

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

#### 1.1. Product identifier

Product form : Mixture  
Trade name : Härter  
Product code : 281.05.0119

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

##### 1.2.1. Relevant identified uses

Use of the substance/mixture : Hardener (Crosslinker)

##### 1.2.2. Uses advised against

No additional information available

#### 1.3. Details of the supplier of the safety data sheet

##### Supplier

FIBRO GmbH Geschäftsbereich Normalien  
August-Läpple-Weg  
P.O. Box 1120  
74855 Hassmersheim - Deutschland  
T +49 6266-73-0 - F +49 6266-73-237  
[info@fibro.de](mailto:info@fibro.de)

##### Safety Data Sheet

[info@ubsplus.de](mailto:info@ubsplus.de)

#### 1.4. Emergency telephone number

Emergency number : +49 761 19240  
(VIZ Freiburg, 24 h, German & English)

### SECTION 2: Hazards identification

#### 2.1. Classification of the substance or mixture

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

Acute Tox. 4 (Oral)	H302
Acute Tox. 4 (Inhalation:dust,mist)	H332
Skin Corr. 1B	H314
Eye Dam. 1	H318
Skin Sens. 1	H317
Muta. 2	H341
Aquatic Chronic 3	H412

Full text of H statements : see section 16

#### 2.2. Label elements

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

Hazard pictograms (CLP) :



GHS05

GHS07

GHS08

Signal word (CLP) : Danger

Hazardous ingredients : Formaldehyde, oligomeric reaction products with phenol and m-phenylenebis(methylamine); m-phenylenebis(methylamine); benzyl alcohol; phenol; carboic acid; monohydroxybenzene; phenylalcohol

Hazard statements (CLP) : H302+H332 - Harmful if swallowed or if inhaled  
H314 - Causes severe skin burns and eye damage.  
H317 - May cause an allergic skin reaction.  
H341 - Suspected of causing genetic defects.  
H412 - Harmful to aquatic life with long lasting effects.

Precautionary statements (CLP) : P260 - Do not breathe spray, vapours, gas.  
P273 - Avoid release to the environment.  
P280 - Wear eye protection, protective gloves, protective clothing.

P302+P352 - IF ON SKIN: Wash with plenty of soap and water.  
 P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
 P312 - Call a POISON CENTER, a doctor if you feel unwell.

### 2.3. Other hazards

This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII

This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

## SECTION 3: Composition/information on ingredients

### 3.1. Substances

Not applicable

### 3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Formaldehyde, oligomeric reaction products with phenol and m-phenylenebis(methylamine)	(CAS-No.) 1950616-36-0 (EC-No.) 701-207-5 (REACH-no) 01-2119966906-20	25 - 50	Skin Corr. 1C, H314 Eye Dam. 1, H318 Skin Sens. 1, H317 Aquatic Chronic 3, H412
m-phenylenebis(methylamine)	(CAS-No.) 1477-55-0 (EC-No.) 216-032-5 (REACH-no) 01-2119480150-50	10 - 25	Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Inhalation:dust,mist), H332 Skin Corr. 1B, H314 Eye Dam. 1, H318 Skin Sens. 1, H317 Aquatic Chronic 3, H412
benzyl alcohol	(CAS-No.) 100-51-6 (EC-No.) 202-859-9 (EC Index-No.) 603-057-00-5 (REACH-no) 01-2119492630-38	10 - 25	Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Inhalation:dust,mist), H332 Eye Irrit. 2, H319
phenol; carboic acid; monohydroxybenzene; phenylalcohol	(CAS-No.) 108-95-2 (EC-No.) 203-632-7 (EC Index-No.) 604-001-00-2 (REACH-no) 01-2119471329-32	1 - 7.6	Acute Tox. 3 (Oral), H301 Acute Tox. 3 (Dermal), H311 Acute Tox. 3 (Inhalation:dust,mist), H331 Skin Corr. 1B, H314 Eye Dam. 1, H318 Muta. 2, H341 STOT RE 2, H373 Aquatic Chronic 2, H411

#### Specific concentration limits:

Name	Product identifier	Specific concentration limits
phenol; carboic acid; monohydroxybenzene; phenylalcohol	(CAS-No.) 108-95-2 (EC-No.) 203-632-7 (EC Index-No.) 604-001-00-2 (REACH-no) 01-2119471329-32	( 1 =<C < 3) Skin Irrit. 2, H315 ( 1 =<C < 3) Eye Irrit. 2, H319 (C >= 3) Skin Corr. 1B, H314

