoms:						n.d.a.

Benzyl alcohol

Toxicity / effect	Endpoint	Value	Unit	Organism	Test method	Notes
Acute toxicity, by oral route:	LD50	1230	mg/kg	Rat		
Acute toxicity, by oral route:	ATE	1230	mg/kg			
Acute toxicity, by dermal route:	LD50	>2000	mg/kg	Rabbit		
Acute toxicity, by inhalation:	LC50	> 4,178	mg/l/4h	Rat	OECD 403 (Acute Inhalation Toxicity)	Aerosol
Acute toxicity, by inhalation:	ATE	11	mg/l/4h			Vapours
Acute toxicity, by inhalation:	ATE	4,178	mg/l/4h			Aerosol
Skin corrosion/irritation:				Rabbit	OECD 404 (Acute Dermal Irritation/Corrosion)	Not irritant
Serious eye damage/irritation:				Rabbit	OECD 405 (Acute Eye Irritation/Corrosion)	Eye Irrit. 2
Respiratory or skin sensitisation:				Guinea pig	OECD 406 (Skin Sensitisation)	Not sensitizising
Germ cell mutagenicity:				Mouse	OECD 474 (Mammalian Erythrocyte Micronucleus Test)	Negative
Reproductive toxicity:	NOAEC	1072	mg/m3	Rat		
Specific target organ toxicity - repeated exposure (STOT-RE):	NOAEL	200	mg/kg	Mouse		
Specific target organ toxicity - repeated exposure (STOT-RE), inhalat.:	NOAEC	1072	mg/m3	Rat	OECD 412 (Subacute Inhalation Toxicity - 28-Day Study)	Aerosol
Symptoms:						headaches, fatigue, dizziness, nausea and vomiting., drying of the skin., unconsciousness, drowsiness

3-aminomethyl-3,5,5-trimethylcyclohexylamine

Toxicity / effect	Endpoint	Value	Unit	Organism	Test method	Notes
Acute toxicity, by oral route:	ATE	1030	mg/kg			
Acute toxicity, by inhalation:	LC50	>5,01	mg/l/4h	Rat	OECD 403 (Acute Inhalation Toxicity)	Aerosol
Respiratory or skin sensitisation:				Guinea pig	OECD 406 (Skin Sensitisation)	Yes (skin contact)
Symptoms:						respiratory distress, burning of the membranes of the nose and throat, coughing, mucous membrane irritation

Fatty acids, tall-oil, dimers, polymers with tall-oil fatty acids and triethylenetetramine

Toxicity / effect	Endpoint	Value	Unit	Organism	Test method	Notes
Skin corrosion/irritation:						Irritant
Serious eye damage/irritation:						Irritant
Aspiration hazard:						No

Phenol, methylstyrenated

Toxicity / effect	Endpoint	Value	Unit	Organism	Test method	Notes

Acute toxicity, by oral route:	LD50	> 2000	mg/kg	Rat	OECD 423 (Acute Oral Toxicity - Acute Toxic Class Method)	
Acute toxicity, by dermal route:	LD50	> 2000	mg/kg	Rat	OECD 402 (Acute Dermal Toxicity)	
Acute toxicity, by inhalation:	LC50	>4,92	mg/l/4h	Rat	OECD 403 (Acute Inhalation Toxicity)	Maximum achievable concentration., Aerosol
Skin corrosion/irritation:				Rabbit	OECD 404 (Acute Dermal Irritation/Corrosion)	Irritant
Serious eye damage/irritation:				Rabbit	OECD 405 (Acute Eye Irritation/Corrosion)	Slightly irritant
Respiratory or skin sensitisation:				Mouse	OECD 429 (Skin Sensitisation - Local Lymph Node Assay)	Yes (skin contact)
Germ cell mutagenicity:					OECD 471 (Bacterial Reverse Mutation Test)	Negative, Analogous conclusion
Aspiration hazard:						No

Trimethylhexamethylenediamine

Toxicity / effect	Endpoint	Value	Unit	Organism	Test method	Notes
Acute toxicity, by oral route:	LD50	910	mg/kg	Rat		

Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine

Toxicity / effect	Endpoint	Value	Unit	Organism	Test method	Notes
Acute toxicity, by oral route:	LD50	>2000	mg/kg	Rat	OECD 423 (Acute Oral Toxicity - Acute Toxic Class Method)	
Acute toxicity, by dermal route:	LD50	>2000	mg/kg	Rat	OECD 402 (Acute Dermal Toxicity)	
Skin corrosion/irritation:				Mammalian	OECD 439 (In Vitro Skin Irritation - Reconstructed Human Epidermis Test Method)	Irritant
Serious eye damage/irritation:				Rabbit	OECD 405 (Acute Eye Irritation/Corrosion)	Intensively irritant
Respiratory or skin sensitisation:				Mouse	OECD 429 (Skin Sensitisation - Local Lymph Node Assay)	Sensitising (skin contact)
Germ cell mutagenicity:					OECD 471 (Bacterial Reverse Mutation Test)	Negative
Reproductive toxicity (Developmental toxicity):	NOAEL	1000	mg/kg/d	Rat	OECD 422 (Combined Repeated Dose Tox. Study with the Reproduction/Developm. Tox. Screening Test)	
Symptoms:						stomach pain, eyes, reddened, watering eyes, blisters by skin-contact, discoloration of the skin, rash

m-phenylenebis(methylamine)

Toxicity / effect	Endpoint	Value	Unit	Organism	Test method	Notes
Acute toxicity, by dermal route:	LD50	2000	mg/kg	Rat		
Acute toxicity, by inhalation:	LC50	3,89	mg/l/1h	Rat		Vapours
Skin corrosion/irritation:						Corrosive
Germ cell mutagenicity:						Negative

Amines, polyethylenepoly-, triethylenetetramine fraction

Toxicity / effect	Endpoint	Value	Unit	Organism	Test method	Notes
Acute toxicity, by oral route:	LD50	1716	mg/kg	Rat	OECD 401 (Acute Oral Toxicity)	
Acute toxicity, by dermal route:	LD50	1465	mg/kg	Rabbit	OECD 402 (Acute Dermal Toxicity)	
Skin corrosion/irritation:				Rabbit	OECD 404 (Acute Dermal Irritation/Corrosion)	Skin Corr. 1B
Serious eye damage/irritation:				Rabbit	OECD 405 (Acute Eye Irritation/Corrosion)	Eye Dam. 1
Respiratory or skin sensitisation:				Guinea pig	OECD 406 (Skin Sensitisation)	Yes (skin contact)
Germ cell mutagenicity:					OECD 474 (Mammalian Erythrocyte Micronucleus Test)	Negative
Specific target organ toxicity - repeated exposure (STOT-RE):	LOAEL	50	mg/kg	Rat		
Symptoms:						abdominal pain, blisters, eyes, reddened, watering eyes

Salicylic acid

Toxicity / effect	Endpoint	Value	Unit	Organism	Test method	Notes
Acute toxicity, by oral route:	LD50	891	mg/kg	Rat		
Acute toxicity, by dermal route:	LD50	>10000	mg/kg	Rabbit		
Serious eye damage/irritation:						Intensively irritant
Symptoms:						abdominal pain, drowsiness, collapse, cramps, mucous membrane irritation, dizziness, nausea and vomiting., mental confusion
Specific target organ toxicity - single exposure (STOT-SE), inhalative:						Irritation of the respiratory tract

