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

1.1 Product identifier

Trade name/designation elma clean 225 (EC 225)

Unique Formula Identifier UFI: DW10-90XT-Q009-D609

Product category PC-CLN-OTH Other cleaning, care and maintenance products (excludes biocidal products)

Hazard components
Cocosfatty acid amidopropyldimethylaminoxide [Amides, C12-18 (even numbered), N-[3-(dimethylamino) propyl], N'-oxides], disodium metasilicate

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

Sector of uses [SU]
SU22 Professional uses: Public domain (administration, education, entertainment, services, craftsmen)
SU3 Industrial uses

* **Product Categories [PC]**
PC35 Washing and cleaning products

Use of the substance/mixture
Universal alkaline cleaning concentrate.

1.3 Details of the supplier of the safety data sheet

Supplier
Elma Schmidbauer GmbH
Gottlieb-Daimler-Str. 17
D-78224 Singen (Htwl.)
Telephone +49 7731 882-0
Telefax +49 7731 882-266
E-mail info@elma-ultrasonic.com
Website www.elma-ultrasonic.com

Department responsible for information:
Chemie/Labor: Email: chemlab@elma-ultrasonic.com

1.4 Emergency telephone number

Vergiftungs-Informations-Zentrale Freiburg (Sprache/Language: DE, EN) +49 761 19240

* SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 [CLP]	Classification procedure
Skin Irrit. 2, H315	Bridging principle "Substantially similar mixtures".
Eye Dam. 1, H318	On basis of test data.

Hazard statements for health hazards
H315 Causes skin irritation.
H318 Causes serious eye damage.

2.2 Label elements

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

Hazard components
Cocosfatty acid amidopropyldimethylaminoxide [Amides, C12-18 (even numbered), N-[3-(dimethylamino) propyl], N'-oxides], disodium metasilicate

Hazard pictograms



GHS05

Signal word
Danger

Hazard statements
H315 Causes skin irritation.
H318 Causes serious eye damage.

Precautionary statements
P102 Keep out of reach of children.
P280 Wear protective gloves/eye protection.
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 doctor.
P302 + P352 IF ON SKIN: Wash with plenty of water.
P332 + P313 If skin irritation occurs: Get medical advice/attention.
P301 + P330 + P331 IF SWALLOWED: rinse mouth. Do NOT induce vomiting.
P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER/doctor.

Other labelling
Labelling for contents according to regulation (EC) No. 648/2004:
5 - 15% anionic surfactants
< 5% amphoteric surfactants
5 - 15% phosphates

* **2.3 Other hazards**

* **Adverse human health effects and symptoms**
This product does not contain a substance that has endocrine disrupting properties with respect to humans as no components meets the criteria.

* **Adverse environmental effects**
Aquatic Acute 3 H402: Harmful to aquatic life.
This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.

Results of PBT and vPvB assessment
The product does not contain any PBT-/vPvB-substances according to the recipe.

SECTION 3: Composition / information on ingredients

3.1 Substances

not applicable

3.2 Mixtures

Hazardous ingredients

CAS No	EC No	Index No	Substance name	Concentration	Classification according to Regulation (EC) No 1272/2008 [CLP]	SCL/ M/ ATE
111798-26-6			Na-alkyl-PEG-ether ester of phosphoric acid	5 - 15 weight-%	Skin Irrit. 2; H315 Eye Irrit. 2; H319 Aquatic Chronic 3; H412	
7320-34-5	230-785-7		tetrapotassium pyrophosphate	5 - 15 weight-%	Eye Irrit. 2; H319	
	939-581-9		Cocosfatty acid amidopropyldimethylamino xide [Amides, C12-18 (even numbered), N-[3-(dimethylamino) propyl], N'-oxides]	< 5 weight-%	Acute Tox. 4; H302 Skin Irrit. 2; H315 Eye Dam. 1; H318 Aquatic Acute 1; H400 Aquatic Chronic 3; H412	M=1 (Aquatic Acute 1)

CAS No	EC No	Index No	Substance name	Concentration	Classification according to Regulation (EC) No 1272/2008 [CLP]	SCL/ M/ ATE
6834-92-0	229-912-9	014-010-00-8	disodium metasilicate	< 5 weight-%	Met. Corr. 1; H290 Acute Tox. 4; H302 Skin Corr. 1B; H314 Eye Dam. 1; H318 STOT SE 3; H335	

REACH No.	Substance name
Not relevant (polymer).	Na-alkyl-PEG-ether ester of phosphoric acid
01-2119489369-18	tetrapotassium pyrophosphate
01-2119978229-22	Cocosfatty acid amidopropyldimethylaminoxide [Amides, C12-18 (even numbered), N-[3-(dimethylamino) propyl], N'-oxides]
01-2119449811-37	disodium metasilicate

Additional information
Aqueous alkaline mixture from anionic and amphoteric surfactants, sodium trioxosilicate and complexing agents.