Full text of H-statements: see section 16

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

First-aid measures general	: Move the affected person away from the contaminated area. Fresh air, rest. Prevent cooling by covering the victim (no warming up). If unconscious place in recovery position and seek medical advice. Do not give an unconscious person anything to drink. Remove soiled clothing promptly.
First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing. If you feel unwell, seek medical advice.
First-aid measures after skin contact	: Immediately remove contaminated clothing or footwear. Rinse and then wash skin thoroughly with water and soap. If skin irritation or rash occurs: Get medical advice/attention.
First-aid measures after eye contact	: Wash with plenty of water (during 20 minutes minimum) with eyes wide open after taking off soft contact lenses and immediately take medical advice.
First-aid measures after ingestion	: Rinse mouth. Do not give an unconscious person anything to drink. Do not induce vomiting. Immediately call a POISON CENTER/doctor.

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

Symptoms/effects after inhalation	: Ingestion may cause nausea and vomiting. Headache. Lethargy. Giddiness. Unconsciousness.
Symptoms/effects after skin contact	: Burns. May cause an allergic skin reaction.

Symptoms/effects after eye contact	: Causes serious eye damage.
Symptoms/effects after ingestion	: Ingestion may cause nausea and vomiting. Headache. Lethargy. Giddiness. Loss of consciousness.

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

Symptoms may be delayed. Keep under medical supervision for at least 48 hours.

### SECTION 5: Firefighting measures

#### 5.1. Extinguishing media

Suitable extinguishing media	: water, carbon dioxide (CO <sub>2</sub> ), powder and foam.
Unsuitable extinguishing media	: Do not use a heavy water stream.

#### 5.2. Special hazards arising from the substance or mixture

Fire hazard	: Heating may cause a fire or explosion.
Hazardous decomposition products in case of fire	: Carbon monoxide. Carbon dioxide. Nitrogen oxides.

#### 5.3. Advice for firefighters

Precautionary measures fire	: Making extinguishing agents environment-friendly. Evacuate area.
Firefighting instructions	: Do not allow run-off from fire fighting to enter drains or water courses. Do not contaminate ground and surface water.
Protection during firefighting	: Extra personal protection: complete protective clothing including self-contained breathing apparatus.

### SECTION 6: Accidental release measures

#### 6.1. Personal precautions, protective equipment and emergency procedures

General measures	: Evacuate the danger area. Keep public away from danger area. Mark the danger area.
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##### 6.1.1. For non-emergency personnel

Protective equipment	: Wear personal protective equipment.
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##### 6.1.2. For emergency responders

Protective equipment	: Wear personal protective equipment. Breathing apparatus.
Emergency procedures	: Ventilate spillage area. Stop leak if safe to do so.

#### 6.2. Environmental precautions

Prevent entry to sewers and public waters.

#### 6.3. Methods and material for containment and cleaning up

For containment	: Dike and contain spill. Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Place in a suitable container for disposal in accordance with the waste regulations (see Section 13).
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#### 6.4. Reference to other sections

Fire fighting measures. SECTION 5. Personal protective equipment. SECTION 8. Disposal considerations. SECTION 13.

### SECTION 7: Handling and storage

#### 7.1. Precautions for safe handling

Precautions for safe handling	: Read label before use. Use personal protective equipment as required. Do not breathe vapours. Avoid contact with skin and eyes. Keep in original containers.
Hygiene measures	: Keep away from food, drink and animal feeding stuffs. Do not eat, drink or smoke when using this product. Wash hands and other exposed areas with soap and water before leaving work. Apply emollient cream.

#### 7.2. Conditions for safe storage, including any incompatibilities

Technical measures	: Take precautionary measures against static discharge.
Storage conditions	: Store in a dry, cool and well-ventilated place. Protect from sunlight.
Incompatible products	: Oxidizing agent. Strong bases. Strong acids.
Heat and ignition sources	: Store away from direct sunlight or other heat sources. Keep away from sources of ignition - No smoking. Take precautionary measures against static discharge.
Information on mixed storage	: Keep away from food, drink and animal feeding stuffs.
Special rules on packaging	: Keep in original containers.

