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

### Product identifier

**Name of product** elma tec clean A5

### Relevant identified uses of the substance or mixture and uses advised against

#### Recommended intended purpose(s)

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.).

### 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

#### Emergency telephone number

#### Emergency advice

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

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## !SECTION 2: Hazards identification

### Classification of the substance or mixture

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

C; R34

Xi; R37

#### R-phrases

34 Causes burns.  
37 Irritating to respiratory system.

### Label elements

#### Labelling according to 67/548/EEC or 1999/45/EC

#### Remarks for labelling

The product is classified and labelled in accordance with EC directives/German regulations on dangerous substances.

**C** Corrosive



#### R-phrases

34 Causes burns.  
37 Irritating to respiratory system.



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

Printed 25.04.2012  
revision 05.05.2006 (GB) Version 1.3

**elma tec clean A5**

**! S-phrases**

- 22 Do not breathe dust.  
26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.  
28 After contact with skin, wash immediately with plenty of water.  
36/37/39 Wear suitable protective clothing, gloves and eye/face protection.  
45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

**Hazardous ingredients for labeling**

disodium trioxosilicate

**Other hazards**

not relevant  
PBT/vPvB: see chapter 12.

**! SECTION 3: Composition/ information on ingredients**

**Mixtures**

**Description**

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

**! Hazardous ingredients**

CAS No	EC No	Name	[% weight]	Classification according to 67/548/EEC
61827-42-7		fattyalcoholethoxylate	< 5	Xn R22; Xi R41
61791-14-8		cocosfattyaminoxethylate	< 5	Xn R22; Xi R36; N R51/53
6834-92-0	229-912-9	disodium trioxosilicate	20 - 40	C R34; Xi R37
7722-88-5	217-671-6	tetrasodium pyrophosphate	5 - 15	Xn R22; Xi R41
497-19-8	207-838-8	sodium carbonate	5 - 15	Xi R36
	932-051-8	Reaction product of Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs. and Benzenesulfonic acid, 4-methyl- and sodium hydroxid	< 5	Xi R41-38

CAS No	EC No	Name	[% weight]	Classification according to Regulation (EC) No 1272/2008 [CLP/ GHS]
61827-42-7		fattyalcoholethoxylate	< 5	Acute Tox. 4, H302 / Eye Dam. 1, H318
61791-14-8		cocosfattyaminoxethylate	< 5	Acute Tox. 3, H301 / Eye Irrit. 2, H319 / Aqu. chron. 2, H411
6834-92-0	229-912-9	disodium trioxosilicate	20 - 40	Acute Tox. 4, H302 / Skin Corr. 1B, H314 / Eye Dam. 1, H318 / STOT SE 3, H335
7722-88-5	217-671-6	tetrasodium pyrophosphate	5 - 15	Acute Tox. 4, H302 / Eye Dam. 1, H318
497-19-8	207-838-8	sodium carbonate	5 - 15	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	Skin Irrit. 2, H315 / Eye Dam. 1, H318

**REACH**

CAS No	Name	REACH registration number
497-19-8	sodium carbonate	01-2119485498-19
	Reaction product of Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs. and Benzenesulfonic acid, 4-methyl- and sodium hydroxid	01-2119565112-48



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## SECTION 4: First aid measures

### Description of first aid measures

#### General information

Remove contaminated soaked clothing immediately and dispose it safely.  
Take affected person into fresh air.

#### In case of inhalation

Ensure of fresh air.  
Refer for medical treatment.

#### In case of skin contact

In case of contact with skin wash off immediately with plenty of 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.  
Call for a doctor immediately.  
Rinse out mouth and give plenty of water to drink.

### Most important symptoms and effects, both acute and delayed

#### Physician's information / possible dangers

Risk of stomach perforation

### Indication of any immediate medical attention and special treatment needed

#### Treatment (Advice to doctor)

Keep under medical supervision for at least 48 hours.

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## ! SECTION 5: Firefighting measures

### Extinguishing media

#### Suitable extinguishing media

Fire-extinguishing activities according to surrounding.

### 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:

Nitrogen oxides (NO<sub>x</sub>)

Carbon monoxide (CO)

Phosphorus oxides (e.g. phosphoruspentoxide)

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

Sulfur oxide

### Advice for firefighters

#### Special protective equipment for fire-fighters

Use breathing apparatus with independent air supply.

Do not inhale explosion and/or combustion gases.

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## ! SECTION 6: Accidental release measures



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**Personal precautions, protective equipment and emergency procedures**

Keep people away and stay on the upwind side.

Avoid dust formation.

Use personal protection.

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

**Environmental precautions**

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

Knock down dust with water spray jet.

Do not discharge into the subsoil/soil.

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

Flush away residues with water.

After taking up the material dispose according to regulation.

Take up mechanically.

**Reference to other sections**

Informations for safe handling see chapter 7.

Informations for personal protective equipment see chapter 8.

Informations for disposal see chapter 13.

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**! SECTION 7: Handling and storage**

**Precautions for safe handling**

**Advice on safe handling**

Avoid the formation and deposition of dust.

Care for thoroughly room ventilation, if necessary use in well ventilated area with local exhaust ventilation at workplace.

Open and handle container with care!

**Advice on protection against fire and explosion**

The product is not combustible.

**Conditions for safe storage, including any incompatibilities**

**Requirements for storage rooms and vessels**

Provide alkali-resistant floor.

Keep only in original container.

**Advice on storage compatibility**

Do not store with acids.

**Further information on storage conditions**

Keep locked up, out of reach of children

Keep container dry and tightly closed.

