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

1.1 Product identifier

Trade name/designation elma tec clean A5

Unique Formula Identifier UFI: H050-H0T3-R003-6FYM

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

Hazard components
disodium metasilicate, sodium carbonate, Reaction product of Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs. and Benzenesulfonic acid, 4-methyl- and sodium hydroxid, tetrasodium pyrophosphate, cocosfattyaminoxethylate, decan-1-ol, ethoxylated

* 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
Alkaline cleaning powder for aqueous immersion cleaning with ultrasonics of metal, light metal and plastic surfaces. Contains inhibitors protecting amphoteric metals (aluminium a.s.o.).

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
Acute Tox. 4, H332	Calculation method.
Skin Corr. 1B, H314	Calculation method.
Eye Dam. 1, H318	Calculation method.
STOT SE 3, H335	Calculation method.

Hazard statements for health hazards
H314 Causes severe skin burns and eye damage.
H318 Causes serious eye damage.
H332 Harmful if inhaled.
H335 May cause respiratory irritation.

2.2 Label elements

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

Hazard components
disodium metasilicate, sodium carbonate, Reaction product of Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs. and Benzenesulfonic acid, 4-methyl- and sodium hydroxid, tetrasodium pyrophosphate, cocosfattyaminoxethylate, decan-1-ol, ethoxylated

Hazard pictograms



GHS05



GHS07

Signal word
Danger

Hazard statements
H314 Causes severe skin burns and eye damage.
H332 Harmful if inhaled.
H335 May cause respiratory irritation.

Precautionary statements
P405 Store locked up.
P102 Keep out of reach of children.
P260 Do not breathe dust.
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.
P301 + P330 + P331 IF SWALLOWED: rinse mouth. Do NOT induce vomiting.
P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER/doctor.
P302 + P352 IF ON SKIN: Wash with plenty of water.
P332 + P313 If skin irritation occurs: Get medical advice/attention.
P312 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
≥ 30% phosphates

* 2.3 Other hazards

*** Adverse human health effects and symptoms**
Acute Tox. 5 (oral) H303: May be harmful if swallowed.
Inhalation of dust may cause irritation of the respiratory system.
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
6834-92-0	229-912-9	014-010-00-8	disodium metasilicate	20 - 30 weight-%	Met. Corr. 1; H290 Acute Tox. 4; H302 Skin Corr. 1B; H314 Eye Dam. 1; H318 STOT SE 3; H335	
497-19-8	207-838-8	011-005-00-2	sodium carbonate	5 - 15 weight-%	Eye Irrit. 2; H319	
	932-051-8		Reaction product of Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs. and Benzenesulfonic acid, 4-methyl- and sodium hydroxid	5 - 10 weight-%	Skin Irrit. 2; H315 Eye Dam. 1; H318 Aquatic Chronic 3; H412	
7722-88-5	231-767-1		tetrasodium pyrophosphate	5 - 10 weight-%	Acute Tox. 4; H302 Eye Dam. 1; H318	
61791-14-8			cocosfattyaminoxethylate	< 4 weight-%	Acute Tox. 4; H302 Eye Dam. 1; H318 Aquatic Chronic 3; H412	
26183-52-8			decan-1-ol, ethoxylated	< 4 weight-%	Acute Tox. 4; H302 Eye Dam. 1; H318	

REACH No.	Substance name
01-2119449811-37	disodium metasilicate
01-2119485498-19	sodium carbonate
01-2119565112-48	Reaction product of Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs. and Benzenesulfonic acid, 4-methyl- and sodium hydroxid
01-2119489794-17	tetrasodium pyrophosphate
Not relevant (polymer).	cocosfattyaminoxethylate
Not relevant (polymer).	decan-1-ol, ethoxylated

Additional information
Mixture (powder) with silikates, carbonates, phosphates of alkalies, anionic and nonionic surfactants.

SECTION 4: First aid measures

4.1 Description of first aid measures

General information
Remove contaminated, saturated clothing immediately.
Remove casualty to fresh air and keep warm and at rest.
Symptoms may develop several hours following exposure; medical observation therefore necessary for at least 48 hours.

Following inhalation
Provide fresh air.
Medical treatment necessary.

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.
Call a physician immediately.
Rinse mouth immediately and drink plenty of water.

4.2 Most important symptoms and effects, both acute and delayed

Effects
Risk of stomach perforation.

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

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
Carbon dioxide (CO_2)
Sulphur oxides
Silicon dioxide (SiO_2)

5.3 Advice for firefighters

Special protective equipment for firefighters
Do not inhale explosion and combustion gases.
In case of fire: Wear self-contained breathing apparatus.

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
Keep people away and stay on the upwind side.
Avoid dust formation.
Use personal protection equipment.
Special danger of slipping by leaking/spilling product.

