



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

1.1. Product identifier

Name of product elma tec clean S1

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

Recommended intended purpose(s)

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

1.3. Details of the supplier of the safety data sheet

Manufacturer/distributor

ELMA Hans Schmidbauer GmbH & Co KG
Kolpingstr. 1-7, D-78224 Singen (Htwl.)
Phone +49 7731 882-0, Fax +49 7731 882-266
E-Mail info@elma-ultrasonic.com
Internet www.elma-ultrasonic.com

Advice

Chemie/Labor: Email: chemlab@elma-ultrasonic.com
Phone +49 7731 882-287
Fax +49 7731 882-266

1.4. Emergency telephone number

Emergency advice

Vergiftungs-Informations-Zentrale Freiburg
(Sprache/Language: D, GB)
Phone +49 761 19240

! SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to 67/548/EEC or 1999/45/EC

Xi; R36

R-phrases

36 Irritating to eyes.

! Classification according to Regulation (EC) No 1272/2008 [CLP/GHS]

Hazard classes and Hazard categories	Hazard Statements	Classification procedure
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Eye Irrit. 2	H319	Calculation method.
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Hazard Statements

H319 Causes serious eye irritation.

2.2. Label elements

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



GHS07



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

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elma tec clean S1

! Signal word

Warning

Hazard Statements

H319 Causes serious eye irritation.

Precautionary Statements

P102 Keep out of reach of children.
P280 Wear eye protection.
P301 + P312 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
P301 + P330 + P331 IF SWALLOWED: rinse mouth. Do NOT induce vomiting.
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.

2.3. Other hazards

not relevant

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

Description

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

Hazardous ingredients

CAS No	EC No	Name	[% weight]	Classification according to 67/548/EEC
68411-30-3	270-115-0	Alkylbenzenesulphonates, C10-13-alkylderivates, Na-salts	< 1	Xn R22; Xi R38-41
5949-29-1	201-069-1	citric acid, monohydrate	ca. 20	Xi R36

CAS No	EC No	Name	[% weight]	Classification according to Regulation (EC) No 1272/2008 [CLP/GHS]
68411-30-3	270-115-0	Alkylbenzenesulphonates, C10-13-alkylderivates, Na-salts	< 1	Acute Tox. 4, H302 / Skin Irrit. 2, H315 / Eye Dam. 1, H318 / Aquatic Chronic 3, H412
5949-29-1	201-069-1	citric acid, monohydrate	ca. 20	Eye Irrit. 2, H319

REACH

CAS No	Name	REACH registration number
68411-30-3	Alkylbenzenesulphonates, C10-13-alkylderivates, Na-salts	01-2119489428-22
5949-29-1	citric acid, monohydrate	01-2119457026-42



SECTION 4: First aid measures

4.1. Description of first aid measures

General information

In the event of persistent symptoms receive medical treatment.

In case of skin contact

In case of contact with skin wash off with water.
Consult a doctor if skin irritation persists.

In case of eye contact

In case of contact with eyes rinse thoroughly with plenty of water and seek medical advice.

In case of ingestion

Do not induce vomiting.
If swallowed by mistake drink plenty of water and seek medical treatment.

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

Physician's information / possible symptoms

No further informations available.

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

Treatment (Advice to doctor)

No further informations available.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Product does not burn, fire-extinguishing activities according to surrounding.

Foam

Dry powder

Carbon dioxide

Water spray jet

5.2. Special hazards arising from the substance or mixture

In case of fire formation of dangerous gases possible.

In the event of fire the following can be released:

Carbon monoxide (CO)

Sulfur oxide

5.3. Advice for firefighters

Special protective equipment for fire-fighters

Do not inhale explosion and/or combustion gases.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Use personal protection.

High risk of slipping due to leakage/spillage of product.

6.2. Environmental precautions

Do not discharge into the drains/surface waters/groundwater.

6.3. Methods and material for containment and cleaning up

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

Informations for safe handling see chapter 7.

Informations for personal protective equipment see chapter 8.

! SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

Take the usual precautions when handling with chemicals.

General protective measures

Avoid contact with eyes and skin

Hygiene measures

Provide washing facilities at place of work.

Keep away from food and drink.

Advice on protection against fire and explosion

The product is not combustible.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep only in original container.

Advice on storage compatibility

Do not store with alkalies.

Do not store together with food.

! Further information on storage conditions

Keep locked up, out of reach of children

Protect from heat and direct solar radiation.

Keep container dry, tightly closed and store at cool place.

Do not keep at temperatures below -5°C.

Information on storage stability

Storage time: 3 years.

7.3. Specific end use(s)

! Recommendation(s) for intended use

no further

! SECTION 8: Exposure controls/personal protection

8.1. Control parameters

! Additional advice

Occupational exposure limits: not relevant.

8.2. Exposure controls

Eye protection

tightly fitting goggles

! Limitation and surveillance of the environment

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.



! SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Form liquid	Colour light yellow up to dark yellow	Odour fruity
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! Odour threshold
not determined

Important health, safety and environmental information

	Value	Temperature	at	Method	Remark
pH value in delivery state	1,6	20 °C			
starts to boil	> 100 °C				
solidifying range	<= -5 °C				
Flash point					No flash point below 100 °C.
Flammable solid	not applicable				
Flammability (gas)	not applicable				
Ignition temperature	not determined				
Autoignition					no
Lower explosion limit	not relevant				
Upper explosion limit	not relevant				
Vapour pressure	ca. 23 hPa	20 °C			
Relative density	1,082 g/cm ³	20 °C			
Vapour density	not available				
Solubility in water					miscible
Partition coefficient (log p_{OW})	-1,72	20 °C			Value of citric acid.
Viscosity	not determined				
Solvent concentration	0 %				

! Vapourisation rate
Water: 0.36 (ASTM D3539).

Oxidising properties
no

Explosive properties
no



9.2. 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 alkalis.

10.2. Chemical stability

Stable at ambient temperature.

10.3. Possibility of hazardous reactions

Reactions with strong alkalis.

10.4. Conditions to avoid

Heat and direct solar radiation.

10.5. Incompatible materials

Materials to avoid

Reactions with strong alkalis.

10.6. Hazardous decomposition products

No decomposition if used as directed.

! SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity/Irritability/Sensitization

	Value/Validation	Species	Method	Remark
LD50 acute oral	> 5000 mg/kg		ATE (acute toxicity estimate)	
LD50 acute dermal	> 5000 mg/kg		ATE (acute toxicity estimate)	
Irritability skin	low irritant effect			
Irritability eye	irritant			
Skin sensitization	The mixture is not classified as skin sensitiser.			Contains Benzisothiazolinone (<10ppm).

! Specific target organ toxicity (single exposure)

The mixture is not classified as specific target organ toxicant (single exposure).

! Specific target organ toxicity (repeated exposure)

The mixture is not classified as specific target organ toxicant (repeated exposure).

! Aspiration hazard

The mixture is not classified as aspiration hazardous.

Cleaning products may contribute to the aspiration hazard if they are swallowed and enter airways.

! Toxicity test (Additional information)

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



Experiences made from practice
Has a degreasing effect on the skin.

! SECTION 12: Ecological information

12.1. Toxicity

Ecotoxicological effects

	Value	Species	Method	Validation
Fish	LC50 175 mg/l		calculated	
Daphnia	EC50 132 mg/l		calculated	
Algae	EC50 911 mg/l		calculated	

12.2. Persistence and degradability

Physico-chemical degradability	100 %		Neutralization, pH-measurement	Acid properties can be eliminated up to 100% by neutralization.
Biological degradability	> 95 %	DOC decrease	calculated	readily degradable

12.3. Bioaccumulative potential

Alkylbenzenesulphonates, C10-13-alkylderivates, Na-salts: Significant accumulation in organisms is not expected.
citric acid: Accumulation in organisms is not expected.

12.4. Mobility in soil

Alkylbenzenesulphonates, C10-13-alkylderivates, Na-salts: Slightly 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. Other adverse effects

No further relevant informations available.

Additional ecological information

	Value	Method	Remark
COD	170 mgO ₂ /g	calculated	
AOX	The product does not contain any organically bound halogens according to the recipe.		

General regulation

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.
Do not allow uncontrolled leakage of product into the environment.

! SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste code No.	Name of waste
20 01 30	detergents other than those mentioned in 20 01 29

! Recommendations for the product

Do not dispose with household waste.
Product is allowed to discharge into sewage treatment plants, but in accordance with official regulations.
Neutralize with alkalies or lime.



Recommendations for packaging

Contaminated packaging should be emptied as far as possible and after appropriate cleansing may be taken for reuse.

Recommended cleansing agent

Water

SECTION 14: Transport information**Land and inland navigation transport ADR/RID**

No dangerous goods as defined by these transport regulations.

Marine transport IMDG

No hazardous material as defined by the prescriptions.

Air transport ICAO/IATA-DGR

No hazardous material as defined by the prescriptions.

Special precautions for user

no

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

not relevant

SECTION 15: Regulatory information**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture****VOC standard**

VOC content 0 %

15.2. Chemical Safety Assessment

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

SECTION 16: Other information**Further information**

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.

Indication of changes: "!" = Data changed compared with the previous version.

Sources of key data used

Own measurements.

Wording of the R/H-phrases specified in chapter 3 (not the classification of the mixture!)

R 22 Harmful if swallowed.

R 36 Irritating to eyes.

R 38 Irritating to skin.

R 41 Risk of serious damage to eyes.

H302 Harmful if swallowed.

H315 Causes skin irritation.

H318 Causes serious eye damage.

H319 Causes serious eye irritation.

H412 Harmful to aquatic life with long lasting effects.