



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

### 1.1. Product identifier

Name of product elma lab clean S10 (ELC S10)

### 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)

Aqueous acid foam-inhibited cleaning concentrate for hard surfaces in industry and laboratory.

### 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 67/548/EEC or 1999/45/EC

Xi; R37/38

Xi; R41

#### R-phrases

37/38 Irritating to respiratory system and skin.

41 Risk of serious damage 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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Skin Irrit. 2	H315	Expert judgement and weight of evidence determination.
Eye Dam. 1	H318	Calculation method.
STOT SE 3	H335	Calculation method.
Aquatic Chronic 3	H412	Calculation method.

#### Hazard Statements

H315 Causes skin irritation.

H318 Causes serious eye damage.

H335 May cause respiratory irritation.

H412 Harmful to aquatic life with long lasting effects.



## 2.2. Label elements

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



GHS05



GHS07

### ! Signal word

Danger

### Hazard Statements

H315 Causes skin irritation.  
H318 Causes serious eye damage.  
H335 May cause respiratory irritation.  
H412 Harmful to aquatic life with long lasting effects.

### Precautionary Statements

P102 Keep out of reach of children.  
P261 Avoid breathing mist/vapours/spray.  
P280 Wear protective gloves/eye protection.  
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 POISON CENTER/doctor/...  
P312 Call a POISON CENTER/doctor/...if you feel unwell.

### ! Hazardous ingredients for labeling

C10- fatty alcohol, ethoxylated, glycollic acid, isotridecanol, ethoxylated, isotridecanol, ethoxylated

### 2.3. Other hazards

Acute Tox. 5 (oral) H303: May be harmful if swallowed.

Aquatic Acute 2 H401: Toxic 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 acid foam-inhibited mixture of non-ionic surfactants, complexing agents, solvents and organic acids.

### ! Hazardous ingredients

CAS No	EC No	Name	[% weight]	Classification according to 67/548/EEC
69011-36-5	931-138-8	isotridecanol, ethoxylated	< 5	Xn R22; Xi R41
166736-08-9		C10- fatty alcohol, ethoxylated	5 - 15	Xn R22; Xi R41
69011-36-5	931-138-8	isotridecanol, ethoxylated	5 - 15	Xi R41



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

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**elma lab clean S10 (ELC S10)**

**Hazardous ingredients (continued)**

CAS No	EC No	Name	[% weight]	Classification according to 67/548/EEC
79-14-1	201-180-5	glycollic acid	5 - 15	Xn R20; C R34; Xi R37
34590-94-8	252-104-2	(2-methoxymethylethoxy)-propanol	5 - 15	
27458-92-0	248-469-2	isotridecanol	< 0,5	Xi R38; N R50
64-18-6	200-579-1	formic acid ... %	< 0,2	C R35

CAS No	EC No	Name	[% weight]	Classification according to Regulation (EC) No 1272/2008 [CLP/ GHS]
69011-36-5	931-138-8	isotridecanol, ethoxylated	< 5	Acute Tox. 4, H302 / Eye Dam. 1, H318
166736-08-9		C10- fatty alcohol, ethoxylated	5 - 15	Acute Tox. 4, H302 / Eye Dam. 1, H318
69011-36-5	931-138-8	isotridecanol, ethoxylated	5 - 15	Eye Dam. 1, H318 / Aquatic Chronic 3, H412
79-14-1	201-180-5	glycollic acid	5 - 15	Met. Corr. 1, H290 / Acute Tox. 4, H332 / Skin Corr. 1B, H314 / Eye Dam. 1, H318 / STOT SE 3, H335
34590-94-8	252-104-2	(2-methoxymethylethoxy)-propanol	5 - 15	
27458-92-0	248-469-2	isotridecanol	< 0,5	Skin Irrit. 2, H315 / Aquatic Acute 1, H400 / Aquatic Chronic 1, H410
64-18-6	200-579-1	formic acid ... %	< 0,2	Flam. Liq. 3, H226 / Acute Tox. 4, H302 / Acute Tox. 3, H331 / Skin Corr. 1A, H314 / Eye Dam. 1, H318 / , EUH071 / STOT SE 1, H370

