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

1.1. Product identifier

Hardener FH-Super for cds-Cable-Joint-Filler

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

Use of the substance/preparation

Coating material

1.3. Details of the supplier of the safety data sheet

Address/Manufacturer

cds Polymere GmbH & Co. KG
Gau-Bickelheimer Str. 72
55576 Sprendlingen/Rhh.
Telephone no. +49(6701) 9350-0
Fax no. +49(6701) 9350-50

1.4. Emergency telephone number

cds-Labor / Tel. +49 (67 01) 93 50-28 (This number is reachable monday to friday from 8 am to 5 pm)

SECTION 2: Hazards identification***

2.1. Classification of the substance or mixture

Classification (Regulation (EC) No. 1272/2008)

Classification (Regulation (EC) No. 1272/2008)

Skin Corr. 1B	H314
Eye Dam. 1	H318
Skin Sens. 1	H317
Repr. 2	H361fd
STOT SE 3	H335
STOT RE 1	H372
Asp. Tox. 1	H304
Aquatic Acute 1	H400
Aquatic Chronic 1	H410

The product is classified and labelled in accordance with Regulation (EC) No 1272/2008
For explanation of abbreviations see section 16.

2.2. Label elements

Labelling according to regulation (EC) No 1272/2008

Hazard pictograms

Signal word

Danger

Hazard statements

H314	Causes severe skin burns and eye damage.
H317	May cause an allergic skin reaction.

H361fd	Suspected of damaging fertility. Suspected of damaging the unborn child.
H335	May cause respiratory irritation.
H372	Causes damage to organs through prolonged or repeated exposure.
H304	May be fatal if swallowed and enters airways.
H410	Very toxic to aquatic life with long lasting effects.

Precautionary statements

P260	Do not breathe dust/fume/gas/mist/vapours/spray.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P301+P310	IF SWALLOWED: Immediately call a POISON CENTER or doctor.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310	Immediately call a POISON CENTER or doctor.

Hazardous component(s) to be indicated on label (Regulation (EC) No. 1272/2008)

contains 2-Piperazin-1-ylethylamin; Reaction mass of (1-Phenylethyl)phenols and bis-(1-phenylethyl)phenols; (Z)-octadec-9-enylamine; Amines, coco alkyl; 2,2,4-Trimethylhexan-1,6-Diamin

2.3. Other hazards***

No special hazards have to be mentioned.

The product contains no PBT substances. The product contains no vPvB substances. This product does not contain a substance that has endocrine disrupting properties with respect to human. The product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms.

SECTION 3: Composition/information on ingredients ***

Hazardous ingredients *

Reaction mass of (1-Phenylethyl)phenols and bis-(1-phenylethyl)phenols

EINECS no. 701-443-9
Registration no. 01-2119980970-27-XXXX
Concentration >= 50 %
Classification (Regulation (EC) No. 1272/2008)

Skin Irrit. 2	H315
Skin Sens. 1A	H317
Aquatic Chronic 2	H411

(Z)-octadec-9-enylamine

CAS No. 112-90-3
EINECS no. 204-015-5
Registration no. 01-2119473797-19-XXXX
Concentration >= 20 < 25 %
Classification (Regulation (EC) No. 1272/2008)

Acute Tox. 4	H302
Asp. Tox. 1	H304
Skin Corr. 1B	H314
STOT SE 3	H335
STOT RE 2	H373
Aquatic Acute 1	H400
Aquatic Chronic 1	H410

Concentration limits (Regulation (EC) No. 1272/2008)

Aquatic Acute 1	M = 10
Aquatic Chronic 1	M = 10

ATE	oral	1.200	mg/kg

2-Piperazin-1-ylethylamin

CAS No.	140-31-8				
EINECS no.	205-411-0				
Registration no.	01-2119471486-30-XXXX				
Concentration	>=	10	<	25	%

Classification (Regulation (EC) No. 1272/2008)

Acute Tox. 3	H311
Repr. 2	H361
STOT RE 1	H372
Skin Corr. 1B	H314
Eye Dam. 1	H318
Acute Tox. 4	H302
Skin Sens. 1	H317
Aquatic Chronic 3	H412