For emergency responders
Keep people away and stay on the upwind side.
Avoid dust formation.
Personal protection equipment
Use personal protection.
Use breathing apparatus if exposed to vapours/dust/aerosol.
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.
Knock down dust with water spray jet.
Do not allow to enter into soil/subsoil.

6.3 Methods and material for containment and cleaning up

For containment
Flush away residues with water.
After taking up the material dispose according to regulation.

For cleaning up
Take up mechanically.

6.4 Reference to other sections

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

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Protective measures
Handle and open container with care.
Avoid the formation and deposition of dust.
Do not inhale dust.
If local exhaust ventilation is not possible or not sufficient, the entire working area should be ventilated by technical means.
Avoid contact with eyes and skin.
Use only alkali-resistant equipment.
Keep the packing dry and well sealed to prevent contamination and absorbtion of humidity.
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.

Materials to avoid
Do not store together with:
Acid

Further information on storage conditions
Keep locked up and out of reach of children.
Product is hygroscopic.
Storage time: 5 years.

7.3 Specific end use(s)

Recommendation
no further

* SECTION 8: Exposure controls/personal protection

* 8.1 Control parameters

Occupational exposure limit values

CAS No	EC No	Substance name	occupational exposure limit value
7722-88-5		Tetrasodium pyrophosphate	5 [mg/m³] (IE)
7722-88-5		Tetrasodium pyrophosphate	5 [mg/m³] (UK)

* **DNEL worker**

CAS No	Substance name	DNEL value	DNEL type	Remark
	Reaction product of Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs. and Benzenesulfonic acid, 4-methyl-and sodium hydroxid	6 mg/m³	long-term inhalative (systemic)	Assessment factor 25
497-19-8	sodium carbonate	10 mg/m³	long-term inhalative (local)	
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
7722-88-5	tetrasodium pyrophosphate	17.63 mg/m³	long-term inhalative (systemic)	Assessment factor 25

* **PNEC**

CAS No	Substance name	PNEC Value	PNEC type	Remark
	Reaction product of Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs. and Benzenesulfonic acid, 4-methyl-and sodium hydroxid	0.268 mg/L	aquatic, freshwater	Assessment factor 1
	Reaction product of Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs. and Benzenesulfonic acid, 4-methyl-and sodium hydroxid	5.6 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

Appropriate engineering controls

Technical measures to prevent exposure
Technical exhaustion if there is a long-term exposition

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, permeation time/life]: FKM, 0,4mm, >=8h.
Glove material specification [make/type, thickness]: NR, 0.5mm.

Body protection:
Required properties:
alkali-resistant

Respiratory protection
Suitable respiratory protection apparatus:
Particle filter P2
In case of dust formation wear micro dust mask.

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 for dust.

* SECTION 9: Physical and chemical properties

* 9.1 Information on basic physical and chemical properties

* **Physical state**
solid
Powder

Colour
white

Odour
characteristic

Safety relevant basis data

	Value	Method	Source, Remark
Odour threshold:			not determined
Melting point/freezing point	melting range		not determined
Boiling point or initial boiling point and boiling range			not determined
flammability	solid		none
flammability	gaseous		not applicable
Lower and upper explosion limit	Upper explosion limit		not applicable
Lower and upper explosion limit	Lower explosion limit		not applicable
Flash point			not applicable
Auto-ignition temperature	> 400 °C		Value of Reaction product of Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs. and Benzenesulfonic acid, 4-methyl- and sodium hydroxid.
Decomposition temperature			not determined
pH	in delivery state approx. 12 (20°C) Concentration 10 g/L		
Viscosity			not applicable
Solubility(ies)	Water solubility 100 g/L (20°C)		
Partition coefficient n-octanol/water (log value)	0.7		Value of Reaction product of Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs. and Benzenesulfonic acid, 4-methyl- and sodium hydroxid.
Vapour pressure			not available
Density and/or relative density			not determined
Density and/or relative density	Bulk density 920 kg/m³		
Relative vapour density			not relevant

	Value	Method	Source, Remark
particle characteristics	Particle size distribution range 200- 1250 µm		CAS No6834-92-0 disodium metasilicate European Chemicals Agency, http://echa.europa.eu/.
particle characteristics	mass median diameter (MMD) 695 µm		CAS No6834-92-0 disodium metasilicate European Chemicals Agency, http://echa.europa.eu/.
particle characteristics	Particle size distribution range < 100 µm		CAS No7722-88-5 tetrasodium pyrophosphate European Chemicals Agency, http://echa.europa.eu/.
particle characteristics	mass median diameter (MMD) 198- 1580 µm		CAS No497-19-8 sodium carbonate European Chemicals Agency, http://echa.europa.eu/.
particle characteristics	mass median diameter (MMD) 638.7 µm		реакционен продукт на бензенсулфоновата киселина, 4-C10-13-втор-алкилови производни и бензенсулфоновата киселина, 4-метил- и натриев хидроксид European Chemicals Agency, http://echa.europa.eu/.

