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

1.1. Product identifier

Trade name/designation:

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

Relevant identified uses:

Sector of uses [SU]

SU 19: Building and construction work

Uses advised against:

Sector of uses [SU]

SU 21: Consumer uses

1.3. Details of the supplier of the safety data sheet

Supplier (manufacturer/importer/only representative/downstream user/distributor):

Euroteam Bauchemie GmbH

An der Mühle 1 15345 Altlandsberg

Germany

Telephone: +49 (0) 33438 14790
Telefax: +49 (0) 33438 147929
E-mail: info@euroteam-bauchemie.de
Website: www.euroteam-bauchemie.de

E-mail (competent person): info@euroteam-bauchemie.de

1.4. Emergency telephone number

Labor, 24h: +49 (0) 162 2599220, Montag - Donnerstag 7:00 - 16:00; Freitag 7:00 - 13:00 +49 (0) 33438 1479 19 (Only available during office hours.)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

Hazard classes and hazard categories	Hazard statements	Classification pro cedure
Skin corrosion/irritation (Skin Irrit. 2)	H315: Causes skin irritation.	
Respiratory or skin sensitisation (Skin Sens. 1)	H317: May cause an allergic skin reaction.	
Serious eye damage/eye irritation (Eye Irrit. 2)	H319: Causes serious eye irritation.	
Hazardous to the aquatic environment (Aquatic Chronic 3)	H412: Harmful to aquatic life with long lasting effects.	

2.2. Label elements

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



GHS07

Exclamation mark

Signal word: Warning

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Hazard components for labelling:

methyl toluene-4-sulphonate; reaction product: bisphenol-A-(epichlorhydrin)epoxy resin (number average) molecular weight <= 700; reaction product: bisphenol-F-(epichlorhydrin)epoxy resin (number average) molecular weight <= 700; 1,6-hexanediol diglycidyl ether

hazard statements for health hazards	
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.

Hazard statements for environmental hazards	
H412	Harmful to aquatic life with long lasting effects.

Supplemental Haza	Supplemental Hazard information (EU)	
EUH205	Contains epoxy constituents. May produce an allergic reaction.	

Precautionary statements Prevention		
P261	Avoid breathing dust/fume/gas/mist/vapours/spray.	
P264	Wash hands thoroughly after handling.	
P272	Contaminated work clothing should not be allowed out of the workplace.	

Precautionary statements Response		
P333 + P313	If skin irritation or rash occurs: Get medical advice/attention.	
P337 + P313	P337 + P313 If eye irritation persists: Get medical advice/attention.	

2.3. Other hazards

No data available

SECTION 3: Composition / information on ingredients

3.2. Mixtures

Hazardous ingredients / Hazardous impurities / Stabilisers:

product identifiers	Substance name Classification according to Regulation (EC) No 1272/2008 [CLP]	Concen- tration
CAS No.: 25068-38-6 EC No.: 500-033-5 REACH No.: 01-2119456619-26-XXXX	reaction product: bisphenol-A-(epichlorhydrin)epoxy resin (number average) molecular weight <= 700 Aquatic Chronic 2, Eye Irrit. 2, Skin Irrit. 2, Skin Sens. 1 •• Warning H315-H317-H319-H411	15 - 20 %
CAS No.: 16096-31-4 EC No.: 240-260-4 REACH No.: 01-2119463471-41-XXXX	1,6-hexanediol diglycidyl ether Aquatic Chronic 3, Eye Irrit. 2, Skin Irrit. 2, Skin Sens. 1 1 H315-H317-H319-H412	1 - 5 %
CAS No.: 26142-30-3	polyoxypropylene diglycidyl ether Eye Irrit. 2, Skin Irrit. 2, Skin Sens. 1 H315-H317-H319	1 - 5
CAS No.: 80-48-8 EC No.: 201-283-5	methyl toluene-4-sulphonate Acute Tox. 4, Eye Irrit. 2, STOT SE 3, Skin Irrit. 2, Skin Sens. 1 H302-H315-H317-H319-H335	1 - 5
CAS No.: 9003-36-5 EC No.: 500-006-8 REACH No.: 01-2119454392-40-XXXX	reaction product: bisphenol-F-(epichlorhydrin)epoxy resin (number average) molecular weight <= 700 Aquatic Chronic 2, Skin Irrit. 2, Skin Sens. 1 Warning H315-H317-H411	2.5 - 5

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

SECTION 4: First aid measures

4.1. Description of first aid measures

General information:

Take off immediately all contaminated clothing and wash it before reuse.

according to Regulation (EC) No. 1907/2006 (REACH)

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Following inhalation:

In case of respiratory tract irritation, consult a physician. Apply cortisone spray at early stage.