ATE	dermal	866	mg/kg

Benzylalcohol

CAS No.	100-51-6				
EINECS no.	202-859-9				
Registration no.	01-2119492630-38-XXXX				
Concentration	>=	1	<	10	%

Classification (Regulation (EC) No. 1272/2008)

Acute Tox. 4	H302
Acute Tox. 4	H332

ATE	oral	1.620	mg/kg
cATpE	inhalative, Dust/Mist	1,5	mg/l
cATpE	inhalative, Vapors	11	mg/l

2,4,6-Tri(dimethylaminomethyl)phenol

CAS No.	90-72-2				
EINECS no.	202-013-9				
Registration no.	01-2119560597-27-XXXX				
Concentration	>=	1	<	3	%

Classification (Regulation (EC) No. 1272/2008)

Acute Tox. 4	H302
Skin Irrit. 2	H315
Eye Irrit. 2	H319

Amines, coco alkyl

CAS No.	61788-46-3				
EINECS no.	262-977-1				
Registration no.	01-2119473798-17-XXXX				
Concentration	>=	1	<	3	%

Classification (Regulation (EC) No. 1272/2008)

Acute Tox. 4	H302
Asp. Tox. 1	H304
Skin Corr. 1B	H314
STOT SE 3	H335
STOT RE 2	H373
Aquatic Acute 1	H400
Aquatic Chronic 1	H410

Concentration limits (Regulation (EC) No. 1272/2008)

Aquatic Acute 1	M = 10
Aquatic Chronic	M = 10

1

ATE	oral	1.240	mg/kg

2,2,4-Trimethylhexan-1,6-Diamin

CAS No.	25513-64-8			
EINECS no.	247-063-2			
Registration no.	01-2119560598-25-XXXX			
Concentration		<	2,5	%

Classification (Regulation (EC) No. 1272/2008)

Skin Corr. 1A	H314
Acute Tox. 4	H302
Skin Sens. 1A	H317
Eye Dam. 1	H318

ATE	oral	910	mg/kg

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

Remove contaminated, soaked clothing immediately and dispose of safely. Adhere to personal protective measures when giving first aid. Clean body thoroughly (bath, shower). In any case show the physician the Safety Data Sheet.

After inhalation

Ensure supply of fresh air. Remove affected person from danger area. Seek medical advice immediately.

After skin contact

Wash off immediately with soap and water. Seek medical advice immediately.

After eye contact

Separate eyelids, wash the eyes thoroughly with water (15 min.). Take medical treatment.

After ingestion

Call in a physician immediately and show him the Safety Data Sheet. Rinse mouth thoroughly with water. Let plenty of water be drunk in small gulps. Do not induce vomiting.

Adhere to personal protective measures when giving first aid

First aider: Pay attention to self-protection!

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

Until now no symptoms known so far.

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

Hints for the physician / hazards

In the case of swallowing with subsequent vomiting, aspiration of the lungs can occur which can lead to chemical pneumonia or asphyxiation.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Dry powder

Non suitable extinguishing media

Full water jet

5.2. Special hazards arising from the substance or mixture

In case of combustion evolution of dangerous gases possible.

5.3. Advice for firefighters

Special protective equipment for fire-fighting

Do not inhale explosion and/or combustion gases. In case of combustion use a suitable breathing apparatus. Wear full protective suit.

Other information

Collect contaminated fire-fighting water separately, must not be discharged into the drains. Fire residues and contaminated fire-fighting water must be disposed of in accordance with the local regulations. Observe manufacturer's / distributor`s instructions.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Use breathing apparatus if exposed to vapours/dust/aerosol. Avoid contact with skin, eyes and clothing. Refer to protective measures listed in Sections 7 and 8.

6.2. Environmental precautions

Prevent spread over a wide area (e.g. by containment or oil barriers). Do not discharge into the drains/surface waters/groundwater. Do not discharge into the subsoil/soil. Retain and dispose of contaminated wash water. 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

Pick up with absorbent material. Clean contaminated floors and objects thoroughly with water and detergents, observing environmental regulations. Containers in which spilt substance has been collected must be adequately labelled. Dispose of absorbed material in accordance with the regulations.