Phenol, styrenated

Toxicity / effect	Endpoint	Value	Unit	Organism	Test method	Notes
Acute toxicity, by oral route:	LD50	>2000	mg/kg	Rat	OECD 423 (Acute Oral Toxicity - Acute Toxic Class Method)	
Acute toxicity, by dermal route:	LD50	>2000	mg/kg	Rat	OECD 402 (Acute Dermal Toxicity)	Analogous conclusion
Acute toxicity, by inhalation:	LC50	4,9	mg/l/4h	Rat	OECD 403 (Acute Inhalation Toxicity)	Maximum achievable concentration., Aerosol, Analogous conclusion
Skin corrosion/irritation:				Rabbit	OECD 404 (Acute Dermal Irritation/Corrosion)	Skin Irrit. 2, Analogous conclusion
Serious eye damage/irritation:				Rabbit	OECD 405 (Acute Eye Irritation/Corrosion)	Not irritant, Analogous conclusion
Respiratory or skin sensitisation:				Mouse	OECD 429 (Skin Sensitisation - Local Lymph Node Assay)	Skin Sens. 1A
Germ cell mutagenicity:					OECD 471 (Bacterial Reverse Mutation Test)	Negative
Germ cell mutagenicity:					OECD 474 (Mammalian Erythrocyte Micronucleus Test)	Negative
Germ cell mutagenicity:					OECD 476 (In Vitro Mammalian Cell Gene Mutation Test)	Negative
Specific target organ toxicity - repeated exposure (STOT-RE):	NOAEL	1000	mg/kg bw/d	Rat	OECD 410 (Repeated Dose Dermal Toxicity - 90-Day)	Analogous conclusion

Calcium carbonate

Toxicity / effect	Endpoint	Value	Unit	Organism	Test method	Notes
Acute toxicity, by oral route:	LD50	>2000	mg/kg	Rat	OECD 420 (Acute Oral toxicity - Fixe Dose Procedure)	
Acute toxicity, by dermal route:	LD50	>2000	mg/kg	Rat	OECD 402 (Acute Dermal Toxicity)	

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Acute toxicity, by inhalation:	LC50	>3	mg/l/ 4h	Rat	OECD 403 (Acute Inhalation Toxicity)	
Skin corrosion/irritation:				Rabbit	OECD 404 (Acute Dermal Irritation/Corrosion)	Not irritant
Serious eye damage/irritation:				Rabbit	OECD 405 (Acute Eye Irritation/Corrosion)	Not irritant
Respiratory or skin sensitisation:				Mouse	OECD 429 (Skin Sensitisation - Local Lymph Node Assay)	No (skin contact)
Germ cell mutagenicity:					OECD 471 (Bacterial Reverse Mutation Test)	Negative
Germ cell mutagenicity:					OECD 473 (In Vitro Mammalian Chromosome Aberration Test)	Negative
Germ cell mutagenicity:					OECD 476 (In Vitro Mammalian Cell Gene Mutation Test)	Negative
Carcinogenicity:						No indications of such an effect.
Reproductive toxicity:	NOEL	1000	mg/kg bw/d	Rat	OECD 422 (Combined Repeated Dose Tox. Study with the Reproduction/Developm. Tox. Screening Test)	
Specific target organ toxicity - single exposure (STOT-SE):						No indications of such an effect.
Specific target organ toxicity - repeated exposure (STOT-RE):						No indications of such an effect.
Aspiration hazard:						No
Specific target organ toxicity - repeated exposure (STOT-RE), oral:	NOAEL	1000	mg/kg bw/d	Rat	OECD 422 (Combined Repeated Dose Tox. Study with the Reproduction/Developm. Tox. Screening Test)	
Specific target organ toxicity - repeated exposure (STOT-RE), inhalat.:	NOAEC	0,212	mg/l	Rat	OECD 413 (Subchronic Inhalation Toxicity - 90-Day Study)	

11.2. Information on other hazards

COSMO® EP-205.110

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Toxicity / effect	Endpoint	Value	Unit	Organism	Test method	Notes
Endocrine disrupting properties:						Does not apply to mixtures.
Other information:						No other relevant information available on adverse effects on health.

SECTION 12: Ecological information

Possibly more information on environmental effects, see Section 2.1 (classification).

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Toxicity / effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
12.1. Toxicity to fish:							n.d.a.
12.1. Toxicity to daphnia:							n.d.a.
12.1. Toxicity to algae:							n.d.a.
12.2. Persistence and degradability:							n.d.a.
12.3. Bioaccumulative potential:							n.d.a.
12.4. Mobility in soil:							n.d.a.
12.5. Results of PBT and vPvB assessment							n.d.a.
12.6. Endocrine disrupting properties:							Does not apply to mixtures.
12.7. Other adverse effects:							No information available on other adverse effects on the environment.