In case of skin contact:

After contact with skin, wash immediately with plenty of water and soap.

After eye contact:

In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist. Remove contact lenses, if present and easy to do. Continue rinsing.

After ingestion:

Do NOT induce vomiting. Immediately call a doctor.

4.2. Most important symptoms and effects, both acute and delayed

No known symptoms to date.

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

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media:

alcohol resistant foam, Extinguishing powder, Carbon dioxide (CO2), Water spray jet

Unsuitable extinguishing media:

Full water jet

5.2. Special hazards arising from the substance or mixture

In case of fire may be liberated: Gases/vapours, harmful

Hazardous combustion products:

Hazardous decomposition products: Carbon dioxide (CO2), Carbon monoxide, Nitrogen oxides (NOx)

5.3. Advice for firefighters

In case of fire: Wear self-contained breathing apparatus.

5.4. Additional information

Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Personal precautions:

Provide adequate ventilation. To follow: SECTION 7: Handling and storage; Personal protection equipment: see section 8

6.1.2. For emergency responders

No data available

6.2. Environmental precautions

Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains. In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.

6.3. Methods and material for containment and cleaning up

For containment:

Take up mechanically. Disposal: see section 13

6.4. Reference to other sections

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

according to Regulation (EC) No. 1907/2006 (REACH)

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SECTION 7: Handling and storage

7.1. Precautions for safe handling

Protective measures

Advices on safe handling:

Avoid contact with eyes and skin. When using do not eat, drink or smoke.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels:

Store in a closed container.

Hints on storage assembly:

Keep away from food, drink and animal feedingstuffs.

Storage class: 10 - Combustible liquids that cannot be assigned to any of the above storage classes

Further information on storage conditions:

Keep container dry. To follow: Recommended storage temperature

7.3. Specific end use(s)

Industrial sector specific solutions:

Epoxy resin products, solvent-free, sensitising

GISCODE:

RE1

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1. Occupational exposure limit values

No data available

8.1.2. Biological limit values

No data available

8.1.3. DNEL-/PNEC-values

Substance name	DNEL value	① DNEL type② Exposure route
reaction product: bisphenol-A-(epichlorhydr in)epoxy resin (number average) molecular weight <= 700 CAS No.: 25068-38-6	12.3 mg/m ³	① DNEL worker ② inhalative, short-term, systemic, (acute)
reaction product: bisphenol-A-(epichlorhydr in)epoxy resin (number average) molecular weight <= 700 CAS No.: 25068-38-6	8.3 mg/kg	① DNEL worker ② Acute – dermal, systemic effects

Substance name	PNEC Value	① PNEC type
reaction product: bisphenol-A-(epichlorhydr in)epoxy resin (number average) molecular weight <= 700 CAS No.: 25068-38-6	0.006 mg/l	① PNEC aquatic, freshwater
reaction product: bisphenol-A-(epichlorhydr in)epoxy resin (number average) molecular weight <= 700 CAS No.: 25068-38-6	0.0006 mg/l	① PNEC aquatic, marine water

8.2. Exposure controls

8.2.1. Appropriate engineering controls

No data available

8.2.2. Personal protection equipment

Eye/face protection:

Eye glasses with side protection

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Skin protection:

Wear protective gloves. Suitable gloves type: plastic. When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits. Check leak tightness/impermeability prior to use. Use protective skin cream before handling the product. Suitable material: NBR (Nitrile rubber), FKM (fluoro rubber). Thickness of the glove material: >= 0,5 mm. Breakthrough time (maximum wearing time): >= 480 min. Breakthrough times and swelling properties of the material must be taken into consideration. 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. Wear suitable protective clothing.

Respiratory protection:

Respiratory protection necessary at: exceeding exposure limit values. Suitable respiratory protection apparatus: Half-face mask or quarter facepiece: maximum use concentration for substances with exposure limits: P1 filter: up to a max. of 4 times the exposure limit. P2 filter: up to a max. of 10 times the exposure limit. P3 filter: up to a max. of 30 times the expo.

Other protection measures:

Keep away from food, drink and animal feedingstuffs. Take off immediately all contaminated clothing and wash it before reuse. Wash hands before breaks and after work. Wear suitable protective clothing.

