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

1.1 Product identifier

Trade name/designation

WEBAC 4420 Comp. B
faserarmierte EP Schutzbeschichtung

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

Restricted to professional users.

Relevant identified uses

hardener/amine component for epoxy resin

1.3 Details of the supplier of the safety data sheet

supplier

WEBAC-Chemie GmbH
Fahrenberg 22 Telephone: +49 40 670570
22885 Barsbüttel Telefax: +49 40 6703227
Deutschland

Department responsible for information

E-mail (competent person) msds@webac.de

1.4 Emergency telephone number

Giftinformationszentrum-Nord
Emergency telephone number: +49 551 192 40
available 24h/365days; Information will be provided in German and English

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 [CLP]

The mixture is classified as hazardous according to regulation (EC) No 1272/2008 [CLP].
Acute Tox. 4 oral; Acute toxicity; H302 Harmful if swallowed.
Eye Dam. 1; Serious eye damage/eye irritation; H318 Causes serious eye damage.
Repr. 2; Reproductive toxicity; H361 Suspected of damaging fertility or the unborn child.
STOT RE 2; STOT-repeated exposure; H373 May cause damage to organs through prolonged or repeated exposure.
Skin Corr. 1B; Skin corrosion/irritation; H314 Causes severe skin burns and eye damage.
Skin Sens. 1; Skin sensitisation; H317 May cause an allergic skin reaction.
Aquatic Chronic 2; Hazardous to the aquatic environment; H411 Toxic to aquatic life with long lasting effects.

2.2 Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms

GHS05 GHS07 GHS08 GHS09

Signal word

Danger

Hazard statements

H302	Harmful if swallowed.
H361	Suspected of damaging fertility or the unborn child.
H373	May cause damage to organs through prolonged or repeated exposure.
H314	Causes severe skin burns and eye damage.
H317	May cause an allergic skin reaction.
H411	Toxic to aquatic life with long lasting effects.

Precautionary statements

P260	Do not breathe vapours.
P273	Avoid release to the environment.

P280	Wear protective gloves and eye/face protection.
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.
P391	Collect spillage.

Hazard components for labelling

2,2,4(or 2,4,4)-trimethylhexane-1,6-diamine
2-piperazin-1-ylethylamine
3-aminomethyl-3,5,5-trimethylcyclohexylamine
4,4'-methylenebis(cyclohexylamine)
Amines, polyethylenepoly-, triethylenetetramine fraction
Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine
Methyleneoxide, polymer with benzenamine, hydrogenated
3-aminopropyldimethylamine
Phenol, methylstyrenated
Phenol, styrenated
m-phenylenebis(methylamine)

Supplemental hazard information

not applicable

2.3 Other hazards

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

SECTION 3: Composition/information on ingredients.

3.2 Mixtures

Description

hardener/amine component for epoxy resin

Hazardous ingredients

CAS No. EC No. Index No.	Substance name REACH No. Classification according to Regulation (EC) No 1272/2008 [CLP]	weight-%
61788-44-1 262-975-0 -	**Phenol, styrenated** 01-2119980970-27-xxxx Skin Irrit. 2 H315 / Skin Sens. 1A H317 / Aquatic Chronic 2 H411 ATE (oral): > 2.000 mg/kg ATE (dermal): > 2.000 mg/kg	10,0 < 25,0
100-51-6 202-859-9 603-057-00-5	**benzyl alcohol** 01-2119492630-38-xxxx Acute Tox. 4 H302 / Eye Irrit. 2 H319 / Acute Tox. 4 H332 ATE (dermal): = 2.000 mg/kg ATE (oral): = 1.230 mg/kg ATE (inhalative): > 4,178 mg/L (4 h)	10,0 < 25,0
135108-88-2 603-894-6 -	**Methyleneoxide, polymer with benzenamine, hydrogenated** 01-2119983522-33-xxxx Acute Tox. 4 H302 / Skin Corr. 1C H314 / Skin Sens. 1 H317 / STOT RE 2 H373 / Aquatic Chronic 3 H412 ATE (dermal): > 2.000 mg/kg ATE (oral): = 367 mg/kg	2,50 < 10,0
140-31-8 205-411-0 612-105-00-4	**2-piperazin-1-ylethylamine** 01-2119471486-30-xxxx Acute Tox. 4 H302 / Acute Tox. 3 H311 / Skin Corr. 1B H314 / Skin Sens. 1 H317 / Repr. 2 H361 / STOT RE 1 H372 / Aquatic Chronic 3 H412 ATE (dermal): = 866 mg/kg ATE (oral): = 2.000 mg/kg	2,50 < 10,0
1477-55-0 216-032-5 -	**m-phenylenebis(methylamine)** 01-2119480150-50-xxxx Acute Tox. 4 H302 / Skin Corr. 1B H314 / Skin Sens. 1 H317 / Acute Tox. 4 H332 / Aquatic Chronic 3 H412 ATE (dermal): > 3.100 mg/kg ATE (oral): = 930 mg/kg	2,50 < 10,0
68082-29-1 500-191-5 -	**Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine** 01-2119972320-44-xxxx Skin Irrit. 2 H315 / Skin Sens. 1 H317 / Eye Dam. 1 H318 / Aquatic Chronic 2 H411 ATE (dermal): > 2.000 mg/kg ATE (oral): > 2.000 mg/kg	2,50 < 10,0