6.4. Reference to other sections

Refer to protective measures listed in Sections 7 and 8.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

Avoid formation of aerosols. Perform filling operations only at stations with exhaust ventilation facilities. Provide suitable exhaust ventilation at the processing machines. If workplace limits are exceeded, a respiratory protection approved for this particular job must be worn. Keep container tightly closed.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep in original packaging, tightly closed. Storage rooms must be properly ventilated. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Provide solvent-resistant and impermeable floor.

Hints on storage assembly

Do not store together with foodstuffs.

Further information on storage conditions

Do not keep at temperatures above 20 °C.

SECTION 8: Exposure controls/personal protection***

8.1. Control parameters

Derived No/Minimal Effect Levels (DNEL/DMEL)***

Benzylalcohol

Reference substance	Benzylalcohol

Type of value	Derived No Effect Level (DNEL)	
Reference group	Worker	
Duration of exposure	Long term	
Route of exposure	dermal	
Mode of action	Systemic effects	
Concentration	8	mg/kg

Type of value	Derived No Effect Level (DNEL)	
Reference group	Worker	
Duration of exposure	Long term	
Route of exposure	inhalative	
Mode of action	Systemic effects	
Concentration	22	mg/m³

Benzylalcohol

Type of value	Derived No Effect Level (DNEL)	
Reference group	Worker	
Duration of exposure	Acute	
Route of exposure	inhalative	
Mode of action	Systemic effects	
Concentration	110	mg/m³

Benzylalcohol

Type of value	Derived No Effect Level (DNEL)	
Reference group	Worker	
Duration of exposure	Acute	
Route of exposure	dermal	
Mode of action	Systemic effects	
Concentration	40	mg/kg

2-Piperazin-1-ylethylamin

Type of value	Derived No Effect Level (DNEL)	
Reference group	Worker	
Duration of exposure	Long term	
Route of exposure	inhalative	
Mode of action	Systemic effects	
Concentration	10,6	mg/m³

Type of value	Derived No Effect Level (DNEL)	
Reference group	Worker	
Duration of exposure	Acute	
Route of exposure	inhalative	
Mode of action	Systemic effects	
Concentration	10,6	mg/m³

Type of value	Derived No Effect Level (DNEL)	
Reference group	Worker	
Duration of exposure	Long term	
Route of exposure	inhalative	
Mode of action	Local effects	
Concentration	0,015	mg/m³

Type of value	Derived No Effect Level (DNEL)
Reference group	Worker
Duration of exposure	Short term
Route of exposure	inhalative
Mode of action	Local effects

Concentration	0,08	mg/m³

Type of value	Derived No Effect Level (DNEL)
Reference group	Worker
Duration of exposure	Long term
Route of exposure	dermal
Mode of action	Systemic effects
Concentration	3,33 mg/kg/d

Type of value	Derived No Effect Level (DNEL)
Reference group	Worker
Duration of exposure	Short term
Route of exposure	dermal
Mode of action	Systemic effects
Concentration	20 mg/kg/d

Reaction mass of (1-Phenylethyl)phenols and bis-(1-phenylethyl)phenols

Type of value	Derived No Effect Level (DNEL)
Reference group	Worker
Duration of exposure	Long term
Route of exposure	dermal
Mode of action	Systemic effects
Concentration	2,87 mg/kg

Type of value	Derived No Effect Level (DNEL)
Reference group	Worker
Duration of exposure	Long term
Route of exposure	inhalative
Mode of action	Systemic effects
Concentration	1,21 mg/m³

Amines, coco alkyl

Type of value	Derived No Effect Level (DNEL)
Reference group	Worker
Duration of exposure	Long term
Route of exposure	inhalative
Mode of action	Systemic effects
Concentration	0,38 mg/m³

2,4,6-Tri(dimethylaminomethyl)phenol

Type of value	Derived No Effect Level (DNEL)
Reference group	Worker
Duration of exposure	Long term
Route of exposure	inhalative
Mode of action	Systemic effects
Concentration	0,53 mg/m³

Type of value	Derived No Effect Level (DNEL)
Reference group	Worker
Duration of exposure	Long term
Route of exposure	dermal
Mode of action	Systemic effects
Concentration	0,15 mg/kg/d