SECTION 4: First aid measures

4.1 Description of first aid measures

General information
Remove contaminated, saturated clothing immediately.

Following skin contact
In case of contact with skin wash off immediately with plenty of water.
In case of skin irritation, consult a physician.

After eye contact
After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an ophthalmologist immediately.

Following ingestion
Do NOT induce vomiting.
Seek medical advice immediately.
Rinse mouth immediately and drink plenty of water.
Medical treatment necessary.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms
No further informations available.

4.3 Indication of any immediate medical attention and special treatment needed

Notes for the doctor
Keep under medical supervision for at least 48 hours.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media
Water
Foam
Extinguishing powder
Carbon dioxide (CO2)

Unsuitable extinguishing media
none

5.2 Special hazards arising from the substance or mixture

Hazardous combustion products
In case of fire formation of dangerous gases possible.
In the event of fire the following can be released:
Nitrogen oxides (NOx)
Carbon monoxide
Phosphorus oxides
Silicon dioxide (SiO2)

5.3 Advice for firefighters

Special protective equipment for firefighters
Do not inhale explosion and combustion gases.

Additional information
Co-ordinate fire-fighting measures to the fire surroundings.
The product itself does not burn.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel
Use personal protection equipment.
Special danger of slipping by leaking/spilling product.

For emergency responders
Personal protection equipment
Use personal protection.
Forms slippery surfaces with water.
Special danger of slipping by leaking/spilling product.

6.2 Environmental precautions

Do not allow to enter into surface water or drains.
Do not allow to enter into soil/subsoil.

6.3 Methods and material for containment and cleaning up

For containment
Suitable material for taking up:
Sand
Sawdust
Universal binder
Kieselguhr
Flush away residues with water.
After taking up the material dispose according to regulation.

6.4 Reference to other sections

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

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Protective measures
Handle and open container with care.
Avoid contact with eyes and skin.
The product is not combustible.

Advices on general occupational hygiene
Make available sufficient washing facilities
Keep away from food and drink.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels
Keep/Store only in original container.

Materials to avoid
Do not store together with:
Acid

Further information on storage conditions
Keep locked up and out of reach of children.
Protect from heat and direct solar radiation.
Do not keep at temperatures below -5°C.
Do not keep at temperatures above 30°C.
Storage time: 5 years.

7.3 Specific end use(s)

Recommendation
no further

* SECTION 8: Exposure controls/personal protection

* 8.1 Control parameters

*** DNEL worker**

CAS No	Substance name	DNEL value	DNEL type	Remark
6834-92-0	disodium metasilicate	1.49 mg/kg bw/day	long-term dermal (systemic)	Assessment factor 175
6834-92-0	disodium metasilicate	6.22 mg/m³	long-term inhalative (systemic)	Assessment factor 25

*** PNEC**

CAS No	Substance name	PNEC Value	PNEC type	Remark
	Cocosfatty acid amidopropyldimethylaminoxide [Amides, C12-18 (even numbered), N-[3-(dimethylamino) propyl], N'-oxides]	0.00606 mg/L	aquatic, freshwater	Assessment factor 50
	Cocosfatty acid amidopropyldimethylaminoxide [Amides, C12-18 (even numbered), N-[3-(dimethylamino) propyl], N'-oxides]	3.2 mg/L	sewage treatment plant (STP)	Assessment factor 10
6834-92-0	disodium metasilicate	7.5 mg/L	aquatic, freshwater	
6834-92-0	disodium metasilicate	1000 mg/L	sewage treatment plant (STP)	

8.2 Exposure controls

Personal protection equipment

Eye/face protection
tightly fitting goggles

Hand protection
Gloves (alkali-resistant)
Glove material specification [make/type, thickness, permeation time/life]: Butyl, 0,5mm, >=8h.
Glove material specification [make/type, thickness, permeation time/life]: NBR, 0,35mm, >=8h.
Glove material specification [make/type, thickness]: NR, 0.5mm.