#### 7.3. Specific end use(s)

No additional information available

### SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

phenol; carboic acid; monohydroxybenzene; phenylalcohol (108-95-2)		
United Kingdom	Local name	Phenol
United Kingdom	WEL TWA (mg/m <sup>3</sup> )	7.8 mg/m <sup>3</sup>
United Kingdom	WEL TWA (ppm)	2 ppm
United Kingdom	WEL STEL (mg/m <sup>3</sup> )	16 mg/m <sup>3</sup>
United Kingdom	WEL STEL (ppm)	4 ppm
United Kingdom	Remark (WEL)	Sk

Formaldehyde, oligomeric reaction products with phenol and m-phenylenebis(methylamine) (1950616-36-0)	
DNEL/DMEL (Workers)	
Acute - systemic effects, dermal	3.85 mg/kg bw/d
Acute - systemic effects, inhalation	2 mg/m <sup>3</sup>
Acute - local effects, dermal	2.8 µg/cm <sup>2</sup>
Acute - local effects, inhalation	6 mg/m <sup>3</sup>
Long-term - systemic effects, dermal	0.385 mg/kg bw/d
Long-term - local effects, dermal	0.28 µg/cm <sup>2</sup>
Long-term - systemic effects, inhalation	0.02 mg/m <sup>3</sup>
Long-term - local effects, inhalation	0.6 mg/m <sup>3</sup>
DNEL/DMEL (General population)	
Acute - systemic effects, dermal	0.008 mg/kg bw/d
Acute - systemic effects, oral	3.33 mg/kg bw
Acute - local effects, dermal	0.167 µg/cm <sup>2</sup>
Long-term - systemic effects, oral	3.33 mg/kg bw/d
Long-term - systemic effects, dermal	0.008 mg/kg bw/d
Long-term - local effects, dermal	0.167 µg/cm <sup>2</sup>
PNEC (Water)	
PNEC aqua (freshwater)	20 µg/L
PNEC aqua (marine water)	2 µg/L
PNEC aqua (intermittent, freshwater)	200 µg/L
PNEC (Sediment)	
PNEC sediment (freshwater)	0.1 mg/kg dwt
PNEC sediment (marine water)	0.01 mg/kg dwt
PNEC (Soil)	
PNEC soil	0.024 mg/kg dwt
PNEC (STP)	
PNEC sewage treatment plant	30 mg/l

m-phenylenebis(methylamine) (1477-55-0)	
DNEL/DMEL (Workers)	
Long-term - systemic effects, dermal	0.33 mg/kg bw/d
Long-term - systemic effects, inhalation	1.2 mg/m <sup>3</sup>
Long-term - local effects, inhalation	0.2 mg/m <sup>3</sup>
PNEC (Water)	
PNEC aqua (freshwater)	94 µg/L
PNEC aqua (marine water)	9 µg/L
PNEC (Sediment)	
PNEC sediment (freshwater)	0.43 mg/kg dwt
PNEC sediment (marine water)	0.043 mg/kg dwt
PNEC (Soil)	
PNEC soil	0.045 mg/kg dwt
PNEC (STP)	
PNEC sewage treatment plant	10 mg/l

benzyl alcohol (100-51-6)	
DNEL/DMEL (Workers)	
Acute - systemic effects, dermal	40 mg/kg bw/d
Acute - systemic effects, inhalation	110 mg/m <sup>3</sup>
Long-term - systemic effects, dermal	8 mg/kg bw/d