Benzyl alcohol

Toxicity / effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
12.1. Toxicity to fish:	LC50	96h	460	mg/l	Pimephales promelas		
12.1. Toxicity to daphnia:	EC50	48h	230	mg/l	Daphnia magna	OECD 202 (Daphnia sp. Acute Immobilisation Test)	
12.1. Toxicity to daphnia:	NOEC/NOEL	21d	51	mg/l	Daphnia magna	OECD 211 (Daphnia magna Reproduction Test)	
12.1. Toxicity to algae:	EC50	72h	770	mg/l	Pseudokirchneriella subcapitata	OECD 201 (Alga, Growth Inhibition Test)	
12.1. Toxicity to algae:	NOEC/NOEL	72h	310	mg/l	Pseudokirchneriella subcapitata	OECD 201 (Alga, Growth Inhibition Test)	
12.2. Persistence and degradability:		21d	95-97	%		OECD 301 A (Ready Biodegradability - DOC Die-Away Test)	Readily biodegradable
12.2. Persistence and degradability:		28d	92-96	%		OECD 301 C (Ready Biodegradability - Modified MITI Test (I))	Readily biodegradable
12.3. Bioaccumulative potential:	Log Pow		1,1				Low
12.5. Results of PBT and vPvB assessment							No PBT substance, No vPvB substance
Toxicity to bacteria:	IC50		2100	mg/l	activated sludge	ISO 8192	49h
Toxicity to bacteria:	EC10	16h	658	mg/l	Pseudomonas putida		

3-aminomethyl-3,5,5-trimethylcyclohexylamine

Toxicity / effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
12.5. Results of PBT and vPvB assessment							No PBT substance, No vPvB substance
Toxicity to bacteria:	EC10	18h	1120	mg/l	Pseudomonas putida	DIN 38412 T.8	

Phenol, methylstyrenated

Toxicity / effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
12.1. Toxicity to fish:	LC50	96h	25,8	mg/l	Brachydanio rerio	OECD 203 (Fish, Acute Toxicity Test)	
12.1. Toxicity to daphnia:	EL50	48h	14	mg/l	Daphnia magna	OECD 202 (Daphnia sp. Acute Immobilisation Test)	
12.1. Toxicity to algae:	EL50	72h	178	mg/l	Desmodesmus subspicatus	OECD 201 (Alga, Growth Inhibition Test)	
12.2. Persistence and degradability:		28d	4	%			Not readily biodegradable
12.4. Mobility in soil:	Log Koc		>3,2-<5,9				Slight, calculated value

Trimethylhexamethylenediamine

Toxicity / effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
12.1. Toxicity to fish:	LC50	96h	1000	mg/l	Brachydanio rerio		
12.1. Toxicity to daphnia:	EC50	24h	31,5	mg/l	Daphnia magna		
12.1. Toxicity to algae:	EC50	72h	29,5	mg/l	Scenedesmus subspicatus		
12.2. Persistence and degradability:							Not readily biodegradable
Toxicity to bacteria:	IC50	3h	100	mg/l			

Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine

Toxicity / effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes

12.1. Toxicity to fish:	EC50	96h	7,07	mg/l	Brachydanio rerio	OECD 203 (Fish, Acute Toxicity Test)	
12.1. Toxicity to daphnia:	EC50	48h	7,07	mg/l	Daphnia magna	OECD 202 (Daphnia sp. Acute Immobilisation Test)	
12.1. Toxicity to algae:	EC10	72h	4,34	mg/l	Thalassiosira guillardi	OECD 201 (Alga, Growth Inhibition Test)	
12.2. Persistence and degradability:		>60 d	0-70	%		OECD 301 B (Ready Biodegradability - Co2 Evolution Test)	
12.3. Bioaccumulative potential:	Log Pow		10,34				High
Toxicity to bacteria:	EC50	3h	384	mg/l	activated sludge	OECD 209 (Activated Sludge, Respiration Inhibition Test (Carbon and Ammonium Oxidation))	

m-phenylenebis(methylamine)

