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

1.1 Product identifier

Trade name/designation

WEBAC 4204 Comp. B
Epoxy Resin

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
22885 Barsbüttel
Germany

Telephone: +49 40 670570
Telefax: +49 40 6703227

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 3; Hazardous to the aquatic environment; H412 Harmful 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

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.
H412	Harmful to aquatic life with long lasting effects.

Precautionary statements

P260	Do not breathe vapours.
P280	Wear protective gloves and eye protection/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.

Hazard components for labelling

2-piperazin-1-ylethylamine
Amines, polyethylenepoly-, triethylenetetramine fraction
Hydrocarbons, C9-unsaturated, polymerized
Methyleneoxide, polymer with benzenamine, hydrogenated
* N,N'-bis(3-aminopropyl)ethylenediamine
* N-(2-aminoethyl)-1,3-propanediamine
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-%
*	90640-67-8 292-588-2 -	**Amines, polyethylenepoly-, triethylenetetramine fraction** 01-2119487919-13-xxxx Acute Tox. 4 H302 / Acute Tox. 4 H312 / Skin Corr. 1B H314 / Skin Sens. 1 H317 / Eye Dam. 1 H318 / Aquatic Chronic 3 H412 / EUH071 ATE (dermal): 1,465 mg/kg ATE (oral): 1,716 mg/kg	25,0 <= 50,0
*	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	10,0 <= 25,0
*	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	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
*	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
*	9046-10-0 618-561-0 -	**Poly(oxypropylene)diamine** 01-2119557899-12-xxxx Skin Corr. 1C H314 / Eye Dam. 1 H318 / Aquatic Chronic 3 H412 ATE (dermal): 2,980 mg/kg ATE (oral): 2,885 mg/kg	2,50 <= 10,0

*	71302-83-5 701-299-7 -	**Hydrocarbons, C9-unsaturated, polymerized** 01-2119555292-40-xxxx Asp. Tox. 1 H304 / Skin Sens. 1A H317 / Aquatic Chronic 3 H412	2,50 <= 10,0
*	10563-26-5 234-147-9 -	**N,N'-bis(3-aminopropyl)ethylenediamine** 01-2119976331-37-xxxx Acute Tox. 4 H302 / Acute Tox. 3 H311 / Skin Corr. 1B H314 / Skin Sens. 1A H317 / Eye Dam. 1 H318 ATE (oral): 1,200 mg/kg ATE (dermal): 190 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	2,50 <= 10,0
*	13531-52-7 236-882-0 -	**N-(2-aminoethyl)-1,3-propanediamine** 01-2120097861-45-xxxx Acute Tox. 4 H302 / Acute Tox. 2 H310 / Skin Corr. 1A H314 / Skin Sens. 1A H317 / Eye Dam. 1 H318 ATE (oral): 654 mg/kg ATE (dermal): 184 mg/kg	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

Further information on storage conditions

* Store in a well-ventilated and dry room at temperatures between 5 °C and 30 °C.

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
*	90640-67-8	Amines, polyethylenepoly-, triethylenetetramine fraction	DNEL acute inhalative (systemic)	0.54 mg/m³
*	71302-83-5	Hydrocarbons, C9-unsaturated, polymerized	DNEL long-term inhalative (systemic)	3.3 mg/m³
*	71302-83-5	Hydrocarbons, C9-unsaturated, polymerized	DNEL long-term dermal (systemic)	4.7 mg/kg
*	10563-26-5	N,N'-bis(3-aminopropyl)ethylenediamine	DNEL long-term inhalative (systemic)	1.5 mg/m³
*	10563-26-5	N,N'-bis(3-aminopropyl)ethylenediamine	DNEL long-term dermal (systemic)	0.42 mg/kg bw/day
*	13531-52-7	N-(2-aminoethyl)-1,3-propanediamine	DNEL long-term inhalative (systemic)	0.62 mg/m³
*	13531-52-7	N-(2-aminoethyl)-1,3-propanediamine	DNEL long-term dermal (systemic)	0.18 mg/kg bw/day
*	9046-10-0	Poly(oxypropylene)diamine	DNEL long-term inhalative (systemic)	1.36 mg/m³
*	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