Product is hygroscopic.

**Information on storage stability**

Storage time: 5 years.

**Specific end use(s)**

**! Recommendation(s) for intended use**

no further

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**! SECTION 8: Exposure controls/personal protection**



**Control parameters**

**! Ingredients with occupational exposure limits to be monitored**

CAS No	Name	Code	[mg/m3]	[ppm]	Remark
7722-88-5	tetrasodium pyrophosphate	WEL, 8 hours	5		

**Additional advice**

**Exposure controls**

**! Respiratory protection**

Particle filter P2

In case of dust formation wear micro dust mask.

**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.

**Eye protection**

tightly fitting goggles

**Skin protection**

Alkali-resistant protective clothing

**General protective measures**

Avoid contact with eyes and skin

Do not inhale dust.

**Hygiene measures**

Provide washing facilities at place of work.

Keep away from food and drink.

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

**Information on basic physical and chemical properties**

**Form**

powder

**Colour**

white

**Odour**

characteristic

**Important health, safety and environmental information**

	Value	Temperature	at	Method	Remark
<b>pH value in delivery state</b>	ca. 12	20 °C	10 g/l		
<b>boiling range</b>	not determined				
<b>melting range</b>	not determined				
<b>Flash point</b>	not applicable				
<b>Flammable solid</b>	no				
<b>Flammability (gas)</b>	not applicable				
<b>Ignition temperature</b>					no



	Value	Temperature	at	Method	Remark
<b>Autoignition</b>	no				
<b>Lower explosion limit</b>	not applicable				
<b>Upper explosion limit</b>	not applicable				
<b>Vapour pressure</b>	not available				
<b>Density</b>	not determined				
<b>Bulk density</b>	920 kg/m <sup>3</sup>				
<b>Rel. vapour density</b>	not applicable				
<b>Solubility in water</b>	100 g/l	20 °C			
<b>Partition coefficient (log p<sub>OW</sub>)</b>	not available				
<b>Viscosity</b>	not applicable				
<b>Solvent concentration</b>	0 %				
<b>Oxidizing properties</b>	no				
<b>Explosive properties</b>	no				
<b>Other information</b>	No further relevant informations available.				

## ! SECTION 10: Stability and reactivity

### Reactivity

Evolution of heat under influence of acids.  
No further hazardous reactions known if used as directed.

### Chemical stability

Stable at ambient temperature.

### Possibility of hazardous reactions

Reactions with acids.

### Conditions to avoid

not relevant

### Incompatible materials

#### Materials to avoid

Reactions with acids.



**Hazardous decomposition products**  
No decomposition if used as directed.

## ! SECTION 11: Toxicological information

### Information on toxicological effects

#### Acute toxicity/Irritability/Sensitization

	Value/Validation	Species	Method	Remark
<b>LD50 acute oral</b>	990 mg/kg		ATE (acute toxicity estimate)	
<b>LD50 acute dermal</b>	> 2000 mg/kg		ATE (acute toxicity estimate)	
<b>Irritability skin</b>	corrosive			
<b>Irritability eye</b>	corrosive			
<b>Skin sensitization</b>	non-sensitizing			

#### ! Toxicity test (Additional information)

disodium trioxosilicate : LD50(oral, rat): 600-1350 mg/kg .

#### Experiences made from practice

Has a degreasing effect on the skin.

Causes corrosions.

## ! SECTION 12: Ecological information

### Toxicity

#### Ecotoxicological effects

	Value	Species	Method	Validation
<b>Fish</b>	LC50 18 mg/l		calculated	
<b>Daphnia</b>	EC50 16 mg/l		calculated	
<b>Algae</b>	EC50 30 mg/l		calculated	

#### Persistence and degradability

<b>Physico-chemical degradability</b>	100 %		Neutralization, pH-measurement	Alkaline properties can be eliminated up to 100% by neutralization.
<b>Biological degradability</b>	> 70 %		OECD 301 A	Biodegradable

#### Bioaccumulative potential

not available

#### Mobility in soil

not available

#### Results of PBT and vPvB assessment

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



**Other adverse effects**

No further relevant informations available.

**Additional ecological information**

	Value	Method	Remark
<b>COD</b>	ca. 0,2 gO2/g		
<b>AOX</b>	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.  
Harmful to aquatic life.  
Do not allow uncontrolled leakage of product into the environment.

**SECTION 13: Disposal considerations**

**Waste treatment methods**

**Waste code No.**

20 01 29\*

**Name of waste**

detergents containing dangerous substances

Wastes marked with an asterisk are considered to be hazardous waste pursuant to Directive 91/689/EEC on hazardous waste.

**Recommendations for the product**

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.

In accordance with local official regulations take to chemical / physical treatment plant.

**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**

UN 3253 DISODIUM TRIOXOSILICATE, 8, III, (E)

**Marine transport IMDG**

UN 3253 DISODIUM TRIOXOSILICATE, 8, III

**Air transport ICAO/IATA-DGR**

UN 3253 DISODIUM TRIOXOSILICATE, 8, III

**Special precautions for user**

no

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

not relevant





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## ! SECTION 15: Regulatory information

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

**VOC standard**

VOC content 0 %

**Chemical Safety Assessment**

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

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## ! 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.

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

R 22 Harmful if swallowed.

R 34 Causes burns.

R 36 Irritating to eyes.

R 37 Irritating to respiratory system.

R 38 Irritating to skin.

R 41 Risk of serious damage to eyes.

R 51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

H301 Toxic if swallowed.

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.

H411 Toxic to aquatic life with long lasting effects.