Type of value	Derived No Effect Level (DNEL)
Reference group	Worker
Duration of exposure	Short term

Route of exposure	inhalative	
Mode of action	Systemic effects	
Concentration	2,1	mg/m³
Type of value	Derived No Effect Level (DNEL)	
Reference group	Worker	
Duration of exposure	Short term	
Route of exposure	dermal	
Mode of action	Systemic effects	
Concentration	0,6	mg/kg/d

(Z)-octadec-9-enylamine

Type of value	Derived No Effect Level (DNEL)	
Reference group	Worker	
Duration of exposure	Long term	
Route of exposure	inhalative	
Mode of action	Systemic effects	
Concentration	0,38	mg/m³

Predicted No Effect Concentration (PNEC)***

Benzylalcohol

Type of value	PNEC	
Type	Water	
Concentration	1	mg/l
Type of value	PNEC	
Type	Water (intermittent release)	
Concentration	2,31	mg/l
Type of value	PNEC	
Type	Saltwater	
Concentration	0,1	mg/l
Type of value	PNEC	
Type	Sewage treatment plant (STP)	
Concentration	39	mg/l
	Benzylalcohol	
Type of value	PNEC	
Type	Freshwater sediment	
Concentration	5,27	mg/kg
	Benzylalcohol	
Type of value	PNEC	
Type	Marine sediment	
Concentration	0,527	mg/kg
	Benzylalcohol	
Type of value	PNEC	
Type	Soil	
Concentration	0,456	mg/kg

2-Piperazin-1-ylethylamin

Type of value	PNEC	
Type	Freshwater	
Concentration	0,058	mg/l

Type of value	PNEC	
Type	Marine	
Concentration	0,0058	mg/l
Type of value	PNEC	
Type	Water (intermittent release)	
Concentration	0,58	mg/l
Type of value	PNEC	
Type	Sewage treatment plant (STP)	
Concentration	250	mg/l
Type of value	PNEC	
Type	Sediment	
Concentration	215	mg/kg
Type of value	PNEC	
Type	Marine sediment	
Concentration	21,5	mg/kg
Type of value	PNEC	
Type	Soil	
Concentration	1	mg/kg

2,2,4-Trimethylhexan-1,6-Diamin

Type of value	PNEC	
Type	Freshwater	
Concentration	0,102	mg/l
Type of value	PNEC	
Type	Marine	
Concentration	0,01	mg/l

Reaction mass of (1-Phenylethyl)phenols and bis-(1-phenylethyl)phenols

Type of value	PNEC	
Type	Freshwater	
Concentration	0,0115	mg/l
Type of value	PNEC	
Type	Marine	
Concentration	0,00115	mg/l

Amines, coco alkyl

Type of value	PNEC	
Type	Freshwater	
Concentration	0,00026	mg/l
Type of value	PNEC	
Type	Marine	
Concentration	0,000026	mg/l
Type of value	PNEC	
Type	Sewage treatment plant (STP)	
Concentration	0,55	mg/l
Type of value	PNEC	

Type	Freshwater sediment	
Concentration	0,1794	mg/kg
Type of value	PNEC	
Type	Marine sediment	
Concentration	0,01794	mg/kg
Type of value	PNEC	
Type	Soil	
Concentration	10	mg/kg

2,4,6-Tri(dimethylaminomethyl)phenol

Type of value	PNEC	
Type	Water	
Concentration	0,046	mg/l
Type of value	PNEC	
Type	Marine	
Concentration	0,0046	mg/l
Type of value	PNEC	
Type	Water (intermittent release)	
Concentration	0,46	mg/l
Type of value	PNEC	
Type	Sewage treatment plant (STP)	
Concentration	0,2	mg/l
Type of value	PNEC	
Type	Freshwater sediment	
Concentration	0,262	mg/kg
Type of value	PNEC	
Type	Marine sediment	
Concentration	0,026	mg/kg
Type of value	PNEC	
Type	Soil	
Concentration	0,025	mg/kg