Environmental exposure controls

Technical measures to prevent exposure
Neutralization is normally necessary before a waste water is discharged into sewage treatment plants.
Avoid penetration into the subsoil/soil.
Do not discharge into surface waters.

Additional information
Occupational exposure limits: No relevant informations available.

* SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state
liquid

Colour
yellowish up to beige

Odour
mild

Safety relevant basis data

	Value	Method	Source, Remark
Odour threshold:			not determined
Melting point/freezing point	solidifying range < -5 °C		
Boiling point or initial boiling point and boiling range	> 100 °C		
flammability	solid		not applicable
flammability	gaseous		not applicable
Lower and upper explosion limit	Upper explosion limit		not relevant
Lower and upper explosion limit	Lower explosion limit		not relevant
Flash point			No flash point up to 100 °C.
Auto-ignition temperature	> 300 °C		Value of complexing agents.
Decomposition temperature	≥ 100 °C		
pH	in delivery state approx. 13 (20°C)		
Viscosity	dynamic 4.4 mPa*s (20°C)		
Solubility(ies)	Water solubility		miscible
Partition coefficient n-octanol/water (log value)	approx. -2		Value of tetrapotassium pyrophosphate.
Vapour pressure	approx. 23 hPa (20°C)		
Density and/or relative density	1.132 g/cm³ (20°C)		
Relative vapour density	0.62		Value of Water.
particle characteristics			not applicable (liquid).

*** 9.2 Other information**

*** Information with regard to physical hazard classes**

*** Explosives**

*** Assessment/classification**
The mixture does not contain any explosive substances.

flammable gases

Assessment/classification
not applicable (liquid).

Aerosols

Assessment/classification
not relevant - no aerosol.
The classification criteria for this hazard class are not met by definition.

Oxidising gas

Assessment/classification
not applicable (liquid).

Gases under pressure

Assessment/classification
not applicable (liquid - no dissolved gas).

flammable liquids

Assessment/classification
not flammable, not combustible (No flash point below 100°C).

flammable solids

Assessment/classification
not applicable (liquid).

* **Self-reactive substances and mixtures**

* **Assessment/classification**
The mixture does not contain any self-reactive substances.

Pyrophoric liquids

Assessment/classification
The mixture does not contain any pyrophoric substances - not spontaneously flammable (CLP I 2.9.4.1).
CLP I 2.9.4.1: The classification procedure for pyrophoric liquids need not be applied when experience in manufacture or handling shows that the substance or mixture does not ignite spontaneously on coming into contact with air at normal temperatures (i.e. the substance is known to be stable at room temperature for prolonged periods of time (days)).

Pyrophoric solids

Assessment/classification
not applicable (liquid).

self-heating substances and mixtures

Assessment/classification
The mixture does not contain any self-heating substances.

Substances or mixtures which, in contact with water, emit flammable gases

Assessment/classification
not relevant - in contact with water releases no flammable gases (CLP I 2.12.4.1).
CLP I 2.12.4.1: The classification procedure for this class need not be applied if: (a) the chemical structure of the substance or mixture does not contain metals or metalloids; or (b) experience in production or handling shows that the substance or mixture does not react with water, e.g. the substance is manufactured with water or washed with water; or (c) the substance or mixture is known to be soluble in water to form a stable mixture.

Oxidising liquids

Assessment/classification
The mixture does not contain any oxidising substances.

Oxidising solids

Assessment/classification
not applicable (liquid).

Organic peroxides

Assessment/classification
The mixture does not contain any organic peroxides.

Corrosive to metals

Safety characteristics

	Value	Method, Result	Source, Remark
Corrosion rate (mm aluminium/year)	0.07 mm/a	UN Test, Part III of sub-section 37.4	
Corrosion rate (mm steel/year)	0.03 mm/a	UN Test, Part III of sub-section 37.4	

Assessment/classification
The mixture is not classified as corrosive to metals.

Desensitised explosives

Assessment/classification
The mixture does not contain any desensitised explosive substances.

Other safety characteristics

	Value	Method	Source, Remark
Evaporation rate			Water: 0.36 (ASTM D3539).
Solvent content	0 %		
Explosive properties			none
Oxidising properties			none

* **Other information**
No further relevant informations available.

SECTION 10: Stability and reactivity

10.1 Reactivity

Exothermic reaction with:
Acid
No further hazardous reactions known if used as directed.

10.2 Chemical stability

Stable at ambient temperature.

10.3 Possibility of hazardous reactions

Reactions with acids.

10.4 Conditions to avoid

Heat and direct solar radiation.