*** 9.2 Other information**

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

Explosives

Assessment/classification
This product 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.

flammable gases

Assessment/classification
not applicable (solid).

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 (solid).

Gases under pressure

Assessment/classification
not applicable (solid).

flammable liquids

Assessment/classification
not applicable (solid).

flammable solids

Assessment/classification
not flammable, not combustible.
The mixture does not contain any flammable substances.

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
not applicable (solid).

Pyrophoric solids

Assessment/classification
The mixture does not contain any pyrophoric substances - not spontaneously flammable (CLP I 2.10.4.1).
CLP I 2.10.4.1: The classification procedure for pyrophoric solids 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)).

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
not applicable (solid).

Oxidising solids

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

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 steel/year)	< 6.25 mm/a	Expert judgement and weight of evidence determination.	
Corrosion rate (mm aluminium/year)	< 6.25 mm/a	Expert judgement and weight of evidence determination.	

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

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

not relevant

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	2000- 2500 mg/kg	ATE: Acute Toxicity Estimate	
	CAS No6834-92-0 disodium metasilicate LD50: 1152 mg/kg Species Rat		
	CAS No26183-52-8 decan-1-ol, ethoxylated LD50: 500- 2000 mg/kg Species Rat		

	Effective dose	Method,Evaluation	Source, Remark
	CAS No61791-14-8 cocosfattyaminoxethylate LD50: 750 mg/kg Species Rat		
	CAS No7722-88-5 tetrasodium pyrophosphate LD50: 1624 mg/kg Species Rat		
Acute dermal toxicity	> 5000 mg/kg	ATE: Acute Toxicity Estimate	
Acute inhalation toxicity	Acute inhalation toxicity (dust/mist) approx. 2.3 mg/L	ATE: Acute Toxicity Estimate	
	Acute inhalation toxicity (vapour)		not relevant
	CAS No497-19-8 sodium carbonate Acute inhalation toxicity (dust/mist) LC50: 2.3 mg/L Species Rat Exposure time 2 h		

Assessment/classification
Harmful by inhalation.
May be harmful if swallowed.

Skin corrosion/irritation

Animal data

Result / Evaluation	Method	Source, Remark
Corrosive.	Calculation method.	

Serious eye damage/irritation

Animal data

Result / Evaluation	Method	Source, Remark
Corrosive	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.

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

STOT SE 3

Irritation to respiratory tract

Assessment/classification
Respiratory irritant effect: STOT SE 3 H335: May cause respiratory irritation.

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

Causes burns.
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: 44 mg/L CAS No61791-14-8 cocosfattyaminoxethylate LC50: 2.3 mg/L	calculated.	

	Effective dose	Method,Evaluation	Source, Remark
	реакционен продукт на бензенсулфоновата киселина, 4-C10-13-втор-алкилови производни и бензенсулфоновата киселина, 4-метил- и натриев хидроксид LC50: 5.5 mg/L Species Cyprinus carpio (Common Carp) Test duration 96 h	Regulation (EC) No. 440/2008, Annex C.1	
Chronic (long-term) fish toxicity	реакционен продукт на бензенсулфоновата киселина, 4-C10-13-втор-алкилови производни и бензенсулфоновата киселина, 4-метил- и натриев хидроксид NOEC >0.1- 1 mg/L Species Oncorhynchus mykiss (Rainbow trout) Test duration 72 d		
Acute (short-term) toxicity to crustacea	EC50 67 mg/L	calculated.	
	CAS No61791-14-8 cocosfattyaminoxethylate EC50 4.4 mg/L		
	реакционен продукт на бензенсулфоновата киселина, 4-C10-13-втор-алкилови производни и бензенсулфоновата киселина, 4-метил- и натриев хидроксид EC50 8.8 mg/L Species Daphnia magna (Big water flea) Test duration 48 h	OECD 202	
Chronic (long-term) toxicity to aquatic invertebrate	реакционен продукт на бензенсулфоновата киселина, 4-C10-13-втор-алкилови производни и бензенсулфоновата киселина, 4-метил- и натриев хидроксид NOEC >1- 10 mg/L Species Daphnia magna (Big water flea) Test duration 21 d	OECD 211	
Acute (short-term) toxicity to algae and cyanobacteria	EC50 61 mg/L	calculated.	
	CAS No61791-14-8 cocosfattyaminoxethylate EC50 1.9 mg/L		
	реакционен продукт на бензенсулфоновата киселина, 4-C10-13-втор-алкилови производни и бензенсулфоновата киселина, 4-метил- и натриев хидроксид EC50 25 mg/L Species Scenedesmus subspicatus Test duration 72 h	OECD 201	