9046-10-0 618-561-0 -	**Poly(oxypropylene)diamine** 01-2119557899-12-xxxx Skin Corr. 1C H314 / Aquatic Chronic 3 H412 ATE (dermal): = 2.980 mg/kg ATE (oral): = 2.885 mg/kg	2,50 < 10,0
90640-67-8 292-588-2 -	**Amines, polyethylenepoly-, triethylenetetramine fraction** 01-2119487919-13-xxxx Acute Tox. 4 H312 / Skin Corr. 1B H314 / Skin Sens. 1 H317 / Aquatic Chronic 3 H412 ATE (oral): = 5.500 mg/kg ATE (dermal): = 1.465 mg/kg ATE (oral): = 1.600 mg/kg ATE (oral): = 1.716 mg/kg	2,50 < 10,0
2855-13-2 220-666-8 612-067-00-9	**3-aminomethyl-3,5,5-trimethylcyclohexylamine** 01-2119514687-32-xxxx Acute Tox. 4 H302 / Acute Tox. 4 H312 / Skin Corr. 1B H314 / Skin Sens. 1A H317 / Aquatic Chronic 3 H412 Specific concentration limit (SCL) Skin Sens. 1A H317: >= 0,001 ATE (dermal): = 1.840 mg/kg ATE (oral): = 1.030 mg/kg	2,50 < 10,0
25513-64-8 247-063-2 -	**2,2,4(or 2,4,4)-trimethylhexane-1,6-diamine** 01-2119560598-25-xxxx Acute Tox. 4 H302 / Skin Corr. 1A H314 / Skin Sens. 1A H317 ATE (oral): 910 mg/kg	2,50 < 10,0
69-72-7 200-712-3 607-732-00-5	**salicylic acid** 01-2119486984-17-xxxx Acute Tox. 4 H302 / Eye Dam. 1 H318 / Repr. 2 H361d ATE (oral): = 891 mg/kg ATE (dermal): > 2.000 mg/kg	2,50 < 10,0
90-72-2 202-013-9 603-069-00-0	**2,4,6-tris(dimethylaminomethyl)phenol** 01-2119560597-27-xxxx Acute Tox. 4 H302 / Skin Irrit. 2 H315 / Eye Irrit. 2 H319 ATE (dermal): = 1.242 mg/kg ATE (oral): = 1.670 mg/kg	1,00 < 2,50
68512-30-1 270-966-8 -	**Phenol, methylstyrenated** 01-2119555274-38-xxxx Skin Irrit. 2 H315 / Skin Sens. 1 H317 / Aquatic Chronic 3 H412 ATE (oral): = 3.600 mg/kg ATE (dermal): > 2.000 mg/kg ATE (oral): > 2.000 mg/kg ATE (dermal): > 2.000 mg/kg	1,00 < 2,50
109-55-7 203-680-9 612-061-00-6	**3-aminopropyldimethylamine** 01-2119486842-27-xxxx Flam. Liq. 3 H226 / Acute Tox. 4 H302 / Skin Corr. 1B H314 / Skin Sens. 1 H317 ATE (dermal): = 2.139 mg/kg ATE (oral): = 1.600 mg/kg	1,00 < 2,50
61788-46-3 262-977-1 612-285-00-4	**amines, coco alkyl** 01-2119473798-17-xxxx Acute Tox. 4 H302 / Asp. Tox. 1 H304 / Skin Corr. 1B H314 / STOT SE 3 H335 / STOT RE 2 H373 / Aquatic Acute 1 H400 (M = 10,00) / Aquatic Chronic 1 H410 (M = 10,00) ATE (oral): = 1.300 mg/kg	1,00 < 2,50
68609-08-5 614-657-1 -	**Cyclohexanemethanamine, 5-amino-1,3,3-trimethyl-, reaction products with bisphenol A diglycidyl ether homopolymer** Skin Corr. 1B H314 / Eye Dam. 1 H318	0,50 < 1,00
1761-71-3 217-168-8 -	**4,4'-methylenebis(cyclohexylamine)** 01-2119541673-38-xxxx Acute Tox. 4 H302 / Skin Corr. 1B H314 / Skin Sens. 1B H317 / STOT RE 2 H373 ATE (dermal): = 2.110 mg/kg ATE (oral): = 625 mg/kg	0,50 < 1,00
38640-62-9 254-052-6 -	**Bis(isopropyl)naphthalene** 01-2119565150-48-xxxx Asp. Tox. 1 H304 / Aquatic Chronic 1 H410 (M = 1,00)	0,100 < 0,50

Remark
Full text of H- and EUH-statements: see section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General information

In all cases of doubt, or when symptoms persist, seek medical advice. In case of unconsciousness give nothing by mouth, place in recovery position and seek medical advice.

Following inhalation

Remove casualty to fresh air and keep warm and at rest. In case of irregular breathing or respiratory arrest provide artificial respiration.

Following skin contact

Remove contaminated, saturated clothing immediately. After contact with skin, wash immediately with plenty of water and soap. Do not use solvents or thinners.

After eye contact

Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Seek medical advice immediately.

Following ingestion

If swallowed, rinse mouth with water (only if the person is conscious). Seek medical advice immediately. Keep victim calm. Do NOT induce vomiting.

Self-protection of the first aider

First aider: Pay attention to self-protection!

4.2 Most important symptoms and effects, both acute and delayed

Symptoms

In all cases of doubt, or when symptoms persist, seek medical advice.

4.3 Indication of any immediate medical attention and special treatment needed

First Aid, decontamination, treatment of symptoms.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

alcohol resistant foam, Carbon dioxide (CO2), Powder, spray mist, (water)

Unsuitable extinguishing media

Strong water jet

5.2 Special hazards arising from the substance or mixture

Dense black smoke occurs during fire. Inhaling hazardous decomposing products can cause serious health damage.

5.3 Advice for firefighters

Provide a conveniently located respiratory protective device. Cool closed containers that are near the source of the fire. Do not allow water used to extinguish fire to enter drains, ground or waterways.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Ventilate affected area. Do not breathe vapours.