**REACH**

CAS No	Name	REACH registration number
69011-36-5	isotridecanol, ethoxylated	Not relevant (polymer).
166736-08-9	C10- fatty alcohol, ethoxylated	Not relevant (polymer).
69011-36-5	isotridecanol, ethoxylated	Not relevant (polymer).
79-14-1	glycollic acid	01-2119485579-17
34590-94-8	(2-methoxymethylethoxy)-propanol	01-2119450011-60
27458-92-0	isotridecanol	Not relevant (impurity).
64-18-6	formic acid ... %	Not relevant (impurity).

**! 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 inhalation**

Ensure of fresh air.

In case of inhalation of mist seek medical advice.

In the event of symptoms 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.

Refer to medical treatment.

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

Rinse out mouth and give plenty of water to drink.



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**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.

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**! SECTION 5: Firefighting measures**

**5.1. Extinguishing media**

**Suitable extinguishing media**

water

Alcohol-resistant 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:

Corrosive gases/vapours

Carbon monoxide (CO)

Phosphorus oxides (e.g. phosphoruspentoxide)

Under certain fire conditions traces of other toxic substances cannot be excluded.

**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.

Use breathing apparatus if exposed to vapours/dust/aerosol.

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.

**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.

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!  
Take the usual precautions when handling with chemicals.

#### General protective measures

Avoid contact with eyes and skin  
Do not inhale gases/vapours/aerosols.

#### 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 combustible.

### 7.2. Conditions for safe storage, including any incompatibilities

#### Requirements for storage rooms and vessels

Keep only in unopened original container.

#### Advice on storage compatibility

Do not store with alkalies.  
Do not store together with oxidizing agents.

#### 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.  
Do not keep at temperatures above 30°C.

#### Information on storage stability

Storage time: 3 years.

### 7.3. Specific end use(s)

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

Do not use the product itself for injecting or spraying. Use only the diluted application solution for splash cleaning.

## ! SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

Indicative occupational exposure limit values (91/322/EEC, 2000/39/EC, 2006/15/EC or 2009/161/EU)

CAS No	Name	Code	[mg/m3]	[ppm]	Remark
34590-94-8	(2-methoxymethylethoxy)-propanol	8 hours	308	50	skin

#### Additional advice

### 8.2. Exposure controls

#### ! Respiratory protection

Breathing apparatus in the event of aerosol or mist formation.  
Short term: filter apparatus, Filter A/P2

#### Hand protection

chemical-resistant gloves  
Glove material specification [make/type, thickness]: FKM, 0,4mm.  
Glove material specification [make/type, thickness]: Butyl, 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.

**Appropriate engineering controls**

Technical exhaustion in case of longtermed exposition in sprayed aerosols.

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

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

**Appearance**

liquid

**Colour**

yellowish

**Odour**

characteristic

**Odour threshold**

(2-methoxymethylethoxy)-propanol: 210 - 600mg/m<sup>3</sup> (34 - 97 ppm).

**Important health, safety and environmental information**

	Value	Temperature	at	Method	Remark
<b>pH value</b>	ca. 2,5				
<b>boiling range</b>	>= 100 °C				
<b>solidifying range</b>	not determined				
<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>	1,1 Vol-%				Value of (2-methoxymethyl ethoxy)-propanol.
<b>Upper explosion limit</b>	14 Vol-%				Value of (2-methoxymethyl ethoxy)-propanol.
<b>Vapour pressure</b>	ca. 24 hPa	20 °C			
<b>Relative density</b>	ca. 1,05 g/cm <sup>3</sup>				



	Value	Temperature	at	Method	Remark
<b>Vapour density</b>	5,12				Value of (2-methoxymethyl ethoxy)-propanol.
<b>Solubility in water</b>					miscible
<b>Solubility/other</b>	not determined				
<b>Partition coefficient n-octanol/water (log P O/W)</b>	5,57				Value of isotridecanol.
<b>Decomposition temperature</b>	>= 100 °C				
<b>Viscosity</b>	not determined				
<b>Solvent concentration</b>	5 - 15 %				

**! Vapourisation rate**

Water: 0.36 (ASTM D3539).  
(2-methoxymethylethoxy)-propanol: ~0.02 (ASTM D3539).