10.5 Incompatible materials

Acid

10.6 Hazardous decomposition products

No decomposition if used as directed.

SECTION 11: Toxicological information

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

Acute toxicity

Animal data

	Effective dose	Method,Evaluation	Source, Remark
Acute oral toxicity	> 5000 mg/kg CAS No6834-92-0 disodium metasilicate LD50: 1152 mg/kg Species Rat Cocosfatty acid amidopropyldimethylaminoxide [Amides, C12-18 (even numbered), N-[3-(dimethylamino) propyl], N'-oxides] LD50: 500- 1000 mg/kg Species Rat	ATE: Acute Toxicity Estimate	
Acute dermal toxicity	> 5000 mg/kg	ATE: Acute Toxicity Estimate	
Acute inhalation toxicity	Acute inhalation toxicity (vapour)		not relevant

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

Skin corrosion/irritation

Animal data

Result / Evaluation	Method	Source, Remark
Irritant.	Bridging principle 'Substantially similar mixtures.'	

Serious eye damage/irritation

Animal data

Result / Evaluation	Method	Source, Remark
Risk of serious damage to eyes.	OECD 437	

Sensitisation to the respiratory tract

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

Skin sensitisation

Animal data

Result / Evaluation	Dose / Concentration	Method	Source, Remark
not sensitising.		Calculation method.	

Germ cell mutagenicity

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

Carcinogenicity

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

Reproductive toxicity

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

Overall Assessment on CMR properties

The mixture is not classified as mutagen / not classified as carcinogen / not classified as reproductive toxicant.

STOT-single exposure

STOT SE 1 and 2

Assessment/classification
The mixture is not classified as specific target organ toxicant (single exposure).
Based on available data, the classification criteria are not met.

STOT SE 3

Irritation to respiratory tract

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

Narcotic effects

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

STOT-repeated exposure

Assessment/classification
The mixture is not classified as specific target organ toxicant (repeated exposure).
Based on available data, the classification criteria are not met.

Aspiration hazard

Assessment/classification
The mixture is not classified as aspiration hazardous.
Based on available data, the classification criteria are not met.

11.2 Information on other hazards

Information on other hazards

	Effective dose	Method,Evaluation	Source, Remark
Endocrine disrupting properties			This product does not contain a substance that has endocrine disrupting properties with respect to humans as no components meets the criteria.

Other information

Has degreasing effect on the skin.

SECTION 12: Ecological information

12.1 Toxicity

Aquatic toxicity

	Effective dose	Method,Evaluation	Source, Remark
Acute (short-term) fish toxicity	LC50: 29.3 mg/L	calculated.	
	CAS No111798-26-6 Na-alkyl-PEG-ether ester of phosphoric acid LC50: 64 mg/L Test duration 96 h		
	Cocosfatty acid amidopropyldimethylaminoxide [Amides, C12-18 (even numbered), N-[3-(dimethylamino) propyl], N'-oxides] LC50: 0.68 mg/L Species Oncorhynchus mykiss (Rainbow trout) Test duration 96 h	OECD 203	
Chronic (long-term) fish toxicity	Cocosfatty acid amidopropyldimethylaminoxide [Amides, C12-18 (even numbered), N-[3-(dimethylamino) propyl], N'-oxides] NOEC 0.42 mg/L Species Pimephales promelas (fathead minnow) Test duration 302 d		
Acute (short-term) toxicity to crustacea	EC50 68.8 mg/L	calculated.	
	CAS No111798-26-6 Na-alkyl-PEG-ether ester of phosphoric acid EC50 227 mg/L Test duration 48 h		
	Cocosfatty acid amidopropyldimethylaminoxide [Amides, C12-18 (even numbered), N-[3-(dimethylamino) propyl], N'-oxides] EC50 19.9 mg/L Species Daphnia magna (Big water flea) Test duration 48 h	OECD 202	
Chronic (long-term) toxicity to aquatic invertebrate	Cocosfatty acid amidopropyldimethylaminoxide [Amides, C12-18 (even numbered), N-[3-(dimethylamino) propyl], N'-oxides] NOEC 0.7 mg/L Species Daphnia magna (Big water flea) Test duration 21 d	OECD 211	
Acute (short-term) toxicity to algae and cyanobacteria	EC50 31.4 mg/L	calculated.	
	Cocosfatty acid amidopropyldimethylaminoxide [Amides, C12-18 (even numbered), N-[3-(dimethylamino) propyl], N'-oxides] EC50 0.705 mg/L Species Pseudokirchneriella subcapitata Test duration 72 h	OECD 201	

