



Ultrasonics.Steam.Ultraclean.

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

Printed 07.04.2017
revision 07.04.2017 (GB) Version 2.2

elma tec clean A4

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

1.1. Product identifier

Name of product elma tec clean A4

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)

Universal alkaline cleaning concentrate.

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
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Skin Irrit. 2 Eye Dam. 1	H315 H318	Bridging principle 'Substantially similar mixtures.' On basis of test data.
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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/eye protection.
P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER/doctor.
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

Cocosfatty acid amidopropyldimethylaminoxide, 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 from anionic and amphoteric surfactants, sodium trioxosilicate and complexing agents.

! 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 - 15	Skin Irrit. 2, H315 / Eye Irrit. 2, H319 / Aquatic Chronic 3, H412
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
7320-34-5	230-785-7 939-581-9	tetrapotassium pyrophosphate Cocosfatty acid amidopropyldimethylaminoxide [Amides, C12-18 (even numbered), N-[3-(dimethylamino) propyl], N'-oxides]	5 - 15 < 5	Eye Irrit. 2, H319 Acute Tox. 4, H302 / Skin Irrit. 2, H315 / Eye Dam. 1, H318 / Aquatic Acute 1, H400 M=1 / Aquatic Chronic 3, H412

REACH

CAS No	Name	REACH registration number
111798-26-6	Na-alkyl-PEG-ether ester of phosphoric acid	Not relevant (polymer).
6834-92-0	disodium metasilicate	01-2119449811-37
7320-34-5	tetrapotassium pyrophosphate	01-2119489369-18
	Cocosfatty acid amidopropyldimethylaminoxide [Amides, C12-18 (even numbered), N-[3-(dimethylamino) propyl], N'-oxides]	01-2119978229-22



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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.

Medical treatment.

Seek medical advice immediately.

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.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

water

Fire-extinguishing activities according to surrounding.

Foam

Dry powder

Carbon dioxide

Unsuitable extinguishing media

no

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_x)

Carbon monoxide (CO)

Phosphorus oxides (e.g. phosphoruspentoxide)

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.

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. sand, sawdust, general-purpose binder, kieselguhr).

Flush away residues with water.

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.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

Open and handle container with care!

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 acids.

Further information on storage conditions

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.



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7.3. Specific end use(s)

Recommendation(s) for intended use

no further

! 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 ³	DNEL long-term inhalative (systemic)	

PNEC

CAS No	Substance name	Value	Code	Remark
	Cocosfatty acid amidopropyl dimethylaminoxide [Amides, C12-18 (even numbered), N- [3-(dimethylamino) propyl], N'-oxides]	9,7 mg/l	PNEC sewage treatment plant (STP)	
		0,0303 mg/l	PNEC aquatic, freshwater	
6834-92-0	disodium metasilicate	1000 mg/l	PNEC sewage treatment plant (STP)	
		7,5 mg/l	PNEC aquatic, freshwater	

! 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

mild

Odour threshold

not determined



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Important health, safety and environmental information

	Value	Temperature	at	Method	Remark
pH value	ca. 13	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				
Self ignition temperature					not spontaneously flammable
Lower explosion limit	not relevant				
Upper explosion limit	not relevant				
Vapour pressure	ca. 23 hPa	20 °C			
Relative density	1,132 g/cm ³	20 °C			
Vapour density	not available				
Solubility in water					miscible
Solubility/other	not determined				
Partition coefficient n-octanol/water (log P O/W)	ca. -2				Value of tetrapotassium pyrophosphate
Decomposition temperature	>= 100 °C				
Viscosity	not determined				
Solvent content	0 %				
Vapourisation rate Water: 0.36 (ASTM D3539).					
Oxidising properties no					
Explosive properties no					



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9.2. Other information

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

Reactions with acids.

10.4. Conditions to avoid

Heat and direct solar radiation.

10.5. Incompatible materials

! Substances to avoid

Reactions with acids.

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
LD50 acute oral	> 5000 mg/kg	rat	calculated	
LD50 acute dermal	> 5000 mg/kg		ATE (acute toxicity estimate)	
Skin irritation	irritant			
Eye irritation	risk of strong eye injuries		OECD 437	
Skin sensitization	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.



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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 29,3 mg/l		calculated	
Daphnia	EC50 68,9 mg/l		calculated	
Algae	EC50 31,4 mg/l		calculated	

12.2. Persistence and degradability

Physico-chemical degradability	100 %		Neutralization, pH-measurement	Alkaline properties can be eliminated up to 100% by neutralization.
Biological degradability	> 70 %	DOC decrease		Biodegradable

12.3. Bioaccumulative potential

disodium metasilicate: Accumulation in organisms is not expected.
tetrapotassium pyrophosphate: Bioaccumulation is improbable.
Na-alkyl-PEG-ether ester of phosphoric acid: not available.
Cocofatty acid amidopropyldimethylaminoxide: Significant accumulation in organisms is not expected (log Pow: 1.27).

12.4. Mobility in soil

tetrapotassium pyrophosphate: moderately mobile in soil (Koc: ~150).
disodium metasilicate: not available.
Na-alkyl-PEG-ether ester of phosphoric acid: not available.
Cocofatty acid amidopropyldimethylaminoxide: Low adsorption on soil (Koc: ~34).

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	165 mgO2/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.

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.

! 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: 2.1

! 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.
H400 Very toxic to aquatic life.
H412 Harmful to aquatic life with long lasting effects.