Toxicity / effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
12.1. Toxicity to fish:	LC50	96h	>100	mg/l	Oncorhynchus mykiss		
12.1. Toxicity to daphnia:	EC50	48h	16	mg/l			
12.1. Toxicity to algae:	IC50	72h	12	mg/l			

Amines, polyethylenepoly-, triethylenetetramine fraction

Toxicity / effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
12.1. Toxicity to fish:	EC50	72h	330	mg/l	Pimephales promelas		
12.1. Toxicity to daphnia:	EC50	48h	31,1	mg/l	Daphnia magna	Regulation (EC) 440/2008 C.2 (DAPHNIA SP. ACUTE IMMOBILISATION TEST)	
12.1. Toxicity to daphnia:	NOEC/NOEL	21d	1,9	mg/l			
12.1. Toxicity to algae:	EC50	72h	2,2	mg/l			
12.1. Toxicity to algae:	NOEC/NOEL	72h	1,34	mg/l			
12.1. Toxicity to algae:	EC50	72h	20	mg/l	Selenastrum capricornutum	OECD 201 (Alga, Growth Inhibition Test)	
12.2. Persistence and degradability:		28d	<60	%			Not readily biodegradable
12.2. Persistence and degradability:		>60 d	0	%	activated sludge	OECD 301 D (Ready Biodegradability - Closed Bottle Test)	
12.3. Bioaccumulative potential:	BCF		99				
12.3. Bioaccumulative potential:	Log Pow		-2,65				Bioaccumulation is unlikely (LogPow < 1).
12.4. Mobility in soil:	Koc		4000			OECD 106 (Adsorption/ Desorption Using a Batch Equilibrium Method)	
12.5. Results of PBT and vPvB assessment							No PBT substance, No vPvB substance
Toxicity to bacteria:	EC50	30min	800	mg/l			
Toxicity to bacteria:	NOEC/NOEL	30min	42,5	mg/l			

Salicylic acid

Toxicity / effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
12.1. Toxicity to daphnia:	EC50	48h	870	mg/l			
12.1. Toxicity to daphnia:	EC50	24h	180	mg/l	Daphnia magna		
12.3. Bioaccumulative potential:	Log Pow		2,25				Low
Toxicity to bacteria:	EC50		110	mg/l			

Phenol, styrenated

Toxicity / effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
12.1. Toxicity to fish:	LL50	96h	14,8	mg/l	Brachydanio rerio	OECD 203 (Fish, Acute Toxicity Test)	
12.1. Toxicity to daphnia:	NOEC/NOEL	21d	0,115	mg/l	Daphnia magna	OECD 211 (Daphnia magna Reproduction Test)	Analogous conclusion
12.1. Toxicity to daphnia:	ErL50	48h	3,14	mg/l	Daphnia magna	OECD 202 (Daphnia sp. Acute Immobilisation Test)	
12.1. Toxicity to algae:	EL50	72h	20,42	mg/l	Chlorella vulgaris	OECD 201 (Alga, Growth Inhibition Test)	
12.2. Persistence and degradability:							Not readily biodegradable
12.3. Bioaccumulative potential:	BCF		69-190				Analogous conclusion
12.5. Results of PBT and vPvB assessment							No PBT substance, No vPvB substance

Calcium carbonate

Toxicity / effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
12.1. Toxicity to fish:	LC50	96h			Oncorhynchus mykiss	OECD 203 (Fish, Acute Toxicity Test)	No observation with saturated solution of test material.
12.1. Toxicity to daphnia:	EC50	48h			Daphnia magna	OECD 202 (Daphnia sp. Acute Immobilisation Test)	No observation with saturated solution of test material.
12.1. Toxicity to algae:	EC50	72h	>14	mg/l	Desmodesmus subspicatus	OECD 201 (Alga, Growth Inhibition Test)	
12.1. Toxicity to algae:	NOEC/NOEL	72h	14	mg/l	Desmodesmus subspicatus	OECD 201 (Alga, Growth Inhibition Test)	
12.2. Persistence and degradability:							Not relevant for inorganic substances.
12.3. Bioaccumulative potential:							Not to be expected
12.4. Mobility in soil:							n.a.
12.5. Results of PBT and vPvB assessment							No PBT substance, No vPvB substance
Toxicity to bacteria:	EC50	3h	>1000	mg/l	activated sludge	OECD 209 (Activated Sludge, Respiration Inhibition Test (Carbon and Ammonium Oxidation))	
Toxicity to bacteria:	NOEC/NOEL	3h	1000	mg/l	activated sludge	OECD 209 (Activated Sludge, Respiration Inhibition Test (Carbon and Ammonium Oxidation))	
Other organisms:	EC50	21d	>1000	mg/kg dw		OECD 208 (Terrestrial Plants, Growth Test)	Glycine max
Other organisms:	EC50	21d	>1000	mg/kg dw		OECD 208 (Terrestrial Plants, Growth Test)	Lycopersicon esculentum
Other organisms:	EC50	21d	>1000	mg/kg dw		OECD 208 (Terrestrial Plants, Growth Test)	Avena sativa