(Z)-octadec-9-enylamine

Type of value	PNEC	
Type	Freshwater	
Concentration	0,00026	mg/l
Type of value	PNEC	
Type	Saltwater	
Concentration	0,000026	mg/l
Type of value	PNEC	
Type	Sewage treatment plant (STP)	
Concentration	0,55	mg/l
Type of value	PNEC	
Type	Freshwater sediment	
Concentration	0,1794	mg/kg

Type of value	PNEC	
Type	Marine sediment	
Concentration	0,01794	mg/kg
Type of value	PNEC	
Type	Soil	
Concentration	10	mg/kg

8.2. Exposure controls

General protective and hygiene measures

Hold emergency shower available. Hold eye wash fountain available. Do not inhale gases/vapours/aerosols. Avoid contact with skin and eyes. Do not eat, drink or smoke during work time. Storage of foodstuffs in work rooms is forbidden. Wash hands before breaks and after work. Clean skin thoroughly after work; apply skin cream.

Respiratory protection

If workplace limits are exceeded, a respiratory protection approved for this particular job must be worn.

Hand protection

Chemical resistant gloves
Appropriate Material neoprene

Eye protection

Safety glasses with side protection shield; Face shield

Body protection

Clothing as usual in the chemical industry. Protective shoes

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	liquid
Odour	amine-like
Colour	yellowish

Melting point
Remarks: not determined

Freezing point
Remarks: not determined

Boiling point or initial boiling point and boiling range
Remarks: not determined

Flammability
evaluation: not determined

Upper and lower explosive limits
Remarks: not determined

Flash point
Value: > 100 °C

Ignition temperature
Remarks: not determined

Decomposition temperature
Remarks: not determined

pH value
Remarks: not determined

Viscosity
Remarks not determined

Solubility(ies)
Remarks not determined

Partition coefficient n-octanol/water (log value)
Remarks not determined

Vapour pressure
Remarks not determined

Density and/or relative density

Value	0,96		g/cm³
Temperature	23	°C	

Relative vapour density
Remarks not determined

9.2. Other information

Odour threshold
Remarks not determined

Evaporation rate (ether = 1) :
Remarks not determined

Solubility in water
Remarks not determined

Explosive properties
evaluation not determined

Oxidising properties
Remarks not determined

Other information
None known

SECTION 10: Stability and reactivity

10.1. Reactivity
No hazardous reactions when stored and handled according to prescribed instructions.

10.2. Chemical stability
No hazardous reactions known.

10.3. Possibility of hazardous reactions
No hazardous reactions known.

10.4. Conditions to avoid
No hazardous reactions known.

10.5. Incompatible materials
None known

10.6. Hazardous decomposition products
Toxic gases/vapours, Irritant gases/vapours

SECTION 11: Toxicological information ***

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

Acute oral toxicity

ATE	4.219,5332	mg/kg
Method	calculated value (Regulation (EC) No. 1272/2008)	
Remarks	Based on available data, the classification criteria are not met.	

Acute oral toxicity (Components)

Benzylalcohol

Species	mouse	
LD50	1040	mg/kg

Benzylalcohol

Species	rat	
LD50	1620	mg/kg

2-Piperazin-1-ylethylamin

Species	rat	
LD50	2140	mg/kg

2,2,4-Trimethylhexan-1,6-Diamin

Species	rat	
LD50	910	mg/kg

Reaction mass of (1-Phenylethyl)phenols and bis-(1-phenylethyl)phenols

Species	rat	
LD50	> 2000	mg/kg
Method	OECD 423	

Amines, coco alkyl

Species	rat			
LD50	1240	to	1388	mg/kg
Method	OECD 401			

2,4,6-Tri(dimethylaminomethyl)phenol

Species	rat	
LD50	2169	mg/kg

(Z)-octadec-9-enylamine

Species	rat			
LD50	1200	to	2000	mg/kg
Method	OECD 401			

Acute dermal toxicity

ATE	5.162,4441	mg/kg
Method	calculated value (Regulation (EC) No. 1272/2008)	
Remarks	Based on available data, the classification criteria are not met.	