	Effective dose	Method,Evaluation	Source, Remark
Chronic (long-term) toxicity to aquatic algae and cyanobacteria	Cocosfatty acid amidopropyldimethylaminoxide [Amides, C12-18 (even numbered), N-[3-(dimethylamino) propyl], N'-oxides] NOEC: 0.303 mg/L Species Pseudokirchneriella subcapitata Test duration 72 h	OECD 201	
Toxicity to other aquatic plants/organisms	not determined		
Toxicity to microorganisms	not determined		

Assessment/classification
Harmful to aquatic life.

12.2 Persistence and degradability

	Value	Method	Source, Remark
Biodegradation	Degradation rate > 70 %		DOC reduction Biodegradable.
Biodegradation	Degradation rate 100 %	Neutralization, pH-measurement	Alkaline properties can be eliminated up to 100% by neutralization.
Biodegradation			CAS No7320-34-5 tetrapotassium pyrophosphate Inorganic product which is not eliminable from water through biological cleaning processes.
Biodegradation			CAS No6834-92-0 disodium metasilicate Inorganic product which is not eliminable from water through biological cleaning processes.
Biodegradation	Degradation rate 62 % Test duration 28 d	OECD 301A/ ISO 7827/ EEC 92/69/V, C.4-A	CAS No111798-26-6 Na-alkyl-PEG-ether ester of phosphoric acid
Biodegradation	Degradation rate > 60 % Test duration 28 d	OECD 301B/ ISO 9439/ EEC 92/69/V, C.4-C	CAS No111798-26-6 Na-alkyl-PEG-ether ester of phosphoric acid
Biodegradation	Degradation rate 62 % Test duration 28 d	OECD 301E/ EEC 92/69/V, C.4-B	CAS No111798-26-6 Na-alkyl-PEG-ether ester of phosphoric acid
Biodegradation	Degradation rate 65.1 % Test duration 28 d	OECD 302B/ ISO 9888/ EEC 92/69/V, C.9	CAS No111798-26-6 Na-alkyl-PEG-ether ester of phosphoric acid
Biodegradation	Degradation rate 68 % Test duration 28 d	OECD 301B/ ISO 9439/ EEC 92/69/V, C.4-C	Cocosfatty acid amidopropyldimethylaminoxide [Amides, C12-18 (even numbered), N-[3-(dimethylamino) propyl], N'-oxides]

12.3 Bioaccumulative potential

Assessment/classification
disodium metasilicate: Accumulation in organisms is not expected.
tetrapotassium pyrophosphate: Bioaccumulation is improbable.
Na-alkyl-PEG-ether ester of phosphoric acid: not available.
Cocosfatty acid amidopropyldimethylaminoxide: Significant accumulation in organisms is not expected (log Pow: 1.27).

12.4 Mobility in soil

Assessment/classification
tetrapotassium pyrophosphate: moderately mobile in soil (Koc: ~150).
disodium metasilicate: not available.
Na-alkyl-PEG-ether ester of phosphoric acid: not available.
Cocosfatty acid amidopropyldimethylaminoxide: Low adsorption on soil (Koc: ~34).

12.5 Results of PBT and vPvB assessment

The product does not contain any PBT-/vPvB-substances according to the recipe.

12.6 Endocrine disrupting properties

	Effective dose	Method,Evaluation	Source, Remark
Endocrine disrupting properties			This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.

12.7 Other adverse effects

	Value	Method	Source, Remark
Ozone depletion potential (ODP):			Based on available data, the classification criteria are not met.

Additional ecotoxicological information

	Value	Method	Source, Remark
Chemical oyxgen demand (COD)	165 mgO2/g	calculated.	
AOX			The product does not contain any organically bound halogens according to the recipe.

Additional information
The surfactants in our product meet the criteria for biodegradation as laid down in Annex III of the Regulation (EC) No 648/2004 on detergents.
Acute aquatic environmental hazards: Aquatic Acute 3 H402: Harmful to aquatic life.
The mixture is not classified as chronic hazardous to the aquatic environment.
Do not allow uncontrolled discharge of product into the environment.
No further relevant informations available.

* SECTION 13: Disposal considerations

* 13.1 Waste treatment methods

Waste codes/waste designations according to EWC/AVV

Waste code product	Waste name
200129 *	detergents containing hazardous substances

Waste code packaging	Waste name
150110 *	packaging containing residues of or contaminated by hazardous substances

* **Appropriate disposal / Product**
Do not dispose with household waste. Do not discharge into the drains.
Dispose of waste according to applicable legislation.

