



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

**elma tec clean S1**

Print date 22.11.2022  
Revision date 02.08.2022  
Version 1.6 (en)  
replaces version of 06.02.2020 (1.5)

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

**\* 1.1 Product identifier**

**Trade name/designation** elma tec clean S1  
**Unique Formula Identifier** UFI: Y550-J05W-C003-H54R  
**Product category** PC-CLN-OTH Other cleaning, care and maintenance products  
(excludes biocidal products)

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

**Sector of uses [SU]**

SUC22 Professional uses: Public domain (administration, education, entertainment, services, craftsmen)  
SU3 Industrial uses

**Process categories [PROC]**

PROC8a Transfer of substance or mixture (charging and discharging) at non- dedicated facilities  
PROC9 Transfer of substance or mixture into small containers (dedicated filling line, including weighing)  
PROC13 Treatment of articles by dipping and pouring

**Environmental release categories [ERC]**

ERC8a Widespread use of non-reactive processing aid (no inclusion into or onto article, indoor)  
ERC6b Use of reactive processing aid at industrial site (no inclusion into or onto article)

**Product Categories [PC]**

PC35 Washing and cleaning products

**Use of the substance/mixture**

Weakly acid cleaning concentrate, also usable as agent for pickling of stainless steel surfaces.

**Uses advised against**

Do not use for injecting or spraying.

**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
Eye Irrit. 2, H319	Calculation method.

**Hazard statements for health hazards**

H319 Causes serious eye irritation.

**\* 2.2 Label elements**



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

**Hazard pictograms**



GHS07

**Signal word**  
Warning

**Hazard statements**

H319 Causes serious eye irritation.

**Precautionary statements**

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.

P337 + P313 If eye irritation persists: 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.

P302 + P352 IF ON SKIN: Wash with plenty of water.

P333 + P313 If skin irritation or rash occurs: Get medical advice/attention.

**Special rules for supplemental label elements for certain mixtures**

EUH208 Contains 2-methylisothiazol-3(2H)-one. May produce an allergic reaction.

**\* Other labelling**

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

< 5% anionic surfactants

< 5% non-ionic surfactants

Benzisothiazolinone (<5 ppm)

Methylisothiazolinone (<5 ppm)

**\* 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
5949-29-1	201-069-1	citric acid, monohydrate	20 weight-%	Eye Irrit. 2; H319 STOT SE 3; H335	
68411-30-3	270-115-0	Alkylbenzenesulphonates, C10-13-alkylderivates, Na-salts	< 1 weight-%	Acute Tox. 4; H302 Skin Irrit. 2; H315 Eye Dam. 1; H318 Aquatic Chronic 3; H412	ATE(oral): 1080 mg/kg



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CAS No.	EC No.	Substance name	Concentration	Classification according to Regulation (EC) No 1272/2008 [CLP]	SCL/ M/ ATE
2682-20-4	220-239-6	2-methylisothiazol-3(2H)-one	$\geq 0.00015 < 0.0005$ weight-%	Acute Tox. 3; H301 Acute Tox. 3; H311 Acute Tox. 2; H330 Skin Corr. 1B; H314 Eye Dam. 1; H318 Skin Sens. 1A; H317 Aquatic Acute 1; H400 Aquatic Chronic 1; H410; EUH071	Skin Sens. 1A; H317: C $\geq$ 0,0015%  M=10 (Aquatic Acute 1) M=1 (Aquatic Chronic 1)
REACH No.		Substance name			
01-2119457026-42		citric acid, monohydrate			
01-2119489428-22		Alkylbenzenesulphonates, C10-13-alkylderivates, Na-salts			

**Additional information**

Aqueous acid mixture of anionic and nonionic surfactants, salts of organic acids and citric acid, chloride-free.

**\* SECTION 4: First aid measures**

**\* 4.1 Description of first aid measures**

**General information**

In the event of persistent symptoms receive medical treatment.

\*

**Following skin contact**

In case of contact with skin wash off with 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.

Rinse mouth immediately and drink plenty of water.

If swallowed seek medical advice immediately and show the doctor packing or label.

**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**

No further informations available.

**\* SECTION 5: Firefighting measures**

**5.1 Extinguishing media**

**Suitable extinguishing media**

Foam

Extinguishing powder

Carbon dioxide (CO<sub>2</sub>)

Water spray jet



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**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:  
Carbon monoxide  
Sulphur oxides

**\* 5.3 Advice for firefighters**

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

**\* Additional information**

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

**\* 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.  
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.

**6.3 Methods and material for containment and cleaning up**

**For containment**

Take up with absorbent material (e.g. sand, kieselguhr, acid binder, general-purpose binder, sawdust).  
Flush away residues with water.  
Take up mechanically and send for disposal.