Other organisms:	NOEC/NOEL	21d	1000	mg/kg dw		OECD 208 (Terrestrial Plants, Growth Test)	Glycine max
Other organisms:	NOEC/NOEL	21d	1000	mg/kg dw		OECD 208 (Terrestrial Plants, Growth Test)	Lycopersicon esculentum
Other organisms:	NOEC/NOEL	21d	1000	mg/kg dw		OECD 208 (Terrestrial Plants, Growth Test)	Avena sativa
Other organisms:	EC50	14d	>1000	mg/kg dw	Eisenia foetida	OECD 207 (Earthworm, Acute Toxicity Tests)	
Other organisms:	NOEC/NOEL	14d	1000	mg/kg dw	Eisenia foetida	OECD 207 (Earthworm, Acute Toxicity Tests)	
Other organisms:	EC50	28d	>1000	mg/kg dw		OECD 216 (Soil Microorganisms - Nitrogen Transformation Test)	
Other organisms:	NOEC/NOEL	28d	1000	mg/kg dw		OECD 216 (Soil Microorganisms - Nitrogen Transformation Test)	
Water solubility:			0,0166	g/l		OECD 105 (Water Solubility)	20°C

SECTION 13: Disposal considerations

13.1 Waste treatment methods
For the substance / mixture / residual amounts
EC disposal code no.:
The waste codes are recommendations based on the scheduled use of this product.
Owing to the user's specific conditions for use and disposal, other waste codes may be allocated under certain circumstances. (2014/955/EU)
08 04 09 waste adhesives and sealants containing organic solvents or other hazardous substances
20 01 27 paint, inks, adhesives and resins containing hazardous substances
Recommendation:
Sewage disposal shall be discouraged.
Pay attention to local and national official regulations.
E.g. suitable incineration plant.
E.g. dispose at suitable refuse site.

For contaminated packing material
Pay attention to local and national official regulations.
Empty container completely.
Uncontaminated packaging can be recycled.
Dispose of packaging that cannot be cleaned in the same manner as the substance.

SECTION 14: Transport information

General statements

Transport by road/by rail (ADR/RID)
14.1. UN number or ID number: 2735
14.2. UN proper shipping name:
UN 2735 POLYAMINES, LIQUID, CORROSIVE, N.O.S. (XYLYLENE DIAMINE, TRIETHYLENTETRAMINE)
14.3. Transport hazard class(es): 8
14.4. Packing group: II
14.5. Environmental hazards: Not applicable
Tunnel restriction code: E
Classification code: C7
LQ: 1 L
Transport category: 2

Transport by sea (IMDG-code)
14.1. UN number or ID number: 2735
14.2. UN proper shipping name:
UN 2735 POLYAMINES, LIQUID, CORROSIVE, N.O.S. (XYLYLENE DIAMINE, TRIETHYLENTETRAMINE)
14.3. Transport hazard class(es): 8
14.4. Packing group: II
14.5. Environmental hazards: Not applicable
Marine Pollutant: Not applicable
EmS: F-A, S-B

Transport by air (IATA)
14.1. UN number or ID number: 2735
14.2. UN proper shipping name:
UN 2735 Polyamines, liquid, corrosive, n.o.s. (XYLYLENE DIAMINE, TRIETHYLENTETRAMINE)
14.3. Transport hazard class(es): 8
14.4. Packing group: II
14.5. Environmental hazards: Not applicable

14.6. Special precautions for user
Persons employed in transporting dangerous goods must be trained.
All persons involved in transporting must observe safety regulations.
Precautions must be taken to prevent damage.