8.2.3. Environmental exposure controls

No data available

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance

Physical state: solid Colour: grey

Odour: characteristic

Safety relevant basis data

parameter		at °C	Method	Remark
pH	not determined			
Melting point	not determined			
Freezing point	not determined			
Initial boiling point and boiling range	> 200 °C			
Decomposition temperature	not determined			
Flash point	> 100 °C			
Evaporation rate	not determined			
Auto-ignition temperature	not determined			
Upper/lower flammability or explosive limits	not determined			
Vapour pressure	not applicable			
Vapour density	not determined			
Density	≈ 2.4 g/cm³	23 °C		
Bulk density	not determined			
Water solubility	not determined			
Partition coefficient: n-octanol/ water	not determined			
Dynamic viscosity	not determined			
Kinematic viscosity	not determined			

9.2. Other information

No data available

SECTION 10: Stability and reactivity

10.1. Reactivity

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10.2. Chemical stability

No information available.

10.3. Possibility of hazardous reactions

No information available.

10.4. Conditions to avoid

none

10.5. Incompatible materials

Incompatible materials: Strong acid, Alkalis, Oxidising agent

10.6. Hazardous decomposition products

Carbon dioxide, Nitrogen oxides (NOx), Carbon monoxide

SECTION 11: Toxicological information

11.1. Information on toxicological effects

CAS No.	Substance name	Toxicological information
25068-38-6	reaction product: bisphenol-A- (epichlorhydrin)epoxy resin (number average) molecular weight <= 700	LD ₅₀ oral: 15,000 mg/kg (Rat)
	, and the second	LD ₅₀ dermal: 23,000 mg/kg (Rabbit)
9003-36-5	reaction product: bisphenol-F- (epichlorhydrin)epoxy resin (number average) molecular weight <= 700	LD ₅₀ oral: >10,000 mg/kg (Rat) LD ₅₀ dermal: >2,000 mg/kg (Rat)

Skin corrosion/irritation:

Irritating to skin.

Serious eye damage/irritation:

Irritating to eyes.

Respiratory or skin sensitisation:

Sensitisation to the respiratory tract. Skin sensitisation.

Additional information:

The product is skin resorptive.

SECTION 12: Ecological information

12.1. Toxicity

CAS No.	Substance name	Toxicological information
25068-38-6	reaction product: bisphenol-A-	LC ₅₀ : 3.6 mg/l 4 d (Leuciscus idus (golden orfe))
	(epichlorhydrin)epoxy resin (number average) molecular weight <= 700	ErC₅₀: 220 mg/l 3 d
		EC₅₀: 2.8 mg/l 2 d
9003-36-5	reaction product: bisphenol-F-	EC₅₀: 2.54 mg/l 4 d
(epichlorhydrin)epoxy resin (number average) molecular weight <= 700	LC₅₀: 2.55 mg/l 2 d	
molecular weight <= 700		LC₅₀: 1.8 mg/l 3 d

Assessment/classification:

No information available.

Additional ecotoxicological information:

Do not allow to enter into surface water or drains.

12.2. Persistence and degradability

Additional information:

according to Regulation (EC) No. 1907/2006 (REACH)

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12.3. Bioaccumulative potential

CAS No.	Substance name	Log K _{OW}	Bioconcentration factor (BCF)
	reaction product: bisphenol-F-(epichlorhydri n)epoxy resin (number average) molecular weight <= 700	3.6	

Accumulation / Evaluation:

No information available.

12.4. Mobility in soil

No information available.

12.5. Results of PBT and vPvB assessment

CAS No.	Substance name	Results of PBT and vPvB assessment
25068-38-6	reaction product: bisphenol-A- (epichlorhydrin)epoxy resin (number average) molecular weight <= 700	_
16096-31-4	1,6-hexanediol diglycidyl ether	_
9003-36-5	reaction product: bisphenol-F- (epichlorhydrin)epoxy resin (number average) molecular weight <= 700	_

No information available.

12.6. Other adverse effects

No information available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Dispose of waste according to applicable legislation.

13.1.1. Product/Packaging disposal

Waste codes/waste designations according to EWC/AVV

Waste code product:

08 01 12 waste paint and varnish other than those mentioned in 08 01 11

SECTION 14: Transport information

No dangerous good in sense of these transport regulations.