PNEC

	CAS No.	Substance name	PNEC type	PNEC Value
*	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
*	71302-83-5	Hydrocarbons, C9-unsaturated, polymerized	PNEC aquatic, freshwater	0.026 mg/L
*	71302-83-5	Hydrocarbons, C9-unsaturated, polymerized	PNEC aquatic, intermittent release	0.54 mg/L
*	71302-83-5	Hydrocarbons, C9-unsaturated, polymerized	PNEC aquatic, marine water	0.003 mg/L
*	71302-83-5	Hydrocarbons, C9-unsaturated, polymerized	PNEC sewage treatment plant (STP)	0.26 mg/L
	71302-83-5	Hydrocarbons, C9-unsaturated, polymerized	PNEC sediment, marine water	196 mg/kg
*	71302-83-5	Hydrocarbons, C9-unsaturated, polymerized	PNEC sediment, freshwater	1,960 mg/kg
	71302-83-5	Hydrocarbons, C9-unsaturated, polymerized	PNEC soil, freshwater	391 mg/kg
*	10563-26-5	N,N'-bis(3-aminopropyl)ethylenediamine	PNEC aquatic, freshwater	0.144 mg/L
*	10563-26-5	N,N'-bis(3-aminopropyl)ethylenediamine	PNEC aquatic, intermittent release	0.43 mg/L
*	10563-26-5	N,N'-bis(3-aminopropyl)ethylenediamine	PNEC aquatic, marine water	0.014 mg/L
*	10563-26-5	N,N'-bis(3-aminopropyl)ethylenediamine	PNEC sewage treatment plant (STP)	3.4 mg/L
*	10563-26-5	N,N'-bis(3-aminopropyl)ethylenediamine	PNEC sediment, freshwater	45.3 mg/kg sediment dw
*	10563-26-5	N,N'-bis(3-aminopropyl)ethylenediamine	PNEC sediment, marine water	4.53 mg/kg sediment dw
*	10563-26-5	N,N'-bis(3-aminopropyl)ethylenediamine	PNEC soil	8.96 mg/kg soil dw
*	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

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	yellow
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	0.166 mbar
Relative vapour density	not applicable
Density at 20 °C	1.0 kg/l
Water solubility at 20°C	partially soluble
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) 1,033.865 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

* **Amines, polyethylenepoly-, triethylenetetramine fraction**
LD50: dermal (Rabbit): 1,465 mg/kg

* LD50: oral (Rat): 1,716 mg/kg

* **Methyleneoxide, polymer with benzenamine, hydrogenated**
LD50: dermal (Rabbit): > 2,000 mg/kg

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

* **N,N'-bis(3-aminopropyl)ethylenediamine**
LD50: oral (Rat): 1,200 mg/kg

* LD50: dermal (Rabbit): 190 mg/kg

* **N-(2-aminoethyl)-1,3-propanediamine**
LD50: oral (Rat): 654 mg/kg

* LD50: dermal (Rabbit): 184 mg/kg

* **Poly(oxypropylene)diamine**
LD50: dermal (Rabbit): 2,980 mg/kg

* LD50: oral (Rat): 2,885 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

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.

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

Harmful to aquatic life with long lasting effects.

Algae toxicity

* **2-piperazin-1-ylethylamine**
ErC50: (Pseudokirchneriella subcapitata): > 1,000 mg/L (72 h)

* **Amines, polyethylenepoly-, triethylenetetramine fraction**
EC50 (Scenedesmus subspicatus): 3.7 mg/L (48 h)

* ErC50: (Pseudokirchneriella subcapitata): 20 mg/L (72 h)

* **Poly(oxypropylene)diamine**
ErC50: (Pseudokirchneriella subcapitata): 15 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-piperazin-1-ylethylamine
EC50 (Daphnia magna (Big water flea)): = 58 mg/L (48 h)

* **Amines, polyethylenepoly-, triethylenetetramine fraction**
EC50 (Daphnia magna (Big water flea)): 31.1 mg/L (48 h)

* **Poly(oxypropylene)diamine**
EC50 (Daphnia magna (Big water flea)): 80 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)

Fish toxicity

* **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)

* **Amines, polyethylenepoly-, triethylenetetramine fraction**
LC50: (Pimephales promelas (fathead minnow)): 330 mg/L (96 h)

* **Poly(oxypropylene)diamine**
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

* Partition coefficient: n-octanol/water = -2.08 (Amines, polyethylenepoly-, triethylenetetramine fraction)

12.4 Mobility in soil

* **Hydrocarbons, C9-unsaturated, polymerized**
= 5.5

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 TRIETHYLENTETRAMIN, METHYLENOXID, POLYMER MIT BENZENAMIN, HYDRIERT)

Sea transport (IMDG)

* Amines, liquid, corrosive, n.o.s. (contains TRIETHYLENETETRAMINE, METHYLENEOXIDE, POLYMER WITH BENZENAMINE, HYDROGENATED)

Air transport (ICAO-TI / IATA-DGR)

* Amines, liquid, corrosive, n.o.s. (contains TRIETHYLENETETRAMINE, METHYLENEOXIDE, POLYMER WITH BENZENAMINE, HYDROGENATED)

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)	not applicable
Sea transport (IMDG)	not applicable

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: 140 g/l

Directive 2004/42/EC on the limitation of emissions of volatile organic compounds

VOC limit value: 2004/42/IIA(j): 500 g/l (2010)

* Maximum VOC content of the product in a ready to use condition: 604

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

Hazard categories / Named dangerous substances

This product is not classified according to Directive 2012/18/EU.

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

	H302	Harmful if swallowed.
	H304	May be fatal if swallowed and enters airways.
*	H310	Fatal in contact with skin.
	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.
	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).
	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).
	H412	Harmful to aquatic life with long lasting effects.
*	EUH071	Corrosive to the respiratory tract.

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 3	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
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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.