<b>benzyl alcohol (100-51-6)</b>	
Long-term - systemic effects, inhalation	22 mg/m <sup>3</sup>
DNEL/DMEL (General population)	
Acute - systemic effects, dermal	20 mg/kg bw/d
Acute - systemic effects, inhalation	27 mg/m <sup>3</sup>
Long-term - systemic effects, oral	4 mg/kg bw/d
Long-term - systemic effects, inhalation	5.4 mg/m <sup>3</sup>
Long-term - systemic effects, dermal	4 mg/kg bw/d
PNEC (Water)	
PNEC aqua (freshwater)	1 mg/l
PNEC aqua (marine water)	0.1 mg/l
PNEC (Sediment)	
PNEC sediment (freshwater)	5.27 mg/kg dwt
PNEC sediment (marine water)	0.527 mg/kg dwt
PNEC (Soil)	
PNEC soil	0.456 mg/kg dwt
PNEC (STP)	
PNEC sewage treatment plant	39 mg/l
<b>phenol; carboic acid; monohydroxybenzene; phenylalcohol (108-95-2)</b>	
DNEL/DMEL (Workers)	
Long-term - systemic effects, dermal	1.23 mg/kg bw/d
Long-term - systemic effects, inhalation	8 mg/m <sup>3</sup>
Long-term - local effects, inhalation	16 mg/m <sup>3</sup>
DNEL/DMEL (General population)	
Long-term - systemic effects, oral	0.4 mg/kg bw/d
Long-term - systemic effects, inhalation	1.32 mg/m <sup>3</sup>
Long-term - systemic effects, dermal	0.4 mg/kg bw/d
PNEC (Water)	
PNEC aqua (freshwater)	7.7 µg/L
PNEC aqua (marine water)	0.77 µg/L
PNEC (Sediment)	
PNEC sediment (freshwater)	91.5 mg/kg dwt
PNEC sediment (marine water)	9.15 mg/kg dwt
PNEC (Soil)	
PNEC soil	136 mg/kg dwt
PNEC (STP)	
PNEC sewage treatment plant	2.1 mg/l

### 8.2. Exposure controls

Appropriate engineering controls	: Ensure good ventilation of the work station.
Materials for protective clothing	: Wear proper protective equipment
Hand protection	: Chemically resistant protective gloves. Choosing the proper glove is a decision that depends not only on the type of material, but also on other quality features, which differ for each manufacturer. . Penetration time of glove material : >480 min (EN 374). Material : Nitrile rubber (0,7 mm)
Eye protection	: Sealed safety goggles. (EN 166).
Respiratory protection	: Not necessary with sufficient ventilation. In case of insufficient ventilation, wear suitable respiratory equipment. Breathing apparatus with filter. Filter type: A. Appropriate self-contained breathing apparatus may be required



## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Colour	: Yellow-brown

Odour	: Not determined
Odour threshold	: Not determined
pH	: ≈ 9.9 (20 g/L, 20°C, ISO 8975)
pH solution	: Not determined
Relative evaporation rate (butylacetate=1)	: Not determined
Melting point	: Not determined
Freezing point	: Not determined
Boiling point	: > 200 °C (DIN 53171)
Flash point	: 123 °C (ISO 2719)
Auto-ignition temperature	: Not determined
Decomposition temperature	: Not determined
Flammability (solid, gas)	: Not applicable.
Vapour pressure	: 0.28 hPa (20 °C)
Relative vapour density at 20 °C	: Not determined
Relative density	: Not determined
Density	: 1.11 - 1.15 g/cm <sup>3</sup> (DIN 53217)
Solubility	: Water: Not determined
Log Pow	: No data available
Viscosity, kinematic	: Not determined
Viscosity, dynamic	: 2000 - 3000 mPa.s (ISO 9371)
Explosive properties	: Vapour/air mixtures are explosive.
Oxidising properties	: Not known.
Explosive limits	: ≈ 1.3 - 13 vol %

### 9.2. Other information

No additional information available

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

Reacts with : oxidising compounds. reducing materials. Epoxydic components. Polymerization.

### 10.2. Chemical stability

Stable under normal conditions.

### 10.3. Possibility of hazardous reactions

Polymerization.

### 10.4. Conditions to avoid

Direct sunlight. Moisture. Ignition sources.

### 10.5. Incompatible materials

Water. Acids. Bases. Oxidizing agent.