6.2 Environmental precautions

Do not allow to enter into surface water or drains. If the product contaminates lakes, rivers or sewages, inform competent authorities in accordance with local regulations.

6.3 Methods and material for containment and cleaning up

For containment

Isolate leaked material using non-flammable absorption agent (e.g. sand, earth, vermiculit, diatomaceous earth) and collect it for disposal in appropriate containers in accordance with the local regulations (see section 13).

For cleaning up

Clean using cleansing agents. Do not use solvents.

6.4 Reference to other sections

Safe handling: see section 7
Personal protection equipment: refer to section 8
Disposal: see section 13

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advices on safe handling

Avoid contact with skin, eyes and clothes. Avoid breathing spray. Personal protection equipment: see section 8
Follow the legal protection and safety regulations.

Advices on general occupational hygiene

When using do not eat, drink or smoke.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Storage in accordance with the Ordinance on Industrial Safety and Health (BetrSiVO). Access only for authorised persons.
Smoking is forbidden.
Always keep in containers that correspond to the material of the original container. Store carefully closed containers upright to prevent any leaks. Do not empty containers with pressure - no pressure vessel!

Hints on joint storage

Keep away from strongly acidic and alkaline materials as well as oxidizers.
Do not store together with: Food and feedingstuffs

Storage class LGK8A - Combustible corrosive substances

7.3 Specific end use(s)

Observe technical data sheet.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limit values

CAS No.	Substance name	Source	Long-term /short-term (Spitzenbegrenzung)
1477-55-0	m-phenylenebis(methylamine)	-	0,1 / - (-) mg/m³

Additional information

Long-term: Long-term occupational exposure limit value
short-term: short-term occupational exposure limit value

Biological limit values

No data available

DNEL worker

CAS No.	Substance name	DNEL type	DNEL value
90-72-2	2,4,6-tris(dimethylaminomethyl)phenol	DNEL long-term dermal (systemic)	0,2 mg/kg bw/day
90-72-2	2,4,6-tris(dimethylaminomethyl)phenol	DNEL long-term inhalative (systemic)	0,31 mg/m³
140-31-8	2-piperazin-1-ylethylamine	DNEL long-term dermal (local)	0,6 mg/dm²
140-31-8	2-piperazin-1-ylethylamine	DNEL acute dermal, short-term (local)	4 mg/dm²
140-31-8	2-piperazin-1-ylethylamine	DNEL long-term dermal (systemic)	3,33 mg/kg bw/day
140-31-8	2-piperazin-1-ylethylamine	DNEL acute inhalative (systemic)	21,4 mg/m³
140-31-8	2-piperazin-1-ylethylamine	DNEL long-term inhalative (systemic)	3,6 mg/m³
140-31-8	2-piperazin-1-ylethylamine	DNEL acute dermal, short-term (systemic)	20 mg/kg
109-55-7	3-aminopropyldimethylamine	DNEL acute inhalative (systemic)	9,8 mg/m³
109-55-7	3-aminopropyldimethylamine	DNEL long-term inhalative (local)	4,9 mg/m³
109-55-7	3-aminopropyldimethylamine	DNEL long-term inhalative (systemic)	4,9 mg/m³
109-55-7	3-aminopropyldimethylamine	DNEL acute inhalative (local)	9,8 mg/m³
1761-71-3	4,4'-methylenebis(cyclohexylamine)	DNEL long-term dermal (systemic)	0,1 mg/kg bw/day

1761-71-3	4,4'-methylenebis(cyclohexylamine)	DNEL long-term inhalative (systemic)	1 mg/m³
38640-62-9	Bis(isopropyl)naphthalene	DNEL long-term dermal (systemic)	4,3 mg/kg bw/day
38640-62-9	Bis(isopropyl)naphthalene	DNEL long-term inhalative (systemic)	30 mg/m³
68082-29-1	Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine	DNEL long-term inhalative (systemic)	3,9 mg/m³
68082-29-1	Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine	DNEL long-term dermal (systemic)	1,1 mg/kg
68512-30-1	Phenol, methylstyrenated	DNEL long-term dermal (systemic)	16,4 mg/kg bw/day
68512-30-1	Phenol, methylstyrenated	DNEL long-term inhalative (systemic)	57 mg/m³
61788-44-1	Phenol, styrenated	DNEL long-term dermal (systemic)	2,92 mg/kg bw/day
61788-44-1	Phenol, styrenated	DNEL long-term inhalative (systemic)	4,11 mg/m³
9046-10-0	Poly(oxypropylene)diamine	DNEL long-term dermal (local)	62,3 mg/dm²
9046-10-0	Poly(oxypropylene)diamine	DNEL long-term dermal (systemic)	2,5 mg/kg bw/day
100-51-6	benzyl alcohol	DNEL acute dermal, short-term (systemic)	47 mg/kg bw/day
100-51-6	benzyl alcohol	DNEL long-term dermal (systemic)	9,5 mg/kg bw/day
100-51-6	benzyl alcohol	DNEL acute inhalative (systemic)	450 mg/m³
100-51-6	benzyl alcohol	DNEL long-term inhalative (systemic)	90 mg/m³
1477-55-0	m-phenylenebis(methylamine)	DNEL long-term inhalative (local)	0,2 mg/m³
1477-55-0	m-phenylenebis(methylamine)	DNEL long-term inhalative (systemic)	1,2 mg/m³
1477-55-0	m-phenylenebis(methylamine)	DNEL long-term dermal (systemic)	0,33 mg/kg
69-72-7	salicylic acid	DNEL long-term dermal (systemic)	2 mg/kg bw/day
69-72-7	salicylic acid	DNEL long-term inhalative (systemic)	16 mg/m³