Acute dermal toxicity (Components)

Benzylalcohol

Species	rabbit	
LD50	> 2000	mg/kg

2-Piperazin-1-ylethylamin

Species	rabbit	
LD50	866	mg/kg

Reaction mass of (1-Phenylethyl)phenols and bis-(1-phenylethyl)phenols

Species	rat	
LD50	> 2000	mg/kg
Method	OECD 402	

Acute inhalational toxicity

ATE	> 100	mg/l
Administration/Form	Vapors	

Method	calculated value (Regulation (EC) No. 1272/2008)		
ATE	>	20	mg/l
Administration/Form	Dust/Mist		
Method	calculated value (Regulation (EC) No. 1272/2008)		
Remarks	Based on available data, the classification criteria are not met.		

Acute inhalative toxicity (Components)

Benzylalcohol

Species	rat		
LC50	>	4,178	mg/l
Duration of exposure	4	h	
Administration/Form	Dust/Mist		
Method	OECD 403		

Reaction mass of (1-Phenylethyl)phenols and bis-(1-phenylethyl)phenols

Species	rat		
LC0	>	4,9	mg/l
Duration of exposure	4	h	
Administration/Form	Dust/Mist		
Method	OECD 403		

Skin corrosion/irritation

evaluation	corrosive
Remarks	The classification criteria are met.

Skin corrosion/irritation (Components)

Amines, coco alkyl

Species	rabbit
evaluation	corrosive

Serious eye damage/irritation

evaluation	corrosive
Remarks	The classification criteria are met.

Sensitization

evaluation	May cause sensitization by skin contact.
Remarks	The classification criteria are met.

Subacute, subchronic, chronic toxicity

Remarks	not determined

Mutagenicity

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

Reproductive toxicity

evaluation	Suspected of damaging fertility. Suspected of damaging the unborn child.
Remarks	The classification criteria are met.

Carcinogenicity

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

Specific Target Organ Toxicity (STOT)

Single exposure

Remarks	The classification criteria are met.
evaluation	May cause respiratory irritation.

Repeated exposure

Remarks	The classification criteria are met.
evaluation	Causes damage to organs through prolonged or repeated exposure

Specific Target Organ Toxicity (STOT) (Components)

Amines, coco alkyl

evaluation May cause respiratory irritation.

Aspiration hazard

The classification criteria are met.
Harmful: may cause lung damage if swallowed.

11.2 Information on other hazards***

Endocrine disrupting properties with respect to humans

The product does not contain a substance that has endocrine disrupting properties with respect to humans.

Experience in practice

Inhalation may lead to irritation of the respiratory tract.

Other information

No toxicological data are available.

SECTION 12: Ecological information ***

12.1. Toxicity***

General information

not determined

Fish toxicity (Components)

Benzylalcohol

Species	Fathead minnow (Pimephales promelas)			
LC50		460		mg/l
Duration of exposure		96	h	

Benzylalcohol

Species	golden orfe (Leuciscus idus)			
LC50	>	645		mg/l
Duration of exposure		96	h	

2-Piperazin-1-ylethylamin

Species	Fathead minnow (Pimephales promelas)			
LC50		2190		mg/l
Duration of exposure		96	h	

2,2,4-Trimethylhexan-1,6-Diamin

Species	golden orfe (Leuciscus idus)			
LC50		174		mg/l
Duration of exposure		48	h	

Reaction mass of (1-Phenylethyl)phenols and bis-(1-phenylethyl)phenols

Species	zebra fish (Brachydanio rerio)			
LL50		14,8		mg/l
Duration of exposure		96	h	
Method	OECD 203			

Amines, coco alkyl

Species	Fathead minnow (Pimephales promelas)				
LC50	>	0,01	to	0,1	mg/l
Method	OECD 203				

2,4,6-Tri(dimethylaminomethyl)phenol

Species	carp (Cyprinus carpio)			
LC50		175		mg/l
Duration of exposure		96	h	

(Z)-octadec-9-enylamine

Species	Fathead minnow (Pimephales promelas)				
LC50	>	0,01	to	0,1	mg/l

Duration of exposure	96	h		
Method	OECD 203			

Daphnia toxicity (Components)