Land transport (ADR/RID)	Inland waterway craft (ADN)	Sea transport (IMDG)	Air transport (ICAO- TI / IATA-DGR)
14.1. UN-No.	_		-
No dangerous good in sense of these transport regulations.	No dangerous good in sense of these transport regulations.	No dangerous good in sense of these transport regulations.	No dangerous good in sense of these transport regulations.
14.2. UN proper shi	ipping name		
No dangerous good in sense of these transport regulations.	No dangerous good in sense of these transport regulations.	No dangerous good in sense of these transport regulations.	No dangerous good in sense of these transport regulations.
14.3. Transport haz	ard class(es)		
not relevant			_
14.4. Packing group	•		
not relevant			_
14.5. Environmenta	ıl hazards		
not relevant			

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-	Inland waterway craft (ADN)	Sea transport (IMDG)	Air transport (ICAO- TI / IATA-DGR)
14.6. Special precautions for user			
not relevant			

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code not relevant

SECTION 15: Regulatory information

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

15.1.1. EU legislation

No data available

15.1.2. National regulations

[DE] National regulations

Water hazard class (WGK)

WGK:

3 - stark wassergefährdend

Berufsgenossenschaftliche Vorschriften (BGV)

Berufsgenossenschaftliche Vorschriften (BGV): D25 Berufsgenossenschaftliche Informationen (BGI): 595 Berufsgenossenschaftliche Regeln (BGR): 227

15.2. Chemical Safety Assessment

For this substance a chemical safety assessment has not been carried out.

SECTION 16: Other information

16.1. Indication of changes

No data available

16.2. Abbreviations and acronyms

No data available

16.3. Key literature references and sources for data

No data available

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

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

Hazard classes and hazard categories	Hazard statements	Classification pro cedure
Skin corrosion/irritation (Skin Irrit. 2)	H315: Causes skin irritation.	
Respiratory or skin sensitisation (Skin Sens. 1)	H317: May cause an allergic skin reaction.	
Serious eye damage/eye irritation (Eye Irrit. 2)	H319: Causes serious eye irritation.	
Hazardous to the aquatic environment (Aquatic Chronic 3)	H412: Harmful to aquatic life with long lasting effects.	

16.5. Relevant R-, H- and EUH-phrases (Number and full text)

Hazard statements	
H302	Harmful if swallowed.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.

according to Regulation (EC) No. 1907/2006 (REACH)

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

16.6. Training advice

No data available

16.7. Additional information

No data available

according to Regulation (EC) No. 1907/2006 (REACH)

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

1.1. Product identifier

Trade name/designation:

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

Relevant identified uses:

Sector of uses [SU]

SU 19: Building and construction work

Uses advised against:

Sector of uses [SU]

SU 21: Consumer uses

1.3. Details of the supplier of the safety data sheet

Supplier (manufacturer/importer/only representative/downstream user/distributor):

Euroteam Bauchemie GmbH

An der Mühle 1 15345 Altlandsberg

Germany

Telephone: +49 (0) 33438 14790
Telefax: +49 (0) 33438 147929
E-mail: info@euroteam-bauchemie.de
Website: www.euroteam-bauchemie.de

E-mail (competent person): info@euroteam-bauchemie.de

1.4. Emergency telephone number

Labor, 24h: +49 (0) 162 2599220, Montag - Donnerstag 7:00 - 16:00; Freitag 7:00 - 13:00 +49 (0) 33438 1479 19 (Only available during office hours.)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

Hazard classes and hazard categories	Hazard statements	Classification pro cedure
Acute toxicity (oral) (Acute Tox. 4)	H302: Harmful if swallowed.	
Skin corrosion/irritation (Skin Corr. 1B)	H314: Causes severe skin burns and eye damage.	
Respiratory or skin sensitisation (Skin Sens. 1)	H317: May cause an allergic skin reaction.	
Hazardous to the aquatic environment (Aquatic Chronic 2)	H411: Toxic to aquatic life with long lasting effects.	

2.2. Label elements

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







GHS09 Environment



GHS07 Exclamation mark

Signal word: Danger

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Hazard components for labelling:

Phenol, styrenated; (Z)-octadec-9-enylamine; 2-piperazin-1-ylethylamine; trimethylhexane-1,6-diamine; Amines, coco alkyl

hazard statements for health hazards	
H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H317	May cause an allergic skin reaction.

Hazard statements for environmental hazards	
H411	Toxic to aquatic life with long lasting effects.

Precautionary statements Prevention	
P260	Do not breathe dust/fume/gas/mist/vapours/spray.
P264	Wash thoroughly after handling.

Precautionary statements Response	
P310	Immediately call a POISON CENTER/doctor/
P321 Specific treatment (see on this label).	

Precautionary statements Storage	
P405	Store locked up.