DNEL Consumer

CAS No.	Substance name	DNEL type	DNEL value
2855-13-2	3-aminomethyl-3,5,5-trimethylcyclohexylamine	DNEL long-term oral (repeated)	0,526 mg/kg

PNEC

CAS No.	Substance name	PNEC type	PNEC Value
25513-64-8	2,2,4(or 2,4,4)-trimethylhexane-1,6-diamine	PNEC aquatic, intermittent release	0,295 mg/L
25513-64-8	2,2,4(or 2,4,4)-trimethylhexane-1,6-diamine	PNEC aquatic, marine water	0,003 mg/L
25513-64-8	2,2,4(or 2,4,4)-trimethylhexane-1,6-diamine	PNEC aquatic, freshwater	0,029 mg/L
25513-64-8	2,2,4(or 2,4,4)-trimethylhexane-1,6-diamine	PNEC sewage treatment plant (STP)	72 mg/L
25513-64-8	2,2,4(or 2,4,4)-trimethylhexane-1,6-diamine	PNEC sediment, marine water	0,018 mg/kg
25513-64-8	2,2,4(or 2,4,4)-trimethylhexane-1,6-diamine	PNEC sediment, freshwater	0,18 mg/kg
25513-64-8	2,2,4(or 2,4,4)-trimethylhexane-1,6-diamine	PNEC soil, freshwater	0,019 mg/kg
90-72-2	2,4,6-tris(dimethylaminomethyl)phenol	PNEC aquatic, intermittent	0,84 mg/L

		release	
90-72-2	2,4,6-tris(dimethylaminomethyl)phenol	PNEC aquatic, freshwater	0,084 mg/L
90-72-2	2,4,6-tris(dimethylaminomethyl)phenol	PNEC aquatic, marine water	0,008 mg/L
90-72-2	2,4,6-tris(dimethylaminomethyl)phenol	PNEC sewage treatment plant (STP)	0,2 mg/L
140-31-8	2-piperazin-1-ylethylamine	PNEC aquatic, intermittent release	0,58 mg/L
140-31-8	2-piperazin-1-ylethylamine	PNEC sewage treatment plant (STP)	250 mg/L
140-31-8	2-piperazin-1-ylethylamine	PNEC aquatic, marine water	0,006 mg/L
140-31-8	2-piperazin-1-ylethylamine	PNEC aquatic, freshwater	0,058 mg/L
140-31-8	2-piperazin-1-ylethylamine	PNEC sediment, marine water	21,5 mg/kg
140-31-8	2-piperazin-1-ylethylamine	PNEC sediment, freshwater	215 mg/kg
140-31-8	2-piperazin-1-ylethylamine	PNEC soil, freshwater	42,9 mg/kg
2855-13-2	3-aminomethyl-3,5,5-trimethylcyclohexylamine	PNEC aquatic, intermittent release	0,23 mg/L
2855-13-2	3-aminomethyl-3,5,5-trimethylcyclohexylamine	PNEC sewage treatment plant (STP)	3,18 mg/L
2855-13-2	3-aminomethyl-3,5,5-trimethylcyclohexylamine	PNEC aquatic, marine water	0,006 mg/L
2855-13-2	3-aminomethyl-3,5,5-trimethylcyclohexylamine	PNEC aquatic, freshwater	0,06 mg/L
2855-13-2	3-aminomethyl-3,5,5-trimethylcyclohexylamine	PNEC sediment, marine water	0,578 mg/kg
2855-13-2	3-aminomethyl-3,5,5-trimethylcyclohexylamine	PNEC sediment, freshwater	5,784 mg/kg
2855-13-2	3-aminomethyl-3,5,5-trimethylcyclohexylamine	PNEC soil, freshwater	1,121 mg/kg
109-55-7	3-aminopropyldimethylamine	PNEC aquatic, intermittent release	0,535 mg/L
109-55-7	3-aminopropyldimethylamine	PNEC sewage treatment plant (STP)	69,5 mg/L
109-55-7	3-aminopropyldimethylamine	PNEC aquatic, marine water	0,053 mg/L
109-55-7	3-aminopropyldimethylamine	PNEC aquatic, freshwater	0,053 mg/L
109-55-7	3-aminopropyldimethylamine	PNEC sediment, marine water	0,059 mg/kg
109-55-7	3-aminopropyldimethylamine	PNEC sediment, freshwater	0,585 mg/kg
109-55-7	3-aminopropyldimethylamine	PNEC soil, freshwater	0,085 mg/kg
1761-71-3	4,4'-methylenebis(cyclohexylamine)	PNEC aquatic, intermittent release	0,08 mg/L
1761-71-3	4,4'-methylenebis(cyclohexylamine)	PNEC aquatic, marine water	0,001 mg/L
1761-71-3	4,4'-methylenebis(cyclohexylamine)	PNEC aquatic, freshwater	0,008 mg/L
1761-71-3	4,4'-methylenebis(cyclohexylamine)	PNEC sewage treatment plant (STP)	80 mg/L
1761-71-3	4,4'-methylenebis(cyclohexylamine)	PNEC sediment, marine water	0,039 mg/kg
1761-71-3	4,4'-methylenebis(cyclohexylamine)	PNEC sediment, freshwater	0,39 mg/kg
1761-71-3	4,4'-methylenebis(cyclohexylamine)	PNEC soil, freshwater	0,072 mg/kg
38640-62-9	Bis(isopropyl)naphthalene	PNEC Secondary Poisoning	25 mg/kg
38640-62-9	Bis(isopropyl)naphthalene	PNEC aquatic, marine water	0,026 mg/L
38640-62-9	Bis(isopropyl)naphthalene	PNEC aquatic, freshwater	0,26 mg/L
38640-62-9	Bis(isopropyl)naphthalene	PNEC sewage treatment plant (STP)	0,15 mg/L
38640-62-9	Bis(isopropyl)naphthalene	PNEC sediment, marine water	0,094 mg/kg
38640-62-9	Bis(isopropyl)naphthalene	PNEC sediment, freshwater	0,94 mg/kg
38640-62-9	Bis(isopropyl)naphthalene	PNEC soil, freshwater	0,187 mg/kg
68082-29-1	Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine	PNEC aquatic, marine water	0 mg/L
68082-29-1	Fatty acids, C18-unsatd., dimers, oligomeric	PNEC aquatic, freshwater	0,004 mg/L