Benzylalcohol

Species	Daphnia magna			
EC50	230			mg/l
Duration of exposure	48	h		

2-Piperazin-1-ylethylamin

Species	Daphnia magna			
EC50	58			mg/l
Duration of exposure	48	h		

2,2,4-Trimethylhexan-1,6-Diamin

Species	Daphnia magna			
EC50	31,5			mg/l
Duration of exposure	24	h		

Reaction mass of (1-Phenylethyl)phenols and bis-(1-phenylethyl)phenols

Species	Daphnia magna			
EC50	4,6			mg/l
Duration of exposure	48	h		
Method	OECD 202			

Amines, coco alkyl

Species	Daphnia magna			
EC50	> 0,01	to	0,1	mg/l
Duration of exposure	48	h		
Method	OECD 202			

Amines, coco alkyl

Species	Daphnia magna			
NOEC	> 0,01	to	0,1	
Duration of exposure	21	Days		
Method	OECD 211			

(Z)-octadec-9-enylamine

Species	Daphnia magna			
EC50	> 0,01	to	0,1	mg/l
Duration of exposure	48	h		
Method	OECD 202			

2,4,6-Tri(dimethylaminomethyl)phenol

Species	Daphnia magna			
EC50	718			mg/l
Duration of exposure	96	h		

Algae toxicity (Components)

Benzylalcohol

Species	Pseudokirchneriella subcapitata			
IC50	770			mg/l
Duration of exposure	72	h		

2-Piperazin-1-ylethylamin

Species	Pseudokirchneriella subcapitata			
EC50	> 1000			mg/l
Duration of exposure	72	h		

2,2,4-Trimethylhexan-1,6-Diamin

Species	Scenedesmus subspicatus			
ErC50	43,5			mg/l
Duration of exposure	72	h		

Reaction mass of (1-Phenylethyl)phenols and bis-(1-phenylethyl)phenols

Species	Scenedesmus subspicatus				
EL50		3,14			mg/l
Duration of exposure		72	h		
Method	OECD 201				

Amines, coco alkyl

Species	Scenedesmus subspicatus				
EC50	>	0,01	to	0,1	mg/l
Duration of exposure		72	h		

2,4,6-Tri(dimethylaminomethyl)phenol

Species	Desmodesmus subspicatus				
EC50		84			mg/l
Duration of exposure		72	h		

2,4,6-Tri(dimethylaminomethyl)phenol

Species	Desmodesmus subspicatus				
NOEC		6,25			mg/l
Duration of exposure		72	h		
Method	OECD 201				

(Z)-octadec-9-enylamine

Species	Desmodesmus subspicatus				
EC50	>	0,01	to	0,1	mg/l
Duration of exposure		72	h		
Method	OECD 201				

Bacteria toxicity (Components)

Benzylalcohol

Species	Pseudomonas putida				
EC10	>	658			mg/l
Duration of exposure		16	h		

Benzylalcohol

Species	Pseudomonas putida				
EC50		390			mg/l
Duration of exposure		24	h		

2,2,4-Trimethylhexan-1,6-Diamin

Species	Pseudomonas putida				
EC50		89			mg/l
Duration of exposure		17	h		

2,4,6-Tri(dimethylaminomethyl)phenol

Species	activated sludge				
NOEC		2			mg/l
Duration of exposure		28	h		

12.2. Persistence and degradability

General information

not determined

12.3. Bioaccumulative potential

General information

not determined

Partition coefficient n-octanol/water (log value)

Remarks not determined

Octanol/water partition coefficient (log Pow) (Components)

(Z)-octadec-9-enylamine

log Pow 3,7

Bioconcentration factor (BCF) (Components)

(Z)-octadec-9-enylamine

BCF	>	500

12.4. Mobility in soil

General information

not determined

12.5. Results of PBT and vPvB assessment***

General information

not determined

Results of PBT and vPvB assessment

The product contains no PBT substances
The product contains no vPvB substances.

12.6 Endocrine disrupting properties***

Endocrine disrupting properties with respect to the envrionment

The product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms.

12.7. Other adverse effects

General information

not determined

General information / ecology

Do not allow to enter soil, waterways or waste water canal. Avoid release into the atmosphere.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal recommendations for the product

Allocation of a waste code number, according to the European Waste Catalogue (EWC), should be carried out in agreement with the regional waste disposal company.