**\* 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**

Avoid:  
generation/formation of aerosols  
Do not inhale aerosols  
Avoid contact with eyes and skin.  
Take the usual precautions when handling with chemicals.  
Keep the packing dry and well sealed to prevent contamination and absorption of humidity.  
Keep in a cool, well-ventilated place.  
The product is not combustible.

**Advices on general occupational hygiene**

Make available sufficient washing facilities  
Keep away from food and drink.  
Wash hands before breaks and after work.



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## 7.2 Conditions for safe storage, including any incompatibilities

### Requirements for storage rooms and vessels

Keep/Store only in original container.

### 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:

alkali

Food and feedingstuffs

### 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: 3 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
68411-30-3	Alkylbenzenesulphonates, C10-13-alkylderivates, Na-salts	119 mg/kg bw/day	long-term dermal (systemic)	Assessment factor 100
68411-30-3	Alkylbenzenesulphonates, C10-13-alkylderivates, Na-salts	7.6 mg/m <sup>3</sup>	long-term inhalative (systemic)	Assessment factor 25

#### \* PNEC

CAS No.	Substance name	PNEC Value	PNEC type	Remark
68411-30-3	Alkylbenzenesulphonates, C10-13-alkylderivates, Na-salts	0.268 mg/L	aquatic, freshwater	Assessment factor 1
68411-30-3	Alkylbenzenesulphonates, C10-13-alkylderivates, Na-salts	3.43 mg/L	sewage treatment plant (STP)	Assessment factor 10

## 8.2 Exposure controls

### Personal protection equipment

#### Eye/face protection

tightly fitting goggles

#### Hand protection

chemical-resistant gloves

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.

### 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 citric acid.



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**\* SECTION 9: Physical and chemical properties**

**9.1 Information on basic physical and chemical properties**

**Physical state**

liquid

**Colour**

light yellow up to dark yellow

**Odour**

fruity

**Safety relevant basis data**

	Value	Method	Source, Remark
Odour threshold:			not determined
Melting point/freezing point	solidifying range $\leq -5\text{ }^{\circ}\text{C}$		
Boiling point or initial boiling point and boiling range	$> 100\text{ }^{\circ}\text{C}$		
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 $100\text{ }^{\circ}\text{C}$ .
Auto-ignition temperature	$345\text{ }^{\circ}\text{C}$		Value of citric acid.
Decomposition temperature	$\geq 100\text{ }^{\circ}\text{C}$		
pH	in delivery state $1.6\text{ (}20^{\circ}\text{C)}$		
Viscosity	dynamic $1.8\text{ mPa}\cdot\text{s (}20^{\circ}\text{C)}$		
Solubility(ies)	Water solubility		miscible
Partition coefficient n-octanol/water (log value)	$-1.72\text{ (}20^{\circ}\text{C)}$		Value of citric acid.
Vapour pressure	approx. $23\text{ hPa (}20^{\circ}\text{C)}$		
Density and/or relative density	$1.082\text{ g/cm}^3\text{ (}20^{\circ}\text{C)}$		
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.

**\* flammable gases**

**\* Assessment/classification**

not applicable (liquid).



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\* **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.

\* **Oxidising solids**

\* **Assessment/classification**  
not applicable (liquid).



**elma tec clean S1**

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\* **Organic peroxides**

\* **Assessment/classification**

The mixture does not contain any organic peroxides.

\* **Corrosive to metals**

\* **Assessment/classification**

The mixture does not contain any substances corrosive to metals.  
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**

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

**10.2 Chemical stability**

Stable at ambient temperature.

**10.3 Possibility of hazardous reactions**

Reactions with strong alkalies.

**10.4 Conditions to avoid**

Heat and direct solar radiation.

**10.5 Incompatible materials**

Reactions with strong alkalies.

**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	





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**elma tec clean S1**

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Revision date 02.08.2022  
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replaces version of 06.02.2020 (1.5)

	Effective dose	Method, Evaluation	Source, Remark
	CAS No.68411-30-3 Alkylbenzenesulphonates, C10-13-alkylderivates, Na- salts LD50: 1080 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
slightly irritant	Expert judgement and weight of evidence determination.	

**Serious eye damage/irritation**

**Animal data**

Result / Evaluation	Method	Source, Remark
Irritant.	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
The mixture is not classified as skin sensitiser.		Calculation method.	Contains 2-methylisothiazol- 3(2H)-one. May produce an allergic reaction.

- \* **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**

- \* **Other information**  
The mixture is not classified as specific target organ toxicant (single exposure).