	reaction products with tall-oil fatty acids and triethylenetetramine		
68082-29-1	Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine	PNEC aquatic, intermittent release	0,043 mg/L
68082-29-1	Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine	PNEC sewage treatment plant (STP)	3,84 mg/L
68082-29-1	Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine	PNEC sediment, marine water	43,4 mg/kg
68082-29-1	Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine	PNEC sediment, freshwater	434,02 mg/kg
68512-30-1	Phenol, methylstyrenated	PNEC aquatic, intermittent release	140 mg/L
68512-30-1	Phenol, methylstyrenated	PNEC aquatic, marine water	1,4 mg/L
68512-30-1	Phenol, methylstyrenated	PNEC aquatic, freshwater	14 mg/L
68512-30-1	Phenol, methylstyrenated	PNEC sewage treatment plant (STP)	2,4 mg/L
68512-30-1	Phenol, methylstyrenated	PNEC sediment, marine water	5,3 mg/kg
68512-30-1	Phenol, methylstyrenated	PNEC sediment, freshwater	52,9 mg/kg
68512-30-1	Phenol, methylstyrenated	PNEC soil, freshwater	10,5 mg/kg
61788-44-1	Phenol, styrenated	PNEC aquatic, freshwater	11,5 mg/L
61788-44-1	Phenol, styrenated	PNEC aquatic, marine water	1,15 mg/L
61788-44-1	Phenol, styrenated	PNEC aquatic, intermittent release	13,5 mg/L
61788-44-1	Phenol, styrenated	PNEC sewage treatment plant (STP)	10 mg/L
61788-44-1	Phenol, styrenated	PNEC sediment, marine water	0,156 mg/kg
61788-44-1	Phenol, styrenated	PNEC sediment, freshwater	1,564 mg/kg
61788-44-1	Phenol, styrenated	PNEC soil, freshwater	0,305 mg/kg
9046-10-0	Poly(oxypropylene)diamine	PNEC aquatic, marine water	0,014 mg/L
9046-10-0	Poly(oxypropylene)diamine	PNEC aquatic, freshwater	0,015 mg/L
9046-10-0	Poly(oxypropylene)diamine	PNEC aquatic, intermittent release	0,15 mg/L
9046-10-0	Poly(oxypropylene)diamine	PNEC Secondary Poisoning	6,93 mg/kg
9046-10-0	Poly(oxypropylene)diamine	PNEC sewage treatment plant (STP)	7,5 mg/L
9046-10-0	Poly(oxypropylene)diamine	PNEC sediment, marine water	0,125 mg/kg
9046-10-0	Poly(oxypropylene)diamine	PNEC sediment, freshwater	0,132 mg/kg
9046-10-0	Poly(oxypropylene)diamine	PNEC soil, freshwater	0,018 mg/kg
100-51-6	benzyl alcohol	PNEC aquatic, intermittent release	2,3 mg/L
100-51-6	benzyl alcohol	PNEC aquatic, marine water	0,1 mg/L
100-51-6	benzyl alcohol	PNEC aquatic, freshwater	1 mg/L
100-51-6	benzyl alcohol	PNEC sewage treatment plant (STP)	39 mg/L
100-51-6	benzyl alcohol	PNEC sediment, marine water	0,527 mg/kg
100-51-6	benzyl alcohol	PNEC sediment, freshwater	5,27 mg/kg
100-51-6	benzyl alcohol	PNEC soil, freshwater	0,456 mg/kg
1477-55-0	m-phenylenebis(methylamine)	PNEC aquatic, intermittent release	0,152 mg/L
1477-55-0	m-phenylenebis(methylamine)	PNEC aquatic, marine water	0,009 mg/L
1477-55-0	m-phenylenebis(methylamine)	PNEC aquatic, freshwater	0,094 mg/L

1477-55-0	m-phenylenebis(methylamine)	PNEC sewage treatment plant (STP)	10 mg/L
1477-55-0	m-phenylenebis(methylamine)	PNEC sediment, marine water	0,043 mg/kg
1477-55-0	m-phenylenebis(methylamine)	PNEC sediment, freshwater	0,43 mg/kg
1477-55-0	m-phenylenebis(methylamine)	PNEC soil, freshwater	0,045 mg/kg
69-72-7	salicylic acid	PNEC aquatic, marine water	0,02 mg/L
69-72-7	salicylic acid	PNEC aquatic, freshwater	0,2 mg/L
69-72-7	salicylic acid	PNEC aquatic, intermittent release	1 mg/L
69-72-7	salicylic acid	PNEC sewage treatment plant (STP)	162 mg/L
69-72-7	salicylic acid	PNEC sediment, marine water	0,142 mg/kg
69-72-7	salicylic acid	PNEC sediment, freshwater	1,42 mg/kg
69-72-7	salicylic acid	PNEC soil, freshwater	0,166 mg/kg

8.2 Exposure controls

Provide good ventilation. This can be achieved with local or room suction.

Personal protection equipment

Respiratory protection

In case of inadequate ventilation wear respiratory protection.