14.7. Maritime transport in bulk according to IMO instruments
Freighted as packaged goods rather than in bulk, therefore not applicable.
Minimum amount regulations have not been taken into account.
Danger code and packing code on request.
Comply with special provisions.

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
Observe restrictions:
Comply with national regulations/laws governing the protection of young people at work (national implementation of the Directive 94/33/EC)!
Comply with national regulations/laws governing maternity protection (national implementation of the Directive 92/85/EEC)!
Comply with trade association/occupational health regulations.

Directive 2010/75/EU (VOC): 0 g/l

National requirements/regulations on safety and health protection must be applied when using work equipment.

15.2 Chemical safety assessment
A chemical safety assessment is not provided for mixtures.

SECTION 16: Other information

Revised sections: 2.3, 3, 11
Employee training in handling dangerous goods is required.
These details refer to the product as it is delivered.
Employee instruction/training in handling hazardous materials is required.

Classification and processes used to derive the classification of the mixture in accordance with the ordinance (EG) 1272/2008 (CLP):

Classification in accordance with regulation (EC) No. 1272/2008 (CLP)	Evaluation method used
Skin Corr. 1B, H314	Classification according to calculation procedure.
Eye Dam. 1, H318	Classification according to calculation procedure.
Skin Sens. 1, H317	Classification according to calculation procedure.
Aquatic Chronic 3, H412	Classification according to calculation procedure.

The following phrases represent the posted Hazard Class and Risk Category Code (GHS/CLP) of the product and the constituents.
H314 Causes severe skin burns and eye damage.
H361d Suspected of damaging the unborn child.
H317 May cause an allergic skin reaction.
H302 Harmful if swallowed.
H312 Harmful in contact with skin.
H315 Causes skin irritation.
H318 Causes serious eye damage.
H319 Causes serious eye irritation.
H331 Toxic if inhaled.
H332 Harmful if inhaled.
H335 May cause respiratory irritation.
H411 Toxic to aquatic life with long lasting effects.
H412 Harmful to aquatic life with long lasting effects.

Skin Corr. — Skin corrosion
Eye Dam. — Serious eye damage
Skin Sens. — Skin sensitization
Aquatic Chronic — Hazardous to the aquatic environment - chronic
Acute Tox. — Acute toxicity - oral
Acute Tox. — Acute toxicity - inhalation
Eye Irrit. — Eye irritation
Skin Irrit. — Skin irritation
Acute Tox. — Acute toxicity - dermal
Repr. — Reproductive toxicity
STOT SE — Specific target organ toxicity - single exposure - respiratory tract irritation

Key literature references and sources for data:
Regulation (EC) No 1907/2006 (REACH) and Regulation (EC) No 1272/2008 (CLP) as amended.
Guidelines for the preparation of safety data sheets as amended (ECHA).
Guidelines on labelling and packaging according to the Regulation (EG) Nr. 1272/2008 (CLP) as amended (ECHA).
Safety data sheets for the constituent substances.
ECHA Homepage - Information about chemicals.
GESTIS Substance Database (Germany).
German Environment Agency "Rigoletto" information site on substances that are hazardous to water (Germany).
EU Occupation Exposure Limits Directives 91/322/EEC, 2000/39/EC, 2006/15/EC, 2009/161/EU, (EU) 2017/164, (EU) 2019/1831, each as amended.
National Lists of Occupational Exposure Limits for each country as amended.
Regulations on the transport of hazardous goods by road, rail, sea and air (ADR, RID, IMDG, IATA) as amended.