Precautionary stat	ements Disposal
P501	Dispose of contents/container to

2.3. Other hazards

No data available

SECTION 3: Composition / information on ingredients

3.2. Mixtures

Hazardous ingredients / Hazardous impurities / Stabilisers:

product identifiers	Substance name Classification according to Regulation (EC) No 1272/2008 [CLP]	Concen- tration
CAS No.: 61788-44-1 EC No.: 262-975-0 REACH No.: 01-2119980970-27-XXXX	Phenol, styrenated Aquatic Chronic 2, Skin Irrit. 2, Skin Sens. 1	25 - 30 %
CAS No.: 112-90-3 EC No.: 204-015-5 REACH No.: 01-2119473797-19-XXXX	(Z)-octadec-9-enylamine The substance is classified as not hazardous according to regulation (EC) No 1272/2008 [CLP].	10 - 15 %
CAS No.: 140-31-8 EC No.: 205-411-0 REACH No.: 01-2119471486-30-XXXX	2-piperazin-1-ylethylamine Acute Tox. 4, Aquatic Chronic 3, Skin Corr. 1B, Skin Sens. 1 Danger H302-H312-H314-H317-H412	5 - 10 %
CAS No.: 25620-58-0 EC No.: 247-134-8	trimethylhexane-1,6-diamine Acute Tox. 4, Skin Corr. 1B, Skin Sens. 1 H302-H314-H317	5 - 10 %
CAS No.: 61788-46-3 EC No.: 262-977-1 REACH No.: 01-2119473798-17-XXXX	Amines, coco alkyl Acute Tox. 4, Aquatic Acute 1, Aquatic Chronic 1, Asp. Tox. 1, STOT RE 2, STOT SE 3, Skin Corr. 1A H302-H304-H314-H335-H373-H400-H410	5 - 10 %
CAS No.: 100-51-6 EC No.: 202-859-9 REACH No.: 01-2119492630-38-XXXX	benzyl alcohol Acute Tox. 4 Warning H302-H332	1 - 5

according to Regulation (EC) No. 1907/2006 (REACH)

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product identifiers	Substance name Classification according to Regulation (EC) No 1272/2008 [CLP]	Concen- tration
CAS No.: 90-72-2 EC No.: 202-013-9 REACH No.: 01-2119560597-27-XXXX	2,4,6-tris(dimethylaminomethyl)phenol The substance is classified as not hazardous according to regulation (EC) No 1272/2008 [CLP].	1 - 5 %
CAS No.: 108-10-1 EC No.: 203-550-1	4-methylpentan-2-one Acute Tox. 4, Eye Irrit. 2, Flam. Liq. 2, STOT SE 3 The state of the state	1 - 5 %

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

SECTION 4: First aid measures

4.1. Description of first aid measures

General information:

Take off immediately all contaminated clothing.

Following inhalation:

Remove casualty to fresh air and keep warm and at rest. If breathing is irregular or stopped, administer artificial respiration. In case of respiratory tract irritation, consult a physician. Apply cortisone spray at early stage. If unconscious place in recovery position and seek medical advice.

In case of skin contact:

Wash immediately with: Water. For cleaning up: Polyethylene glycol 400 Subsequently wash off with: Water. Call a physician immediately.

After eye contact:

In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist. Call a physician immediately.

After ingestion:

Do NOT induce vomiting. Rinse mouth immediately and drink plenty of water.

Self-protection of the first aider:

First aider: Pay attention to self-protection!

4.2. Most important symptoms and effects, both acute and delayed

No known symptoms to date.

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

none

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media:

alcohol resistant foam, Extinguishing powder, Carbon dioxide (CO2), Water spray jet

Unsuitable extinguishing media:

Full water jet

5.2. Special hazards arising from the substance or mixture

Harmful: danger of serious damage to health by prolonged exposure through inhalation.

Hazardous combustion products:

In case of fire may be liberated: Carbon dioxide (CO2), Nitrogen oxides (NOx), Carbon monoxide

5.3. Advice for firefighters

In case of fire: Wear self-contained breathing apparatus.

5.4. Additional information

Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

according to Regulation (EC) No. 1907/2006 (REACH)

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SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Personal precautions:

Provide adequate ventilation. Avoid: Inhalation of vapours or spray/mists. Safe handling: see section 7, Personal protection equipment: see section 8

6.1.2. For emergency responders

No data available

6.2. Environmental precautions

Do not allow to enter into surface water or drains. In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.

6.3. Methods and material for containment and cleaning up

For cleaning up:

Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents). Treat the recovered material as prescribed in the section on waste disposal.

6.4. Reference to other sections

No data available

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Protective measures

Advices on safe handling:

Avoid: Skin contact, Eye contact, Inhalation of vapours or spray/mists. When using do not eat, drink or smoke.