Hand protection

Suitable material: NBR (Nitrile rubber)
Thickness of the glove material >= 0,4 mm
Breakthrough time >= 480 min

For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves. Observe the instructions and details for use, storage, maintenance and replacement provided by the protective glove manufacturer. Penetration time of glove material depending on intensity and duration of exposure to skin.
Recommended glove articles: EN ISO 374

Skin protection

Barrier creams can help protecting exposed skin areas. In no case should they be used after contact.

Eye/face protection

Eye glasses with side protection: EN 166
Wear closely fitting protective glasses in case of splashes.

Body protection

Wear suitable protective clothing. Change contaminated, saturated clothing.

Environmental exposure controls

Do not allow to enter into surface water or drains.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state	Liquid
Colour	orange
Odour	characteristic
pH	not applicable
Melting point/freezing point	not determined
Initial boiling point and boiling range	not determined
Flash point	> 101 °C
flammability	not applicable
Lower explosion limit at 20°C	not determined
Upper explosion limit at 20°C	not determined
Vapour pressure at 20°C	0,624 mbar
Relative vapour density	not applicable

Density at 20 °C	1,01 kg/l
Water solubility at 20°C	practically insoluble
Partition coefficient: n-octanol/water	see section 12
Ignition temperature in °C	not determined
Decomposition temperature	not determined
Viscosity at 40 °C:	> 20,5 mm²/s
particle characteristics	not applicable

9.2 Other information

not applicable

SECTION 10: Stability and reactivity

10.1 Reactivity

No hazardous reaction when handled and stored according to provisions.

10.2 Chemical stability

Stable under recommended storage and handling conditions.
Please note the expiry date.

10.3 Possibility of hazardous reactions

Keep away from strong acids, strong bases and strong oxidizing agents to avoid exothermic reactions.

10.4 Conditions to avoid

Protect from moisture. Avoid high temperatures or direct sunlight.

10.5 Incompatible materials

No further relevant information available.

10.6 Hazardous decomposition products

Hazardous decomposition byproducts may form with exposure to high temperatures e.g.: Carbon dioxide (CO2), Carbon monoxide, smoke.

SECTION 11: Toxicological information

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

Acute toxicity

Harmful if swallowed.
ATEmix: (oral) 1.540,115 mg/kg

2,2,4(or 2,4,4)-trimethylhexane-1,6-diamine
LD50: oral (Rat): 910 mg/kg

2,4,6-tris(dimethylaminomethyl)phenol
LD50: dermal (Rabbit): = 1.242 mg/kg

LD50: oral (Rat): = 1.670 mg/kg

2-piperazin-1-ylethylamine
LD50: dermal (Rabbit): = 866 mg/kg; (literature value)

LD50: oral (Rat): = 2.000 mg/kg

3-aminomethyl-3,5,5-trimethylcyclohexylamine
LD50: dermal (Rabbit): = 1.840 mg/kg

LD50: oral (Rat): = 1.030 mg/kg

3-aminopropyldimethylamine
LD50: dermal (Rabbit): = 2.139 mg/kg

LD50: oral (Rat): = 1.600 mg/kg

4,4'-methylenebis(cyclohexylamine)
LD50: dermal (Rabbit): = 2.110 mg/kg

LD50: oral (Rat): = 625 mg/kg

Amines, polyethylenepoly-, triethylenetetramine fraction
LD50: oral (Rabbit): = 5.500 mg/kg

LD50: dermal (Rabbit): = 1.465 mg/kg

LD50: oral (Mouse): = 1.600 mg/kg

LD50: oral (Rat): = 1.716 mg/kg

Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine
LD50: dermal (Rat): > 2.000 mg/kg

LD50: oral (Rat): > 2.000 mg/kg

Methyleneoxide, polymer with benzenamine, hydrogenated
LD50: dermal (Rabbit): > 2.000 mg/kg

LD50: oral (Rat): = 367 mg/kg

Phenol, methylstyrenated
LD50: oral (Rabbit): = 3.600 mg/kg

LD50: dermal (Rabbit): > 2.000 mg/kg

LD50: oral (Rat): > 2.000 mg/kg

LD50: dermal (Rat): > 2.000 mg/kg

Phenol, styrenated
LD50: oral (Rat): > 2.000 mg/kg

LD50: dermal (Rat): > 2.000 mg/kg

Poly(oxypropylene)diamine
LD50: dermal (Rabbit): = 2.980 mg/kg

LD50: oral (Rat): = 2.885 mg/kg

amines, coco alkyl
LD50: oral (Rat): = 1.300 mg/kg

benzyl alcohol
LD50: dermal (Rabbit): = 2.000 mg/kg

LD50: oral (Rat): = 1.230 mg/kg

LC50: inhalative (Rat): > 4,178 mg/L (4 h)

m-phenylenebis(methylamine)
LD50: dermal (Rabbit): > 3.100 mg/kg

LD50: oral (Rat): = 930 mg/kg

salicylic acid
LD50: oral (Rat): = 891 mg/kg

LD50: dermal (Rat): > 2.000 mg/kg

Skin corrosion/irritation

Causes severe skin burns and eye damage.

Serious eye damage/eye irritation

Causes serious eye damage.

Respiratory or skin sensitisation

May cause an allergic skin reaction.

Overall assessment on CMR properties

Suspected of damaging fertility or the unborn child.

STOT-single exposure

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

STOT-repeated exposure

May cause damage to organs through prolonged or repeated exposure.

Indications for this are:
Headache, Dizziness, fatigue, amyosthenia, Dizziness, in serious cases: unconsciousness. Solvents may cause some of the aforementioned effects through skin resorption. Repeated or prolonged contact with the preparation may cause removal of natural fat from the skin resulting in non-allergic contact dermatitis and/or absorption through skin. Splashing may cause eye irritation and reversible damage.

Aspiration hazard

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

11.2 Information on other hazards

Endocrine disrupting properties

This product does not contain a substance that has endocrine disrupting properties with respect to humans as no components meets the criteria.