Disposal recommendations for packaging

Packaging that cannot be cleaned should be disposed off in agreement with the regional waste disposal company.

SECTION 14: Transport information

	Land transport ADR/RID	Marine transport IMDG/GGVSee	Air transport ICAO/IATA
14.1. UN number or ID number	2735	2735	2735
14.2. UN proper shipping name	POLYAMINES, LIQUID, CORROSIVE, N.O.S. ((Z)-octadec-9-enylamine, 2-Piperazin-1-ylethylamin)	POLYAMINES, LIQUID, CORROSIVE, N.O.S. ((Z)-octadec-9-enylamine, 2-Piperazin-1-ylethylamin)	POLYAMINES, LIQUID, CORROSIVE, N.O.S. ((Z)-octadec-9-enylamine, 2-Piperazin-1-ylethylamin)
14.3. Transport hazard class(es)	8	8	8
Label			
14.4. Packing group	II	II	II
Limited Quantity	1 l	1 l	
Transport category	2		
14.5. Environmental hazards	 ENVIRONMENTALLY HAZARDOUS	Marine Pollutant  ENVIRONMENTALLY HAZARDOUS	 ENVIRONMENTALLY HAZARDOUS
Tunnel restriction code	E		

SECTION 15: Regulatory information ***

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

Major-accident categories acc. 2012/18/EU

Category	E1	Hazardous to the Aquatic Environment	100000	kg	200000	kg

VOC

VOC (EU)	0	%	0	g/l

Restriction according to annex XVII to regulation (EU) No 1907/2006

Conditions of restriction for the entries Annex XVII REACH should be considered.

Other information

The product does not contain substances according to: Candidate List for inclusion in Annex XIV of Regulation (EC) No. 1907/2006 (REACH).

15.2. Chemical safety assessment

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

SECTION 16: Other information

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

Classification (Regulation (EC) No. 1272/2008)

Skin Corr. 1B	H314	Calculation method
Eye Dam. 1	H318	Calculation method
Skin Sens. 1	H317	Calculation method
Repr. 2	H361fd	Calculation method
STOT SE 3	H335	Calculation method
STOT RE 1	H372	Calculation method
Asp. Tox. 1	H304	Calculation method
Aquatic Acute 1	H400	Calculation method
Aquatic Chronic 1	H410	Calculation method

Hazard statements listed in Chapter 2/3

H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H311	Toxic 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.
H361fd	Suspected of damaging fertility. Suspected of damaging the unborn child.
H372	Causes damage to organs through prolonged or repeated exposure.
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.

CLP categories listed in Chapter 2/3

Acute Tox. 3	Acute toxicity, Category 3
Acute Tox. 4	Acute toxicity, Category 4
Aquatic Acute 1	Hazardous to the aquatic environment, acute, Category 1
Aquatic Chronic 1	Hazardous to the aquatic environment, chronic, Category 1
Aquatic Chronic 2	Hazardous to the aquatic environment, chronic, Category 2
Aquatic Chronic 3	Hazardous to the aquatic environment, chronic, Category 3
Asp. Tox. 1	Aspiration hazard, Category 1
Eye Dam. 1	Serious eye damage, Category 1
Eye Irrit. 2	Eye irritation, Category 2
Repr. 2	Reproductive toxicity, Category 2
Skin Corr. 1A	Skin corrosion, Category 1A
Skin Corr. 1B	Skin corrosion, Category 1B
Skin Irrit. 2	Skin irritation, Category 2
Skin Sens. 1	Skin sensitization, Category 1
Skin Sens. 1A	Skin sensitization, Category 1A
STOT RE 1	Specific target organ toxicity - repeated exposure, Category 1
STOT RE 2	Specific target organ toxicity - repeated exposure, Category 2
STOT SE 3	Specific target organ toxicity - single exposure, Category 3

Information about Safety Data Sheets Preparers

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Supplemental information

Relevant changes compared with the previous version of the safety data sheet are marked with: ***
This information is based on our present state of knowledge. However, it should not constitute a guarantee for any specific product properties and shall not establish a legally valid relationship.