**elma tec clean S1**

Print date 22.11.2022  
Revision date 02.08.2022  
Version 1.6 (en)  
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- \* **Assessment/classification**  
Based on available data, the classification criteria are not met.
- \* **STOT SE 3**
- \* **Irritation to respiratory tract**
- \* **Other information**  
Inhalation of spray may cause respiratory irritation.
- \* **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**
- \* **Other information**  
The mixture is not classified as specific target organ toxicant (repeated exposure).
- \* **Assessment/classification**  
Based on available data, the classification criteria are not met.
- \* **Aspiration hazard**
- \* **Remark**  
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**  
OECD 435: not corrosive to skin.  
Has a 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: 177 mg/L  CAS No.68411-30-3 Alkylbenzenesulphonates, C10-13-alkylderivates, Na- salts LC50: 1.67 mg/L	calculated.	



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	Effective dose	Method, Evaluation	Source, Remark
Chronic (long-term) fish toxicity	CAS No.68411-30-3 Alkylbenzenesulphonates, C10-13-alkyl derivatives, Na- salts NOEC 0.63 mg/L Species Pimephales promelas (fathead minnow) Test duration 196 d		
Acute (short-term) toxicity to crustacea	EC50 93 mg/L	calculated.	After neutralisation, reduction in toxic effects is observed.
Chronic (long-term) toxicity to aquatic invertebrate	CAS No.68411-30-3 Alkylbenzenesulphonates, C10-13-alkyl derivatives, Na- salts EC50 1.62 mg/L CAS No.68411-30-3 Alkylbenzenesulphonates, C10-13-alkyl derivatives, Na- salts NOEC 1.18 mg/L Species Daphnia magna (Big water flea) Test duration 21 d		
Acute (short-term) toxicity to algae and cyanobacteria	EC50 10.3 mg/L	calculated.	After neutralisation, reduction in toxic effects is observed.
Chronic (long-term) toxicity to aquatic algae and cyanobacteria	CAS No.68411-30-3 Alkylbenzenesulphonates, C10-13-alkyl derivatives, Na- salts EC50 20 mg/L 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 > 95 %	calculated.	DOC reduction Readily biodegradable (according to OECD criteria).
Biodegradation	Degradation rate 100 %	Neutralization, pH- measurement	Acid properties can be eliminated up to 100% by neutralization.
Biodegradation	Degradation rate > 70 % Test duration 28 d	OECD 301A/ ISO 7827/ EEC 92/69/V, C.4-A	CAS No.68411-30-3 Alkylbenzenesulphonates, C10-13-alkyl derivatives, Na- salts
Biodegradation	Degradation rate 85 % Test duration 29 d	OECD 301B/ ISO 9439/ EEC 92/69/V, C.4-C	CAS No.68411-30-3 Alkylbenzenesulphonates, C10-13-alkyl derivatives, Na- salts
Biodegradation	Degradation rate 97 % Test duration 28 d	OECD 301B/ ISO 9439/ EEC 92/69/V, C.4-C	CAS No.5949-29-1 citric acid, monohydrate



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## elma tec clean S1

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Version 1.6 (en)  
replaces version of 06.02.2020 (1.5)

	Value	Method	Source, Remark
Biodegradation	Degradation rate 48- 56 % Test duration 28 d	OECD 301B/ ISO 9439/ EEC 92/69/V, C.4-C	CAS No.2682-20-4 2-methylisothiazol-3(2H)-one

### 12.3 Bioaccumulative potential

#### Assessment/classification

Alkylbenzenesulphonates, C10-13-alkylderivates, Na-salts: Significant accumulation in organisms is not expected.  
citric acid: Accumulation in organisms is not expected.  
2-methyl-2H-isothiazol-3-one: Accumulation in organisms is not expected.

### 12.4 Mobility in soil

#### Assessment/classification

Alkylbenzenesulphonates, C10-13-alkylderivates, Na-salts: Slightly mobile in soil.  
citric acid: Weak adsorption on soil, mobile in soil.  
2-methyl-2H-isothiazol-3-one: Weak adsorption on soil, mobile in soil.

### 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)	158 mgO <sub>2</sub> /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. After neutralization: not classified as acute hazardous to the aquatic environment.  
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
200130	detergents other than those mentioned in 20 01 29



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### Appropriate disposal / Product

Do not dispose with household waste.

Neutralize with alkalies or lime.

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)
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	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)

#### 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.



**elma tec clean S1**

Print date 22.11.2022  
Revision date 02.08.2022  
Version 1.6 (en)  
replaces version of 06.02.2020 (1.5)

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

**15.2 Chemical Safety Assessment**

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

SCL: Specific concentration limit

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)**

H301	Toxic if swallowed.
H302	Harmful if swallowed.
H311	Toxic in contact with skin.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H330	Fatal if inhaled.
H335	May cause respiratory irritation.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.



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

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replaces version of	06.02.2020 (1.5)

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**Indication of changes**

\* Data changed compared with the previous version