SECTION 12: Ecological information

12.1 Toxicity

Toxic to aquatic life with long lasting effects.

Algae toxicity

2,2,4(or 2,4,4)-trimethylhexane-1,6-diamine
ErC50: (Scenedesmus subspicatus): = 43,5 mg/L (72 h)

2-piperazin-1-ylethylamine
ErC50: (Pseudokirchneriella subcapitata): > 1.000 mg/L (72 h)

3-aminomethyl-3,5,5-trimethylcyclohexylamine
ErC50: (Scenedesmus subspicatus): > 50 mg/L (72 h)

3-aminopropyldimethylamine
EC50 = 56,2 mg/L (72 h)

Amines, polyethylenepoly-, triethylenetetramine fraction
EC50 (Scenedesmus subspicatus): = 2,5 (16 h)

ErC50: (Selenastrum capricornutum): = 20 mg/L (72 h)

Phenol, methylstyrenated
ErC50: (Scenedesmus subspicatus): = 15 mg/L (72 h)

Phenol, styrenated
ErC50: (Scenedesmus subspicatus): = 3,14 mg/L (72 h)

Poly(oxypropylene)diamine
ErC50: (Pseudokirchneriella subcapitata): = 15 mg/L (72 h)

amines, coco alkyl
ErC50: (Selenastrum capricornutum): = 0,17 mg/L (72 h)

benzyl alcohol
ErC50: (Pseudokirchneriella subcapitata): = 770 mg/L (72 h)

NOEC (Pseudokirchneriella subcapitata): = 310 mg/L (72 h)

m-phenylenebis(methylamine)
ErC50: (Scenedesmus subspicatus): = 12 mg/L (72 h)

ErC50: (Scenedesmus subspicatus): = 12 mg/L (72 h)

Daphnia toxicity

2,2,4(or 2,4,4)-trimethylhexane-1,6-diamine
EC50 = 31,5 (24 h)

2-piperazin-1-ylethylamine
EC50 (Daphnia magna (Big water flea)): = 58 mg/L (48 h)

3-aminomethyl-3,5,5-trimethylcyclohexylamine
EC50 (Daphnia magna (Big water flea)): = 23 mg/L (48 h)
Method: OECD 202

EC50 = 3 mg/L (504 h)
Method: OECD 202

3-aminopropyldimethylamine
EC50 = 59,5 mg/L (48 h)

EC50 (Daphnia magna (Big water flea)): = 44,5 mg/L (24 h)

Amines, polyethylenepoly-, triethylenetetramine fraction
EC50 (Daphnia magna (Big water flea)): = 31 mg/L (48 h)

Poly(oxypropylene)diamine
EC50 (Daphnia magna (Big water flea)): = 80 mg/L (48 h)

amines, coco alkyl
EC50 (Daphnia magna (Big water flea)): = 0,045 mg/L (48 h)

benzyl alcohol
EC50 (Daphnia magna (Big water flea)): = 230 mg/L (48 h)

m-phenylenebis(methylamine)
EC50 (Daphnia magna (Big water flea)): = 15,2 mg/L (48 h)

salicylic acid
EC50 = 870 mg/L (48 h)

Fish toxicity
2,2,4(or 2,4,4)-trimethylhexane-1,6-diamine
EC50 (Pseudomonas putida): = 89 (17 h)

LC50: (Leuciscus idus (golden orfe)): = 174 (48 h)

2,4,6-tris(dimethylaminomethyl)phenol
LC50: (Oncorhynchus mykiss (Rainbow trout)): = 222 mg/L (24 h)

LC50: (Cyprinus carpio (Common Carp)): = 718 mg/L (96 h)

2-piperazin-1-ylethylamine
LC50: (Poecilia reticulata (Guppy)): = 368 mg/L (96 h)

3-aminomethyl-3,5,5-trimethylcyclohexylamine
EC10: (Pseudomonas putida): = 1.120 mg/L (18 h)
Method: literature value

LC50: (Danio rerio (zebrafish)): = 110 mg/L (96 h)

3-aminopropyldimethylamine
EC50 > 1.000 mg/L

EC50 (Pseudomonas putida): = 95 mg/L (17 h)

LC50: (Leuciscus idus (golden orfe)): = 122 mg/L (96 h)

Amines, polyethylenepoly-, triethylenetetramine fraction
= 0,003 mg/L

= 0,135 mg/L

= 800 mg/L

EC50 (Pseudomonas putida): = 137 mg/L

LC50: = 330 mg/L (96 h)

LC50: (Poecilia reticulata (Guppy)): = 570 (96 h)

Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine
LC50: = 7,07 mg/L (96 h)

Phenol, methylstyrenated
LC50: = 25,8 mg/L (96 h)

Phenol, styrenated
LC50: = 14,8 mg/L (96 h)

Poly(oxypropylene)diamine
NOEC (Oncorhynchus mykiss (Rainbow trout)): = 15 mg/L (96 h)

LC50: (Leuciscus idus (golden orfe)): > 15 mg/L (96 h)

benzyl alcohol
LC50: = 460 mg/L (96 h)

m-phenylenebis(methylamine)
LC50: (Oncorhynchus mykiss (Rainbow trout)): > 100 mg/L (96 h)

LC50: (Danio rerio (zebrafish)): > 100 mg/L (96 h)

12.2 Persistence and degradability

No information available.

12.3 Bioaccumulative potential

Bis(isopropyl)naphthalene
Partition coefficient: n-octanol/water = 4

12.4 Mobility in soil

No information available.

12.5 Results of PBT and vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

12.6 Endocrine disrupting properties

This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.