Advices on general occupational hygiene

Wash hands before breaks and after work. Apply skin care products after work. Use protective skin cream before handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures and storage conditions:

Keep container tightly closed.

Requirements for storage rooms and vessels:

Keep container tightly closed and dry. To follow: Recommended storage temperature

Hints on storage assembly:

Keep away from food, drink and animal feedingstuffs.

Storage class: 8A - Combustible corrosive substances

7.3. Specific end use(s)

Industrial sector specific solutions:

Epoxy resin products, solvent-free, sensitising

GISCODE:

RF1

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SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1. Occupational exposure limit values

Limit value type (country of origin)	Substance name	 long-term occupational exposure limit value short-term occupational exposure limit value Instantaneous value Monitoring and observation processes Remark
TRGS 900 (DE)	benzyl alcohol CAS No.: 100-51-6	① 5 ppm (22 mg/m³) ② 10 ppm ③ 44 ppm
TRGS 900 (DE)	4-methylpentan-2-one CAS No.: 108-10-1	 20 ppm (83 mg/m³) 40 ppm (166 mg/m³) (kann über die Haut aufgenommen werden)
IOELV (EU)	4-methylpentan-2-one CAS No.: 108-10-1	① 20 ppm (83 mg/m³) ② 50 ppm (208 mg/m³)

8.1.2. Biological limit values

Limit value type (country of origin)	Substance name	Limit value	 parameter Test material Time of sampling Remark
TRGS 903 (DE)	4-methylpentan-2-one CAS No.: 108-10-1		① 4-Methylpentan-2-on② Urin③ Expositionsende bzw. Schichtende

8.1.3. DNEL-/PNEC-values

Substance name	DNEL value	① DNEL type
		② Exposure route
2-piperazin-1-ylethylamine CAS No.: 140-31-8	21.4 mg/m ³	① DNEL worker ② inhalative, short-term, systemic, (acute)
2-piperazin-1-ylethylamine CAS No.: 140-31-8	20 mg/kg	DNEL worker Acute – dermal, systemic effects

Substance name	PNEC Value	① PNEC type
2-piperazin-1-ylethylamine CAS No.: 140-31-8	0.058 mg/l	① PNEC aquatic, freshwater
2-piperazin-1-ylethylamine CAS No.: 140-31-8	0.0058 mg/l	① PNEC aquatic, marine water

8.2. Exposure controls

8.2.1. Appropriate engineering controls

No data available

8.2.2. Personal protection equipment

Eye/face protection:

Eye glasses with side protection

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Skin protection:

Wear protective gloves. Suitable gloves type: plastic. When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits. Check leak tightness/ impermeability prior to use. Use protective skin cream before handling the product. Suitable material: NBR (Nitrile rubber), FKM (fluoro rubber). Thickness of the glove material: >= 0,5 mm. Breakthrough time (maximum wearing time): >= 480 min. Breakthrough times and swelling properties of the material must be taken into consideration. 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. Wear suitable protective clothing.

Respiratory protection:

Respiratory protection necessary at: exceeding exposure limit values. Suitable respiratory protection apparatus: Half-face mask or quarter facepiece: maximum use concentration for substances with exposure limits: P1 filter: up to a max. of 4 times the exposure limit. P2 filter: up to a max. of 10 times the exposure limit. P3 filter: up to a max. of 30 times the expo.

Other protection measures:

Keep away from food, drink and animal feedingstuffs. Take off immediately all contaminated clothing and wash it before reuse. Wear suitable protective clothing. Wash hands before breaks and after work.

8.2.3. Environmental exposure controls

No data available

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance

Physical state: Liquid Colour: yellow

Odour: Amines

Safety relevant basis data

parameter		at °C	Method	Remark
рН	not determined			
Melting point	not determined			
Freezing point	not determined			
Initial boiling point and boiling range	> 200 °C			
Decomposition temperature	not determined			
Flash point	> 100 °C			
Evaporation rate	not determined			
Auto-ignition temperature	not determined			
Upper/lower flammability or explosive limits	not determined			
Vapour pressure	< 1 hPa	50 °C		
Vapour density	not determined			
Density	≈ 1 g/cm³	23 °C		
Bulk density	not determined			
Water solubility	not determined			
Partition coefficient: n-octanol/ water	not determined			
Dynamic viscosity	not determined			
Kinematic viscosity	not determined			
flow time	> 200 s	23 °C		

9.2. Other information

No data available

SECTION 10: Stability and reactivity

10.1. Reactivity

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10.2. Chemical stability

No information available.

