



**elma tec clean A3**

Print date 24.10.2023  
Revision date 24.10.2023  
Version 2.3 (en)  
replaces version of 01.09.2022 (2.2)

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

**1.1 Product identifier**

**Trade name/designation** elma tec clean A3  
**Unique Formula Identifier** UFI: KT40-H0EA-4003-VSTG  
**Product category** PC-CLN-OTH Other cleaning, care and maintenance products (excludes biocidal products)

**Hazard components**  
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

**Use of the substance/mixture**  
Alkaline cleaning concentrate for the metal cleaning (not for aluminium and light metal alloys).

**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, +49 761 19240 EN)

**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	Expert judgement and weight of evidence determination.
Eye Dam. 1, H318	Calculation method.

**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**  
disodium metasilicate

**Hazard pictograms**



GHS05



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**Signal word**

Danger

**Hazard statements**

H315 Causes skin irritation.  
H318 Causes serious eye damage.

**Precautionary statements**

P280 Wear protective gloves/protective clothing and eye protection/face 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 + P312 IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.

**Other labelling**

Labelling for contents according to regulation (EC) No. 648/2004:

- 5 - 15% anionic surfactants
- < 5% non-ionic surfactants
- < 5% soap
- < 5% 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.	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 weight-%	Skin Irrit. 2; H315 Eye Irrit. 2; H319 Aquatic Chronic 3; H412	
6834-92-0	229-912-9	disodium metasilicate	< 5 weight-%	Acute Tox. 4; H302 Skin Corr. 1B; H314 Eye Dam. 1; H318 STOT SE 3; H335	
15763-76-5	239-854-6	sodium cumenesulphonate	< 5 weight-%	Eye Irrit. 2; H319	
164524-02-1	629-764-9	potassium cumenesulphonate	< 5 weight-%	Eye Irrit. 2; H319	
7320-34-5	230-785-7	tetrapotassium pyrophosphate	< 5 weight-%	Eye Irrit. 2; H319	

**REACH No.**

REACH No.	Substance name
Not relevant (polymer).	Na-alkyl-PEG-ether ester of phosphoric acid
01-2119449811-37	disodium metasilicate
01-2119489411-37	sodium cumenesulphonate



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REACH No.	Substance name
01-2119489427-24	potassium cumenesulphonate
01-2119489369-18	tetrapotassium pyrophosphate

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**Additional information**

Aqueous alkaline mixture of anionic and nonionic surfactants, disodium-metasilicate, complexing agents and hydrotropic component.

## 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.  
If swallowed seek medical advice immediately and show the doctor packing or label.  
Rinse mouth immediately and drink plenty of water.

### 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 (CO<sub>2</sub>)

### 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 (NO<sub>x</sub>)  
Carbon monoxide  
Phosphorus oxides  
Sulphur dioxide (SO<sub>2</sub>)  
Silicon dioxide (SiO<sub>2</sub>)

### 5.3 Advice for firefighters

**Special protective equipment for firefighters**

Do not inhale explosion and combustion gases.



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**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:  
Universal binder  
Flush away residues with water.  
Use chemical neutralizers.  
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.  
Take the usual precautions when handling with chemicals.  
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**

Suitable floor material:  
Alkali-resistant  
Keep/Store only in original container.  
Keep container tightly closed.

**Storage class**

12 non-combustible liquids that cannot be assigned to any of the above storage classes

**Materials to avoid**

Do not store together with:  
Acid



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**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/m <sup>3</sup>	long-term inhalative (systemic)	Assessment factor 25
15763-76-5	sodium cumenesulphonate	37.4 mg/m <sup>3</sup>	long-term inhalative (systemic)	Assessment factor 25
15763-76-5	sodium cumenesulphonate	191 mg/kg bw/day	long-term dermal (systemic)	Assessment factor 100
164524-02-1	potassium cumenesulphonate	37.4 mg/m <sup>3</sup>	long-term inhalative (systemic)	Assessment factor 25
164524-02-1	potassium cumenesulphonate	191 mg/kg bw/day	long-term dermal (systemic)	Assessment factor 100

**\* PNEC**

CAS No.	Substance name	PNEC Value	PNEC type	Remark
6834-92-0	disodium metasilicate	7.5 mg/L	aquatic, freshwater	
6834-92-0	disodium metasilicate	1000 mg/L	sewage treatment plant (STP)	
15763-76-5	sodium cumenesulphonate	0.1 mg/L	aquatic, freshwater	Assessment factor 1000
15763-76-5	sodium cumenesulphonate	100 mg/L	sewage treatment plant (STP)	Assessment factor 10
164524-02-1	potassium cumenesulphonate	0.1 mg/L	sediment, freshwater	Assessment factor 1000
164524-02-1	potassium cumenesulphonate	100 µg/kg	sewage treatment plant (STP)	Assessment factor 10

**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.



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## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

**Physical state**

liquid

**Colour**

yellowish up to beige

**Odour**

odourless

**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 13.1 (20°C)		
Viscosity	dynamic 3.8 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	1.122 g/cm <sup>3</sup> (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 (CLP I 2.1.4.3 a).