Appropriate disposal / Package
Non-contaminated packages may be recycled.

* **Other disposal recommendations**
Application solution / cleaning solution :
Suitable for neutralization are acetic acid (60%, liquid) or citric acid (solid powder, crystallized) if a stainless steel bath is used.
Product is allowed to discharge into sewage treatment plants, but in accordance with official regulations.

SECTION 14: Transport information

	Land transport (ADR/RID)	Sea transport (IMDG)	Air transport (ICAO-TI / IATA-DGR)
14.1 UN number or ID number	-	-	-
14.2 UN proper shipping name	-	-	-
14.3 Transport hazard class(es)	-	-	-
14.4 Packing group	-	-	-
14.5 Environmental hazards	-	-	-

14.6 Special precautions for user

none

14.7 Maritime transport in bulk according to IMO instruments

not relevant

Land transport (ADR/RID)

Remark
Not classified for this transport carrier.

Sea transport (IMDG)

Remark
No hazardous material as defined by the prescriptions.

Air transport (ICAO-TI / IATA-DGR)

Remark
No hazardous material as defined by the prescriptions.

* SECTION 15: Regulatory information

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

*** EU legislation**

Authorisations
not relevant

* **Restrictions on use**
Regulation (EC) No 1907/2006 (REACH), Annex XVII No 3 - not relevant if used as directed.
Regulation (EC) No 1907/2006 (REACH), Annex XVII No 75 - not relevant if used as directed.

Restrictions of occupation
Observe restrictions to employment for juvenils according to the 'juvenile work protection guideline' (94/33/EC).

Other regulations (EU)

To follow:
Regulation (EC) No. 648/2004 (Detergents regulation)
Directive 2012/18/EU, Annex I: not mentioned.

Directive 2010/75/EU on industrial emissions [Industrial Emissions Directive] VOC
VOC content, delivery state 0 %

15.2 Chemical Safety Assessment

National regulations

For this mixture a chemical safety assessment were not carried out.

* SECTION 16: Other information

* **Abbreviations and acronyms**
For abbreviations and acronyms, see: ECHA Guidance on information requirements and chemical safety assessment, chapter R.20 (Table of terms and abbreviations).
ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road
ASTM: American Society for Testing and Materials
ATE: Acute Toxicity Estimate
AVV: Waste Shipment Ordinance (DE)
DGR: Dangerous Goods Regulations (IATA)
DNEL: derived no-effect level
DOC: Dissolved Organic Carbon
IATA: International Air Transport Association
ICAO: International Civil Aviation Organization
IMDG: International Maritime Dangerous Goods
IMO: International Maritime Organization
JArbSchG: Youth Labor Protection Act (DE)
OECD: Organisation for Economic Cooperation and Development
PBT: persistent and bioaccumulative and toxic
PNEC: Predicted No Effect Concentration
RID: Dangerous goods regulations for transport by rail
TI: Technical Instruction
TRGS: Technical Rules for Hazardous Substances
VOC: Volatile organic compounds
vPvB: very persistent, very bioaccumulative
Met. Corr. 1: Corrosive to metals, Category 1
Acute Tox. 4, H302: Acute Toxicity (oral), Category 4
Skin Corr. 1B: Skin corrosion, Sub-category 1B
Skin Irrit. 2: Skin irritation, Category 2
Eye Dam. 1: Serious eye damage, Category 1
Eye Irrit. 2: Eye irritation, Category 2
STOT SE 3, H335: Specific target organ toxicity (single exposure), Category 3
Aquatic Acute 1: Short-term (acute) aquatic hazard, Category 1
Aquatic Chronic 3: Long-term (chronic) aquatic hazard, Category 3

Key literature references and sources for data
Own measurements.
European Chemicals Agency, http://echa.europa.eu/.
Informations from our suppliers.

Additional information
National and local regulations concerning chemicals shall be observed.
These data are given according to our actual knowledge about this product.This data sheet does not correspond to an assurance by virtue of a contract for properties of the product.

Relevant H- and EUH-phrases (Number and full text)

H290	May be corrosive to metals.
H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.

H335	May cause respiratory irritation.
H400	Very toxic to aquatic life.
H412	Harmful to aquatic life with long lasting effects.

Indication of changes
* Data changed compared with the previous version