10.3. Possibility of hazardous reactions

No information available.

10.4. Conditions to avoid

none

10.5. Incompatible materials

Incompatible materials: Strong acid, Alkalis, Oxidising agent

10.6. Hazardous decomposition products

Nitrogen oxides (NOx), Carbon dioxide (CO2), Carbon monoxide

SECTION 11: Toxicological information

11.1. Information on toxicological effects

CAS No.	Substance name	Toxicological information	
140-31-8	2-piperazin-1-ylethylamine	LD ₅₀ oral: 2,110 mg/kg (Rat) LD ₅₀ dermal: 867 mg/kg (Rabbit)	
61788-44-1	Phenol, styrenated	LD ₅₀ oral: >2,000 mg/kg (Rat) LD ₅₀ dermal: >2,000 mg/kg (Rat)	
112-90-3	(Z)-octadec-9-enylamine	LD₅₀ oral: 200 – 2,000 mg/kg (Rat)	
25620-58-0	trimethylhexane-1,6-diamine	LD₅₀ oral: 910 mg/kg (Rat)	
61788-46-3	Amines, coco alkyl	LD ₅₀ oral: 1,300 mg/kg (Rat)	
100-51-6	benzyl alcohol	LD ₅₀ oral: 1,230 mg/kg (Rat) LD ₅₀ dermal: 2,000 mg/kg (Rabbit) LC ₅₀ Acute inhalation toxicity (gas): 4,178 ppmV 4 h (Rat)	
90-72-2	2,4,6-tris(dimethylaminomethyl)phenol	LD ₅₀ oral: 2,169 mg/kg (Rat) LD ₅₀ dermal: 1,280 mg/kg	

Skin corrosion/irritation:

corrosive

Serious eye damage/irritation:

Corrosive

Additional information:

Skin corrosion/irritation, Causes serious eye damage. The product is skin resorptive. Sensitising. Harmful if swallowed. IF INHALED: Do not breathe gas/vapour. Adverse human health effects and symptoms: Dizziness, Headache, Nausea.

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SECTION 12: Ecological information

12.1. Toxicity

CAS No.	Substance name	Toxicological information
140-31-8	2-piperazin-1-ylethylamine	LC ₅₀ : 2,190 mg/l 4 d (Pimephales promelas (fath ead minnow)) OECD 203 EC ₅₀ : 58 mg/l 2 d (Daphnia magna (Big water flea)) OECD 202 ErC ₅₀ : >1,000 mg/l 3 d (Pseudokirchneriella sub capitata) OECD 201 EC ₅₀ : 494 mg/l 2 d (Selenastrum capricornutum) LC ₅₀ : 368 mg/l 4 d (Poecilia reticulata (Guppy))
61788-44-1	Phenol, styrenated	LC ₅₀ : 14.8 mg/l 4 d (Brachydanio rerio (zebrafish)) OECD 203 EC ₅₀ : >1 - 10 mg/l 2 d (Daphnia magna (Big water flea)) OECD 202 EC ₅₀ : 3.14 mg/l 3 d (Scenedesmus subspicatus) OECD 201 NOEC: 1.9 mg/l 12 d (Oryzias latipes (Ricefish)) NOEC: 0.2 mg/l 21 d (Daphnia magna (Big water flea))
112-90-3	(Z)-octadec-9-enylamine	EC ₅₀ : 0.1 - 1 mg/l 2 d EC ₅₀ : 0.1 - 1 mg/l 3 d LC ₅₀ : 0.11 mg/l 4 d
25620-58-0	trimethylhexane-1,6-diamine	EC ₅₀ : 31.5 mg/l (Daphnia magna (Big water flea)) EC ₅₀ : 29.5 mg/l 3 d (Scenedesmus subspicatus)
61788-46-3	Amines, coco alkyl	EC₅₀: 0.045 mg/l 2 d
100-51-6	benzyl alcohol	LC ₅₀ : 460 mg/l 4 d (Pimephales promelas (fathe ad minnow)) EC ₅₀ : 400 mg/l (Daphnia magna (Big water flea)) EC ₅₀ : 640 mg/l 4 d (Scenedesmus subspicatus) LC ₅₀ : 27 mg/l 4 d (Lepomis macrochirus (Bluegi II))

Aquatic toxicity:

No information available.

Additional ecotoxicological information:

No information available.