CLP I 2.1.4.3 a: The classification procedure needs not to be applied because there are no chemical groups present in the molecule which are associated with explosive properties.



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**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 (CLP I 2.8.4.2 a).  
CLP I 2.8.4.2 a: There are no chemical groups present in the molecule associated with explosive or self reactive properties.

**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.



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**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)	0.06 mm/a	UN Test, Part III of sub-section 37.4	
Corrosion rate (mm steel/year)	0.04 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**

Exothermic reaction with strong acids.  
Reactions with light metals, with evolution of hydrogen.

**10.4 Conditions to avoid**

Heat and direct solar radiation.

**10.5 Incompatible materials**

Reactions with strong acids.  
Light metals  
Corrodes aluminium.



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**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	ATE: Acute Toxicity Estimate	
	CAS No.6834-92-0 disodium metasilicate LD50: 1152 mg/kg Species Rat		
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.	Expert judgement and weight of evidence determination.	

**Serious eye damage/irritation**

**Animal data**

Result / Evaluation	Method	Source, Remark
Risk of serious damage to eyes.	Calculation method.	

**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.



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**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**

**Symptoms related to the physical, chemical and toxicological characteristics**

	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: 26.7 mg/L	calculated.	
	CAS No.111798-26-6 Na-alkyl-PEG-ether ester of phosphoric acid LC50: 64 mg/L Test duration 96 h		
Chronic (long-term) fish toxicity	not determined		
Acute (short-term) toxicity to crustacea	EC50 26.8 mg/L	calculated.	



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

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	Effective dose	Method, Evaluation	Source, Remark
	CAS No.111798-26-6 Na-alkyl-PEG-ether ester of phosphoric acid EC50 227 mg/L Test duration 48 h		
Chronic (long-term) toxicity to aquatic invertebrate	not determined		
Acute (short-term) toxicity to algae and cyanobacteria	EC50 99.6 mg/L	calculated.	
Chronic (long-term) toxicity to aquatic algae and cyanobacteria	not determined		
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 > 80 %	calculated.	DOC reduction Readily biodegradable (according to OECD criteria).
Biodegradation	Degradation rate 100 %	Neutralization, pH-measurement	Alkaline properties can be eliminated up to 100% by neutralization.
Biodegradation			CAS No.7320-34-5 tetrapotassium pyrophosphate
Biodegradation			Inorganic product which is not eliminable from water through biological cleaning processes. CAS No.6834-92-0 disodium metasilicate
Biodegradation	Degradation rate 62 % Test duration 28 d	OECD 301A/ ISO 7827/ EEC 92/69/V, C.4-A	CAS No.111798-26-6 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 No.111798-26-6 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 No.111798-26-6 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 No.111798-26-6 Na-alkyl-PEG-ether ester of phosphoric acid
Biodegradation	Degradation rate 99 % Test duration 28 d	OECD 301B/ ISO 9439/ EEC 92/69/V, C.4-C	CAS No.15763-76-5 sodium cumenesulphonate



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	Value	Method	Source, Remark
Biodegradation	Degradation rate > 60 % Test duration 28 d	OECD 301B/ ISO 9439/ EEC 92/69/V, C.4-C	CAS No.164524-02-1 potassium cumenesulphonate

### 12.3 Bioaccumulative potential

**Assessment/classification**

sodium cumenesulphonate: Bioaccumulation is improbable.  
potassium cumenesulphonate: Bioaccumulation is improbable.  
disodium metasilicate: Accumulation in organisms is not expected.  
tetrapotassium pyrophosphate: Bioaccumulation is improbable.  
Na-alkyl-PEG-ether ester of phosphoric acid: not available.

### 12.4 Mobility in soil

**Assessment/classification**

sodium cumenesulphonate: Adsorption on soil is not expected.  
potassium cumenesulphonate: Adsorption on soil is not expected.  
tetrapotassium pyrophosphate: moderately mobile in soil (Koc: ~150).  
disodium metasilicate: not available.  
Na-alkyl-PEG-ether ester of phosphoric acid: not available.

### 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 oxygen demand (COD) AOX	approx. 286 mgO2/g	calculated.	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.



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**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

**Appropriate disposal / Product**

Do not dispose with household waste.

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.

**Appropriate disposal / Package**

Non-contaminated packages may be recycled.

**SECTION 14: Transport information**

	Land transport (ADR/RID)	Sea transport (IMDG)	Air transport (ICAO-TI / IATA-DGR)
<b>14.1 UN number or ID number</b>	-	-	-
<b>14.2 UN proper shipping name</b>	-	-	-
<b>14.3 Transport hazard class(es)</b>	-	-	-
<b>14.4 Packing group</b>	-	-	-
<b>14.5 Environmental hazards</b>	-	-	-
<b>14.6 Special precautions for user</b>	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.



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**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

**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)**

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.  
H412 Harmful to aquatic life with long lasting effects.



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

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**Indication of changes**

\* Data changed compared with the previous version