



Ultrasonics.Steam.Ultraclean.

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

Printed 27.04.2017  
revision 27.04.2017 (GB) Version 2.0

**elma tec clean A3**

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

**1.1. Product identifier**

**Name of product** elma tec clean A3

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

**Identified uses**

**Sector of uses [SU]**

SU22 - Professional uses: Public domain (administration, education, entertainment, services, craftsmen)  
SU3 - Industrial uses: Uses of substances as such or in preparations at industrial sites

**! Recommended intended purpose(s)**

Alcaline cleaning concentrate for the metal cleaning (not for aluminium and light metal alloys).

**1.3. Details of the supplier of the safety data sheet**

**Manufacturer/distributor** Elma Schmidbauer GmbH  
Gottlieb-Daimler-Str. 17, 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

**1.4. Emergency telephone number**

**Emergency advice** Vergiftungs-Informationen-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 Regulation (EC) No 1272/2008 [CLP/GHS]**

Hazard classes and Hazard categories	Hazard Statements	Classification procedure
Skin Irrit. 2 Eye Dam. 1	H315 H318	Expert judgement and weight of evidence determination. Calculation method.

**Hazard Statements**

H315 Causes skin irritation.  
H318 Causes serious eye damage.

**2.2. Label elements**

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



GHS05

**! Signal word**

Danger

**Hazard Statements**

H315 Causes skin irritation.



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H318 Causes serious eye damage.

**Precautionary Statements**

P280 Wear protective gloves/protective clothing/eye protection/face protection.  
P301 + P312 IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.  
P301 + P330 + P331 IF SWALLOWED: rinse mouth. Do NOT induce vomiting.  
P302 + P352 IF ON SKIN: Wash with plenty of water.  
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.  
P332 + P313 If skin irritation occurs: Get medical advice/attention.

**Hazardous ingredients for labeling**

disodium metasilicate

**2.3. Other hazards**

Aquatic Acute 3 H402: Harmful to aquatic life.

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

**Hazardous ingredients**

CAS No	EC No	Name	[% weight]	Classification according to Regulation (EC) No 1272/2008 [CLP/ GHS]
111798-26-6		Na-alkyl-PEG-ether ester of phosphoric acid	< 5	Skin Irrit. 2, H315 / Eye Irrit. 2, H319 / Aquatic Chronic 3, H412
68154-97-2	935-890-8	fattyalkohol, C10-12, propoxylated, ethoxylated	< 5	Eye Irrit. 2, H319
6834-92-0	229-912-9	disodium metasilicate	< 5	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	Eye Irrit. 2, H319
164524-02-1	629-764-9	potassium cumenesulphonate	< 5	Eye Irrit. 2, H319
7320-34-5	230-785-7	tetrapotassium pyrophosphate	< 5	Eye Irrit. 2, H319

**REACH**

CAS No	Name	REACH registration number
111798-26-6	Na-alkyl-PEG-ether ester of phosphoric acid	Not relevant (polymer).
68154-97-2	fattyalkohol, C10-12, propoxylated, ethoxylated	Not relevant (polymer).
6834-92-0	disodium metasilicate	01-2119449811-37
15763-76-5	sodium cumenesulphonate	01-2119489411-37
164524-02-1	potassium cumenesulphonate	01-2119489427-24
7320-34-5	tetrapotassium pyrophosphate	01-2119489369-18



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## SECTION 4: First aid measures

### 4.1. Description of first aid measures

#### General information

Remove contaminated soaked clothing immediately and dispose it safely.

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

### 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)

Keep under medical supervision for at least 48 hours.

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## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

#### Suitable extinguishing media

water

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

Foam

Dry powder

Carbon dioxide

### 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:

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

Carbon monoxide (CO)

Phosphorus oxides (e.g. phosphoruspentoxide)

Sulphur dioxide (SO<sub>2</sub>)

Silicon dioxide

### 5.3. Advice for firefighters

#### Special protective equipment for fire-fighters

Do not inhale explosion and/or combustion gases.

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## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

#### For non-emergency personnel

Use personal protection.

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

#### For emergency responders

Use personal protective clothing.

Use personal protection.



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Forms slippery surfaces with water.  
High risk of slipping due to leakage/spillage of product.

#### **6.2. Environmental precautions**

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

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

Take up with absorbent material (e.g. general-purpose binder).  
Flush away residues with water.  
Use chemical neutralizers.  
After taking up the material dispose according to regulation.

#### **6.4. Reference to other sections**

Informations for safe handling see chapter 7.  
Informations for personal protective equipment see chapter 8.

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## **SECTION 7: Handling and storage**

### **7.1. Precautions for safe handling**

#### **Advice on safe handling**

Open and handle container with care!  
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**

Provide alkali-resistant floor.  
Keep only in original container.

#### **Advice on storage compatibility**

Do not store with acids.

#### **Further information on storage conditions**

Keep container tightly closed.  
Keep locked up, out of reach of children  
Protect from heat and direct solar radiation.  
Do not keep at temperatures below -5°C.

#### **Information on storage stability**

Storage time: 5 years.