	Effective dose	Method,Evaluation	Source, Remark
Chronic (long-term) toxicity to aquatic algae and cyanobacteria	CAS No61791-14-8 cocosfattyaminoxethylate NOEC: 0.41 mg/L		
	реакционен продукт на бензенсулфоновата киселина, 4-C10-13-втор-алкилови производни и бензенсулфоновата киселина, 4-метил- и натриев хидроксид EC10: 1.5 mg/L Species Desmodesmus subspicatus 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	Degradation rate 76 % Test duration 28 d	OECD 302B/ ISO 9888/ EEC 92/69/V, C.9	CAS No61791-14-8 cocosfattyaminoxethylate
Biodegradation	Degradation rate > 60 %	OECD 301B/ ISO 9439/ EEC 92/69/V, C.4-C	CAS No26183-52-8 decan-1-ol, ethoxylated
Biodegradation	Degradation rate ≥ 90 % Test duration 28 d	OECD 301E/ EEC 92/69/V, C.4-B	CAS No26183-52-8 decan-1-ol, ethoxylated
Biodegradation	Degradation rate > 70 % Test duration 28 d	OECD 301A/ ISO 7827/ EEC 92/69/V, C.4-A	реакционен продукт на бензенсулфоновата киселина, 4-C10-13-втор-алкилови производни и бензенсулфоновата киселина, 4-метил- и натриев хидроксид
Biodegradation	Degradation rate > 60 % Test duration 28 d	OECD 301B/ ISO 9439/ EEC 92/69/V, C.4-C	реакционен продукт на бензенсулфоновата киселина, 4-C10-13-втор-алкилови производни и бензенсулфоновата киселина, 4-метил- и натриев хидроксид
Biodegradation			CAS No6834-92-0 disodium metasilicate Inorganic product which is not eliminable from water through biological cleaning processes.

	Value	Method	Source, Remark
Biodegradation			CAS No7722-88-5 tetrasodium pyrophosphate Inorganic product which is not eliminable from water through biological cleaning processes.
Biodegradation			CAS No497-19-8 sodium carbonate Inorganic product which is not eliminable from water through biological cleaning processes.

12.3 Bioaccumulative potential

Assessment/classification
disodium metasilicate: Accumulation in organisms is not expected.
sodium carbonate: No bioaccumulation.
Reaction product of Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs. and Benzenesulfonic acid, 4-methyl- and sodium hydroxid: Bioaccumulation is improbable.
tetrasodium pyrophosphate: Bioaccumulation is improbable.
cocosfattyaminoxethylate: not available.
decan-1-ol, ethoxylated: not available.

12.4 Mobility in soil

Assessment/classification
disodium metasilicate: not available.
sodium carbonate: not available.
Reaction product of Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs. and Benzenesulfonic acid, 4-methyl- and sodium hydroxid: Adsorption on soil is not expected.
tetrasodium pyrophosphate: moderately mobile in soil (Koc: ~150).
cocosfattyaminoxethylate: not available.
decan-1-ol, ethoxylated: 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)	approx. 0.2 gO2/g		
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.
Handle contaminated packages in the same way as the substance itself.

* **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.
Send to a physico-chemical treatment facility under observation of 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	UN 3253	UN 3253	UN 3253
14.2 UN proper shipping name	DISODIUM TRIOXOSILICATE	DISODIUM TRIOXOSILICATE	Disodium trioxosilicate
14.3 Transport hazard class(es)	8	8	8
14.4 Packing group	III	III	III
14.5 Environmental hazards	No	No	No

14.6 Special precautions for user

none

14.7 Maritime transport in bulk according to IMO instruments

not relevant

Land transport (ADR/RID)

UN number or ID number	UN 3253
UN proper shipping name	DISODIUM TRIOXOSILICATE
Transport hazard class(es)	8
Hazard label(s)	8
Classification code	C6

Packing group	III
Environmental hazards	No
Limited quantity (LQ)	5 kg
Special provisions	-
Tunnel restriction code	E

Sea transport (IMDG)

UN number or ID number	UN 3253
UN proper shipping name	DISODIUM TRIOXOSILICATE
Transport hazard class(es)	8
Packing group	III
Environmental hazards	No
Limited quantity (LQ)	5 kg
Marine pollutant	No
EmS	F-A, S-B

Air transport (ICAO-TI / IATA-DGR)

UN number or ID number	UN 3253
UN proper shipping name	Disodium trioxosilicate
Transport hazard class(es)	8
Packing group	III
Environmental hazards	No

* 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 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

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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
EmS: emergency procedures
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
Acute Tox. 4, H332: Acute Toxicity (inhalation), 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 Chronic 3: Long-term (chronic) aquatic hazard, Category 3

Key literature references and sources for data
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.
H412	Harmful to aquatic life with long lasting effects.

Indication of changes
* Data changed compared with the previous version