### 10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

Acute toxicity : Oral: Harmful if swallowed. Inhalation:dust,mist: Harmful if inhaled.  
Calculation method

ATE CLP (oral)	811.643 mg/kg bodyweight
ATE CLP (dust,mist)	3.023 mg/l/4h

#### Formaldehyde, oligomeric reaction products with phenol and m-phenylenebis(methylamine) (1950616-36-0)

LD50 oral rat	> 2000 mg/kg (OECD 425, rat, female)
LD50 dermal rat	> 2020 mg/kg (OECD 402, rat, male / female)

<b>m-phenylenebis(methylamine) (1477-55-0)</b>	
LD50 oral rat	930 mg/kg
LD50 dermal rabbit	2000 mg/kg
LC50 inhalation rat (mg/l)	1.34 mg/l/4h

<b>benzyl alcohol (100-51-6)</b>	
LD50 oral rat	1230 mg/kg
LD50 dermal rabbit	> 2000 mg/kg
LC50 inhalation rat (mg/l)	4.178 mg/l/4h

<b>phenol; carbolic acid; monohydroxybenzene; phenylalcohol (108-95-2)</b>	
LD50 oral rat	317 mg/kg
LD50 dermal rabbit	630 mg/kg
LC50 inhalation rat (Dust/Mist - mg/l/4h)	0.9 mg/l/4h

Skin corrosion/irritation : Causes severe skin burns and eye damage.

Calculation method  
pH: ≈ 9.9 (20 g/L, 20°C, ISO 8975)

Serious eye damage/irritation : Causes serious eye damage.

Calculation method  
pH: ≈ 9.9 (20 g/L, 20°C, ISO 8975)

Respiratory or skin sensitisation : May cause an allergic skin reaction.

Calculation method

Germ cell mutagenicity : Suspected of causing genetic defects.

Calculation method

Carcinogenicity : Not classified (No data available)

Reproductive toxicity : Not classified (No data available)

STOT-single exposure : Not classified (No data available)

STOT-repeated exposure : Not classified (No data available)

<b>phenol; carbolic acid; monohydroxybenzene; phenylalcohol (108-95-2)</b>	
NOAEL (oral, rat, 90 days)	300 mg/kg bw/d

Aspiration hazard : Not classified (No data available)

## SECTION 12: Ecological information

### 12.1. Toxicity

Acute aquatic toxicity : Not classified

Chronic aquatic toxicity : Harmful to aquatic life with long lasting effects.

<b>Formaldehyde, oligomeric reaction products with phenol and m-phenylenebis(methylamine) (1950616-36-0)</b>	
LC50 fish 1	25.9 mg/l (OECD 203, Oncorhynchus mykiss (Rainbow trout))
EC50 Daphnia 1	29.8 mg/l (OECD 202)
EC50, microorganisms, acute, ACTIVATED SLUDGE	491,3 mg/l (3 Hours, (OECD 209 method))

<b>m-phenylenebis(methylamine) (1477-55-0)</b>	
LC50 fish 1	87.6 mg/l (OECD 203 method)
EC50 Daphnia 1	15.2 mg/l (OECD 202 method)
NOEC (chronic)	4.7 mg/l (OECD 211, daphnia magna, 21 d)

<b>benzyl alcohol (100-51-6)</b>	
LC50 fish 1	> 100 mg/l (OECD SIDS, 2001)
EC50 Daphnia 1	230 mg/l (OECD 202)

<b>phenol; carbolic acid; monohydroxybenzene; phenylalcohol (108-95-2)</b>	
LC50 fish 1	8.9 mg/l (Oncorhynchus mykiss (Rainbow trout))
EC50 Daphnia 1	3.1 mg/l
NOEC (chronic)	0.16 mg/l (16 d)
NOEC chronic fish	0.077 mg/l (Cyprinus carpio, 60 d)

### 12.2. Persistence and degradability

<b>Härter</b>	
Persistence and degradability	Not determined.

<b>Formaldehyde, oligomeric reaction products with phenol and m-phenylenebis(methylamine) (1950616-36-0)</b>	
Biodegradation	19.3 % (OECD 301 D, 28 d)

<b>phenol; carbolic acid; monohydroxybenzene; phenylalcohol (108-95-2)</b>	
Biodegradation	100 % (OECD 302B method)

### 12.3. Bioaccumulative potential

Härter	
Bioaccumulative potential	Bioaccumulation unlikely.
m-phenylenebis(methylamine) (1477-55-0)	
Bioconcentration factor (BCF REACH)	2.69
Log Pow	0.18
benzyl alcohol (100-51-6)	
Log Pow	1.1
phenol; carbolic acid; monohydroxybenzene; phenylalcohol (108-95-2)	
BCF fish 1	17.5 (OECD 305E method)
Bioconcentration factor (BCF REACH)	17.5
Log Pow	1.5 (25 - 30 °C)