### **7.3. Specific end use(s)**

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

no further



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

**8.1. Control parameters**

**DNEL-/PNEC-values**

**DNEL worker**

CAS No	Substance name	Value	Code	Remark
6834-92-0	disodium metasilicate	1,49 mg/kg bw/day	DNEL long-term dermal (systemic)	
		6,22 mg/m <sup>3</sup>	DNEL long-term inhalative (systemic)	

**PNEC**

CAS No	Substance name	Value	Code	Remark
6834-92-0	disodium metasilicate	7,5 mg/l	PNEC aquatic, freshwater	
		1000 mg/l	PNEC sewage treatment plant (STP)	

**! Additional advice**

Occupational exposure limits: No relevant informations available.

**8.2. Exposure controls**

**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.

**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**

**Appearance**

liquid

**Colour**

yellowish up to beige

**Odour**

odourless

**Odour threshold**

not determined

**Important health, safety and environmental information**

	Value	Temperature	at	Method	Remark
<b>pH value</b>	13,1	20 °C			
<b>boiling range</b>	> 100 °C				
<b>solidifying range</b>	< -5 °C				



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	Value	Temperature	at	Method	Remark
<b>Flash point</b>					No flash point below 100 °C.
<b>Flammable (solid)</b>	not applicable				
<b>Flammability (gas)</b>	not applicable				
<b>Ignition temperature</b>	not determined				
<b>Self ignition temperature</b>					not spontaneously flammable
<b>Lower explosion limit</b>	not relevant				
<b>Upper explosion limit</b>	not relevant				
<b>Vapour pressure</b>	ca. 23 hPa	20 °C			
<b>Relative density</b>	1,122 g/cm <sup>3</sup>	20 °C			
<b>Vapour density</b>	not available				
<b>Solubility in water</b>					miscible
<b>Solubility/other</b>	not determined				
<b>Partition coefficient n-octanol/water (log P O/W)</b>	ca. -2				Value of tetrapotassium pyrophosphate
<b>Decomposition temperature</b>	>= 100 °C				
<b>Viscosity</b>	not determined				
<b>Solvent content</b>	0 %				
<b>Vapourisation rate</b> Water: 0.36 (ASTM D3539).					
<b>Oxidising properties</b> no					
<b>Explosive properties</b> no					
<b>9.2. Other information</b> The mixture is not classified as corrosive to metals. No further relevant informations available.					



**! SECTION 10: Stability and reactivity**

**10.1. Reactivity**

Evolution of heat under influence of acids.  
 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**

**! Substances to avoid**

Reactions with strong acids.  
 Reactions with light metals.  
 Corrodes aluminium.

**10.6. Hazardous decomposition products**

No decomposition if used as directed.

**! SECTION 11: Toxicological information**

**11.1. Information on toxicological effects**

**Acute toxicity/Irritation/Sensitization**

	Value/Validation	Species	Method	Remark
<b>LD50 acute oral</b>	> 5000 mg/kg	rat	calculated	
<b>LD50 acute dermal</b>	> 5000 mg/kg		ATE (acute toxicity estimate)	
<b>Skin irritation</b>	irritant			
<b>Eye irritation</b>	risk of strong eye injuries			
<b>Skin sensitization</b>	non-sensitizing			

**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.

**! Toxicity test (Additional information)**

The mixture is not classified as mutagen / not classified as carcinogen / not classified as reproductive toxicant.  
 disodium metasilicate : LD50(oral, rat): 1152 mg/kg .

**Experiences made from practice**

Has a degreasing effect on the skin.



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**! SECTION 12: Ecological information**

**12.1. Toxicity**

**Ecotoxicological effects**

	Value	Species	Method	Validation
<b>Fish</b>	LC50 26,8 mg/l		calculated	
<b>Daphnia</b>	EC50 26,9 mg/l		calculated	
<b>Algae</b>	EC50 26,6 mg/l		calculated	

**12.2. 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>	> 80 %	DOC decrease	calculated	readily degradable

**12.3. Bioaccumulative potential**

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.  
 fattyalkohol, C10-12, propoxylated, ethoxylated: not available.

**12.4. Mobility in soil**

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.  
 fattyalkohol, C10-12, propoxylated, 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. Other adverse effects**

No further relevant informations available.

**Additional ecological information**

	Value	Method	Remark
<b>COD</b>	ca. 287 mgO2/g	calculated	
<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.  
 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 leakage of product into the environment.





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## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

**Waste code No.**

20 01 29\*

**Name of waste**

detergents containing hazardous substances

Wastes marked with an asterisk are considered to be hazardous waste pursuant to Directive 2008/98/EC on hazardous waste.

### Recommendations for the 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.

### 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

	ADR/RID	IMDG	IATA-DGR
14.1. UN number	-	-	-
14.2. UN proper shipping name	-	-	-
14.3. Transport hazard class(es)	-	-	-
14.4. Packing group	-	-	-
14.5. Environmental hazards	-	-	-

### 14.6. Special precautions for user

no

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

not relevant

### 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.



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## ! SECTION 15: Regulatory information

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

#### Authorizations

not relevant

#### ! Application restrictions

Regulation (EC) No 1907/2006 (REACH), Annex XVII No 3 - not relevant if used as directed.

#### Other regulations (EU)

Regulation (EC) No 648/2004 (Detergents regulation).

Directive 2012/18/EU, Annex I: not mentioned.

#### VOC standard

VOC content 0 %

### 15.2. Chemical Safety Assessment

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

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## ! SECTION 16: Other information

### Recommended uses and restrictions

National and local regulations concerning chemicals shall be observed.

### 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. Previous version: 1.6

#### ! Sources of key data used

Own measurements.

European Chemicals Agency, <http://echa.europa.eu/>.

Informations from our suppliers.

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.