12.2. Persistence and degradability

CAS No.	Substance name	Biodegradation	Remark
140-31-8	2-piperazin-1-ylethylamine	No	Biodegradation: 0 %, Test duration: 28 d, Method: OECD F
61788-44-1	Phenol, styrenated	No	Biodegradation: 4 %, Method: 310

Additional information:

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12.3. Bioaccumulative potential

CAS No.	Substance name	Log K _{OW}	Bioconcentration factor (BCF)
140-31-8	2-piperazin-1-ylethylamine	-1.48	
61788-44-1	Phenol, styrenated	4	
100-51-6	benzyl alcohol	1.05	

Accumulation / Evaluation:

No information available.

12.4. Mobility in soil

No information available.

12.5. Results of PBT and vPvB assessment

CAS No.	Substance name	Results of PBT and vPvB assessment
140-31-8	2-piperazin-1-ylethylamine	_
61788-44-1	Phenol, styrenated	_
112-90-3	(Z)-octadec-9-enylamine	_
25620-58-0	trimethylhexane-1,6-diamine	_
61788-46-3	Amines, coco alkyl	_
100-51-6	benzyl alcohol	_
90-72-2	2,4,6-tris(dimethylaminomethyl)phenol	_

No information available.

12.6. Other adverse effects

Do not allow to enter into surface water or drains.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Dispose of waste according to applicable legislation.

13.1.1. Product/Packaging disposal

Waste codes/waste designations according to EWC/AVV

Waste code product:

08 01 11 * Waste paint and varnish containing organic solvents or other dangerous substances

SECTION 14: Transport information

Land transport (ADR/RID)	Inland waterway craft (ADN)	Sea transport (IMDG)	Air transport (ICAO- TI / IATA-DGR)
14.1. UN-No.			
UN 2735	UN 2735	UN 2735	UN 2735
14.2. UN proper shi	pping name		
POLYAMINES, LIQUID, CORROSIVE, N.O.S. ((Z)-octadec-9-enylami ne , 2-piperazin-1-yleth ylamine)			
14.3. Transport haz	ard class(es)		_
8		8	8

^{*:} Evidence for disposal must be provided.

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Land transport (ADR/ RID)	Inland waterway craft (ADN)	Sea transport (IMDG)	Air transport (ICAO- TI / IATA-DGR)
14.4. Packing group)		
II		II	II
14.5. Environmenta	l hazards		
No	-	No	No
14.6. Special preca	utions for user		
Special provisions: E	Special provisions: Excepted Quantities:	Special provisions: E	Special provisions: E
Limited quantity (LQ): Limited quantity (LQ) 22	Classification code: - Remark:	Limited quantity (LQ): Limited quantity (LQ) 1 L	Excepted Quantities: Remark:
Excepted Quantities:		Excepted Quantities:	
Hazard identificati on number (Kemler No.): 80		EmS-No.: F-A, ; S-B Remark:	
Classification code: C7			
Remark:			

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code No data available

SECTION 15: Regulatory information

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

15.1.1. EU legislation

No data available

15.1.2. National regulations

[DE] National regulations

Water hazard class (WGK)

WGK:

3 - stark wassergefährdend

Berufsgenossenschaftliche Vorschriften (BGV)

Berufsgenossenschaftliche Vorschriften (BGV): D 25 Berufsgenossenschaftliche Informationen (BGI): 595Berufsgenossenschaftliche Regeln (BGR): 227

15.2. Chemical Safety Assessment

For this substance a chemical safety assessment has not been carried out.

SECTION 16: Other information

16.1. Indication of changes

No data available

16.2. Abbreviations and acronyms

No data available

16.3. Key literature references and sources for data

No data available

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

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

Hazard classes and hazard categories	Hazard statements	Classification pro cedure
Acute toxicity (oral) (Acute Tox. 4)	H302: Harmful if swallowed.	
Skin corrosion/irritation (Skin Corr. 1B)	H314: Causes severe skin burns and eye damage.	
Respiratory or skin sensitisation (Skin Sens. 1)	H317: May cause an allergic skin reaction.	
Hazardous to the aquatic environment (Aquatic Chronic 2)	H411: Toxic to aquatic life with long lasting effects.	

16.5. Relevant R-, H- and EUH-phrases (Number and full text)

Hazard statements		
H225	Highly flammable liquid and vapour.	
H302	Harmful if swallowed.	
H304	May be fatal if swallowed and enters airways.	
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.	
H319	Causes serious eye irritation.	
H332	Harmful if inhaled.	
H335	May cause respiratory irritation.	
H373	May cause damage to organs through prolonged or repeated exposure. ()	
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.	

Supplemental Hazard information (EU)	
EUH066	Repeated exposure may cause skin dryness or cracking.

16.6. Training advice

No data available

16.7. Additional information

No data available