### 12.4. Mobility in soil

Härter	
Ecology - soil	No data available.
phenol; carbolic acid; monohydroxybenzene; phenylalcohol (108-95-2)	
Log Koc	14 - 91 (OECD 106 & OECD 121, HPLC)

### 12.5. Results of PBT and vPvB assessment

Härter	
This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII	
This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII	

### 12.6. Other adverse effects

No additional information available






## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

Regional legislation (waste)	: This material and its container must be disposed of in a safe way, and as per local legislation.
Sewage disposal recommendations	: Do not allow to enter drains or water courses.
Product/Packaging disposal recommendations	: Do not dispose of with domestic waste.
Additional information	: Handle uncleaned empty containers as full ones.

## SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN


ADR	IMDG	IATA	ADN	RID
<b>14.1. UN number</b>				
2735	2735	2735	2735	2735
<b>14.2. UN proper shipping name</b>				
POLYAMINES, LIQUID, CORROSIVE, N.O.S. (m-XYLILENDIAMIN)	POLYAMINES, LIQUID, CORROSIVE, N.O.S. (m-XYLILENDIAMIN)	Amines, liquid, corrosive, n.o.s. (m-XYLILENDIAMIN)	POLYAMINES, LIQUID, CORROSIVE, N.O.S. (m-XYLILENDIAMIN)	POLYAMINES, LIQUID, CORROSIVE, N.O.S. (m-XYLILENDIAMIN)
<b>Transport document description</b>				
UN 2735 POLYAMINES, LIQUID, CORROSIVE, N.O.S. (m-XYLILENDIAMIN), 8, III, (E)	UN 2735 POLYAMINES, LIQUID, CORROSIVE, N.O.S. (m-XYLILENDIAMIN), 8, III	UN 2735 Amines, liquid, corrosive, n.o.s. (m-XYLILENDIAMIN), 8, III	UN 2735 POLYAMINES, LIQUID, CORROSIVE, N.O.S. (m-XYLILENDIAMIN), 8, III	UN 2735 POLYAMINES, LIQUID, CORROSIVE, N.O.S. (m-XYLILENDIAMIN), 8, III
<b>14.3. Transport hazard class(es)</b>				
8	8	8	8	8
				
<b>14.4. Packing group</b>				
III	III	III	III	III
<b>14.5. Environmental hazards</b>				
Dangerous for the environment : No	Dangerous for the environment : No Marine pollutant : No	Dangerous for the environment : No	Dangerous for the environment : No	Dangerous for the environment : No



ADR	IMDG	IATA	ADN	RID
No supplementary information available				

### 14.6. Special precautions for user

#### - Overland transport

Classification code (ADR)	: C7
Special provisions (ADR)	: 274
Limited quantities (ADR)	: 5I
Excepted quantities (ADR)	: E1
Packing instructions (ADR)	: P001, IBC03, LP01, R001
Mixed packing provisions (ADR)	: MP19
Portable tank and bulk container instructions (ADR)	: T7
Portable tank and bulk container special provisions (ADR)	: TP1, TP28
Tank code (ADR)	: L4BN
Vehicle for tank carriage	: AT
Transport category (ADR)	: 3
Special provisions for carriage - Packages (ADR)	: V12
Hazard identification number (Kemler No.)	: 80
Orange plates	: 
Tunnel restriction code (ADR)	: E
EAC code	: 2X
APP code	: B

#### - Transport by sea

Special provisions (IMDG)	: 223, 274
Limited quantities (IMDG)	: 5 L
Excepted quantities (IMDG)	: E1
Packing instructions (IMDG)	: P001, LP01
IBC packing instructions (IMDG)	: IBC03
Tank instructions (IMDG)	: T7
Tank special provisions (IMDG)	: TP1, TP28
EmS-No. (Fire)	: F-A
EmS-No. (Spillage)	: S-B
Stowage category (IMDG)	: A
Properties and observations (IMDG)	: Colourless to yellowish liquids or solutions with a pungent odour. Miscible with or soluble in water. When involved in a fire, evolve toxic gases. Corrosive to most metals, especially to copper and its alloys. Reacts violently with acids. Cause burns to skin, eyes and mucous membranes.