12.7 Other adverse effects

No information available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product/Packaging disposal

Do not empty into drains; dispose of this material and its container in a safe way. Waste disposal according to directive 2008/98/EC, covering waste and dangerous waste.

Waste codes/waste designations according to EWC/AVV

080409* - Waste adhesives and sealants containing organic solvents or other dangerous substances
Hazardous waste according to Directive 2008/98/EC (waste framework directive).

Other disposal recommendations

Non-contaminated packages may be recycled. Vessels not properly emptied are special waste.

SECTION 14: Transport information

14.1 UN number or ID number

UN 2735

14.2 UN proper shipping name

Land transport (ADR/RID)

AMINE, FLÜSSIG, ÄTZEND, N.A.G (enthält METHYLENOXID, POLYMER MIT BENZENAMIN, HYDRIERT, 1,3-BENZENDIMETHANAMIN)

Sea transport (IMDG)

Amines, liquid, corrosive, n.o.s. (contain METHYLENEOXIDE, POLYMER WITH BENZENAMINE, HYDROGENATED, 1,3-BENZENEDIMETHANAMINE, AMINES OR POLYAMINES, LIQUID, CORROSIVE)

Air transport (ICAO-TI / IATA-DGR)

Amines, liquid, corrosive, n.o.s. (contain METHYLENEOXIDE, POLYMER WITH BENZENAMINE, HYDROGENATED, 1,3-BENZENEDIMETHANAMINE)

14.3 Transport hazard class(es)

Land transport (ADR/RID)	8
Sea transport (IMDG)	8
Air transport (ICAO-TI / IATA-DGR)	8

14.4 Packing group

Land transport (ADR/RID)	II
Sea transport (IMDG)	II
Air transport (ICAO-TI / IATA-DGR)	II

14.5 Environmental hazards

Land transport (ADR/RID)	ENVIRONMENTALLY HAZARDOUS
Sea transport (IMDG)	Marine pollutant / AMINE ODER POLYAMINE, FLÜSSIG, ÄTZEND

14.6 Special precautions for user

Transport always in closed, upright and safe containers. Make sure that persons transporting the product know what to do in case of an accident or leakage.
Advices on safe handling: see parts 6 - 8

14.7 Maritime transport in bulk according to IMO instruments

No transport as bulk according to IBC Code.

14.8 Additional information

Land transport (ADR/RID)

Tunnel restriction code: E
Limited quantity (LQ): 1 ltr
Hazard identification number (Kemler No.): 80

Sea transport (IMDG)

Segregation group: IMDG-Code segregation group 18 - Alkalis
EmS-No.: F-A, S-B
Limited quantity (LQ): 1 ltr

Air transport (ICAO-TI / IATA-DGR)

not applicable

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

EU legislation

Restrictions of occupation

Observe employment restrictions under the Maternity Protection Directive 92/85/EEC or stricter national regulations, if applicable. Observe restrictions to employment for juveniles according to the 'juvenile work protection guideline' (94/33/EC) or stricter national regulations, if applicable.

Directive 2010/75/EU on industrial emissions [Industrial Emissions Directive]

VOC value: 105 g/l

Directive 2012/18/EU on the control of major-accident hazards involving dangerous substances [Seveso-III-Directive]
Hazard categories / Named dangerous substances

E2 Hazardous to the aquatic environment in Category Chronic 2
Quantity 1: 200t; Quantity 2: 500t

National regulations

Observe in addition any national regulations!

15.2 Chemical Safety Assessment

Chemical safety assessments for substances in this mixture were not carried out.

SECTION 16: Other information

List of relevant hazard statements and/or precautionary statements from sections 2 to 15

H226	Flammable liquid and vapour.
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H311	Toxic in contact with skin.
H312	Harmful in contact with skin.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H361	Suspected of damaging fertility or the unborn child (state specific effect if known) (state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard).
H361d	Suspected of damaging the unborn child.
H372	Causes damage to organs (or state all organs affected, if known) through prolonged or repeated exposure (state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard).
H373	May cause damage to organs (or state all organs affected, if known) through prolonged or repeated exposure (state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard).
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

Classification for mixtures and used evaluation method according to regulation (EC) No 1272/2008 [CLP]

Acute Tox. 4 oral	Calculation method.
Eye Dam. 1	Calculation method.
Repr. 2	Calculation method.
STOT RE 2	Calculation method.
Skin Corr. 1B	Calculation method.
Skin Sens. 1	Calculation method.
Aquatic Chronic 2	Calculation method.

Abbreviations and acronyms

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road
OEL: Occupational Exposure Limit Value
BLV: Biological limit values
CAS: Chemical Abstracts Service
CLP: Classification, Labelling and Packaging
CMR: Carcinogenic, Mutagenic and Reprotoxic
DIN: German Institute for Standardization / German industrial standard
DNEL: Derived No-Effect Level
EAKV: European Waste Catalogue Directive
EC: Effective Concentration
EC: European Community
EN: European Standard
IATA-DGR: International Air Transport Association – Dangerous Goods Regulations
IBC Code: International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk
ICAO-TI: International Civil Aviation Organization Technical Instructions for the Safe Transport of Dangerous Goods by Air
IMDG Code: International Maritime Code for Dangerous Goods
ISO: International Organization for Standardization
LC: Lethal Concentration
LD: Lethal Dose
:
MARPOL: Maritime Pollution: The International Convention for the Prevention of Pollution from Ships
OECD: Organisation for Economic Cooperation and Development
PBT: persistent, bioaccumulative, toxic
PNEC: Predicted No Effect Concentration
RID: Regulations concerning the International Carriage of Dangerous Goods by Rail
UN: United Nations
VOC: Volatile Organic Compounds
vPvB: very persistent and very bioaccumulative

Indication of changes

* Data changed compared with the previous version.