Any abbreviations and acronyms used in this document:

acc., acc. to according, according to
ADR Accord européen relatif au transport international des marchandises Dangereuses par Route (= European Agreement concerning the International Carriage of Dangerous Goods by Road)
AOX Adsorbable organic halogen compounds
approx. approximately
Art., Art. no. Article number
ASTM ASTM International (American Society for Testing and Materials)
ATE Acute Toxicity Estimate
BAM Bundesanstalt für Materialforschung und -prüfung (= Federal Institute for Materials Research and Testing, Germany)
BAuA Bundesanstalt für Arbeitsschutz und Arbeitsmedizin (= Federal Institute for Occupational Health and Safety, Germany)
BCF Bioconcentration factor
BSEF The International Bromine Council
CAS Chemical Abstracts Service
CLP Classification, Labelling and Packaging (REGULATION (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures)
CMR carcinogenic, mutagenic, reproductive toxic
DMEL Derived Minimum Effect Level
DNEL Derived No Effect Level

DOC Dissolved organic carbon
e.g. for example (abbreviation of Latin 'exempli gratia'), for instance
EbCx, EyCx, EbLx (x = 10, 50) Effect Concentration/Level of x % on reduction of the biomass (algae, plants)
EC European Community
ECHA European Chemicals Agency
ECx, ELx (x = 0, 3, 5, 10, 20, 50, 80, 100) Effect Concentration/Level for x % effect
EEC European Economic Community
EINECS European Inventory of Existing Commercial Chemical Substances
ELINCS European List of Notified Chemical Substances
EN European Norms
EPA United States Environmental Protection Agency (United States of America)
ErCx, EμCx, ErLx (x = 10, 50) Effect Concentration/Level of x % on inhibition of the growth rate (algae, plants)
etc. et cetera
EU European Union
EVAL Ethylene-vinyl alcohol copolymer
Fax. Fax number
gen. general
GHS Globally Harmonized System of Classification and Labelling of Chemicals
GWP Global warming potential
Koc Adsorption coefficient of organic carbon in the soil
Kow octanol-water partition coefficient
IARC International Agency for Research on Cancer
IATA International Air Transport Association
IBC (Code) International Bulk Chemical (Code)
IMDG-code International Maritime Code for Dangerous Goods
incl. including, inclusive
IUCLID International Uniform Chemical Information Database
IUPAC International Union for Pure Applied Chemistry
LC50 Lethal Concentration to 50 % of a test population
LD50 Lethal Dose to 50% of a test population (Median Lethal Dose)
Log Koc Logarithm of adsorption coefficient of organic carbon in the soil
Log Kow, Log Pow Logarithm of octanol-water partition coefficient
LQ Limited Quantities
MARPOL International Convention for the Prevention of Marine Pollution from Ships
mg/kg bw mg/kg body weight
mg/kg bw/d, mg/kg bw/day mg/kg body weight/day
mg/kg dw mg/kg dry weight
mg/kg wwt mg/kg wet weight
n.a. not applicable
n.av. not available
n.c. not checked
n.d.a. no data available
NIOSH National Institute for Occupational Safety and Health (USA)
NLP No-longer-Polymer
NOEC, NOEL No Observed Effect Concentration/Level
OECD Organisation for Economic Co-operation and Development
org. organic
OSHA Occupational Safety and Health Administration (USA)
PBT persistent, bioaccumulative and toxic
PE Polyethylene
PNEC Predicted No Effect Concentration
ppm parts per million
PVC Polyvinylchloride
REACH Registration, Evaluation, Authorisation and Restriction of Chemicals (REGULATION (EC) No 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals)
REACH-IT List-No. 6/7/8/9xx-xxx-x No. is automatically assigned, e.g. to pre-registrations without a CAS No. or other numerical identifier. List Numbers do not have any legal significance, rather they are purely technical identifiers for processing a submission via REACH-IT.
RID Règlement concernant le transport International ferroviaire de marchandises Dangereuses (= Regulation concerning the International Carriage of Dangerous Goods by Rail)
SVHC Substances of Very High Concern
Tel. Telephone
TOC Total organic carbon
UN RTDG United Nations Recommendations on the Transport of Dangerous Goods
VOC Volatile organic compounds
vPvB very persistent and very bioaccumulative

The statements made here should describe the product with regard to the necessary safety precautions - they are
not meant to guarantee definite characteristics - but they are based on our present up-to-date knowledge.
No responsibility.