#### - Air transport

PCA Excepted quantities (IATA)	: E1
PCA Limited quantities (IATA)	: Y841
PCA limited quantity max net quantity (IATA)	: 1L
PCA packing instructions (IATA)	: 852
PCA max net quantity (IATA)	: 5L
CAO packing instructions (IATA)	: 856
CAO max net quantity (IATA)	: 60L
Special provisions (IATA)	: A3
ERG code (IATA)	: 8L

#### - Inland waterway transport

Classification code (ADN)	: C7
Special provisions (ADN)	: 274

Limited quantities (ADN)	: 5 L
Excepted quantities (ADN)	: E1
Carriage permitted (ADN)	: T
Equipment required (ADN)	: PP, EP
Number of blue cones/lights (ADN)	: 0

### - Rail transport

Classification code (RID)	: C7
Special provisions (RID)	: 274
Limited quantities (RID)	: 5L
Excepted quantities (RID)	: E1
Packing instructions (RID)	: P001, IBC03, LP01, R001
Mixed packing provisions (RID)	: MP19
Portable tank and bulk container instructions (RID)	: T7
Portable tank and bulk container special provisions (RID)	: TP1, TP28
Tank codes for RID tanks (RID)	: L4BN
Transport category (RID)	: 3
Special provisions for carriage – Packages (RID)	: W12
Colis express (express parcels) (RID)	: CE8
Hazard identification number (RID)	: 80

### 14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

IBC code : Not applicable.

## SECTION 15: Regulatory information

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

#### 15.1.1. EU-Regulations

Contains no REACH substances with Annex XVII restrictions

Contains no substance on the REACH candidate list

Contains no REACH Annex XIV substances

Other information, restriction and prohibition regulations : Ozone layer depleting substances: Not subject to Regulation (EC) No 1005/2009. Persistent organic pollutants (POPs): Not subject to Regulation (EC) No 850/2004. Export and import of dangerous chemicals: Not subject to Regulation (EC) No 649/2012. Control of major-accident hazards (COMAH, Seveso III): Not subject to Directive 2012/18/EC.

#### 15.1.2. National regulations

No additional information available

### 15.2. Chemical safety assessment

Not applicable  
Mixtures

## SECTION 16: Other information

Indication of changes:			
Section	Changed item	Change	Comments
3.2	Concentration	Modified	
3.2	Identifiers	Modified	
8.1	DNELs & PNECs	Added	
11	Toxicological information	Added	
12.1	Ecotoxicity	Added	
15	Regulatory information	Modified	

15	Water hazard class (WGK)	Modified	
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<b>Full text of H- and EUH-statements:</b>	
Acute Tox. 3 (Dermal)	Acute toxicity (dermal), Category 3
Acute Tox. 3 (Inhalation:dust,mist)	Acute toxicity (inhalation:dust,mist) Category 3
Acute Tox. 3 (Oral)	Acute toxicity (oral), Category 3
Acute Tox. 4 (Inhalation:dust,mist)	Acute toxicity (inhalation:dust,mist) Category 4
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Aquatic Chronic 2	Hazardous to the aquatic environment — Chronic Hazard, Category 2
Aquatic Chronic 3	Hazardous to the aquatic environment — Chronic Hazard, Category 3
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Muta. 2	Germ cell mutagenicity, Category 2
Skin Corr. 1B	Skin corrosion/irritation, Category 1B
Skin Corr. 1C	Skin corrosion/irritation, Category 1C
Skin Sens. 1	Skin sensitisation, Category 1
STOT RE 2	Specific target organ toxicity — Repeated exposure, Category 2
H301	Toxic if swallowed.
H302	Harmful if swallowed.
H311	Toxic in contact with skin.
H314	Causes severe skin burns and eye damage.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H331	Toxic if inhaled.
H332	Harmful if inhaled.
H341	Suspected of causing genetic defects.
H373	May cause damage to organs through prolonged or repeated exposure.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

<b>Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:</b>		
Acute Tox. 4 (Oral)	H302	Calculation method
Acute Tox. 4 (Inhalation:dust,mist)	H332	Calculation method
Skin Corr. 1B	H314	Calculation method
Eye Dam. 1	H318	Calculation method
Skin Sens. 1	H317	Calculation method
Muta. 2	H341	Calculation method
Aquatic Chronic 3	H412	Calculation method

*This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product*