**Oxidising properties**

no

**Explosive properties**

no

**9.2. Other information**

The mixture is not classified as corrosive to metals.  
No further relevant informations available.

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**! 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 oxidising agents.  
Reactions with strong alkalis.

**10.4. Conditions to avoid**

Heat and direct solar radiation.

**10.5. Incompatible materials**

**! Materials to avoid**

Reactions with oxidising agents.  
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
<b>LD50 acute oral</b>	3241 mg/kg		ATE (acute toxicity estimate)	
<b>LD50 acute dermal</b>	> 5000 mg/kg		ATE (acute toxicity estimate)	
<b>LC50 acute inhalation</b>	> 50 mg/l ()		ATE (acute toxicity estimate)	vapours
<b>Irritability skin</b>	strong irritant			
<b>Irritability eye</b>	risk of strong eye injuries			
<b>Skin sensitization</b>	The mixture is not classified as skin sensitiser.			

#### ! Specific target organ toxicity (single exposure)

Respiratory irritant effect: STOT SE 3 H335: May cause respiratory irritation.

#### ! 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.  
Aerosols of product effect toxic in case of inhaling (Acute Tox. 4 H332: Harmful if inhaled.).  
OECD 435: not corrosive to skin.

#### Experiences made from practice

Has a degreasing effect on the skin.

## ! SECTION 12: Ecological information

### 12.1. Toxicity

#### Ecotoxicological effects

	Value	Species	Method	Validation
<b>Fish</b>	LC50 4,4 mg/l		calculated	
<b>Daphnia</b>	EC50 3,6 mg/l		calculated	
<b>Algae</b>	EC50 4,3 mg/l		calculated	





## 12.2. Persistence and degradability

<b>Physico-chemical degradability</b>	100 %		Neutralization, pH-measurement	Acid properties can be eliminated up to 100% by neutralization.
<b>Biological degradability</b>	> 80 %	DOC decrease	calculated	Biodegradable

## 12.3. Bioaccumulative potential

isotridecanol, ethoxylated: Bioaccumulation is improbable.  
isotridecanol, ethoxylated: Bioaccumulation is improbable.  
C10- fatty alcohol, ethoxylated: Accumulation in organisms is not expected.  
isotridecanol: Has the potential to bioaccumulate (log Pow: 5.57).  
(2-methoxymethylethoxy)-propanol: Accumulation in organisms is not expected (log Pow: 0.004).  
glycollic acid: Accumulation in organisms is not expected (log Pow: -1.11).  
formic acid: Accumulation in organisms is not expected (log Pow: -0.154).

## 12.4. Mobility in soil

isotridecanol, ethoxylated: Koc: >5000, immobile, strong adsorption on soil.  
isotridecanol, ethoxylated: Koc: >5000, strong adsorption on soil, immobile.  
C10- fatty alcohol, ethoxylated: Adsorption on soil is possible.  
isotridecanol: not available.  
(2-methoxymethylethoxy)-propanol: Dissolves in water. Highly mobile in soil.  
glycollic acid: not available.  
formic acid: 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. 1,0 gO <sub>2</sub> /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 2 H401: Toxic to aquatic life.

Chronic aquatic environmental hazards: Aquatic Chronic 3 H412: Harmful to aquatic life with long lasting effects.

Do not allow uncontrolled leakage of product into the environment.

## ! SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

<b>Waste code No.</b>	<b>Name of waste</b>
20 01 29*	detergents containing dangerous 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.

Product is allowed to discharge into sewage treatment plants, but in accordance with official regulations.

Neutralize with alkalis 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**

	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.

**! 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 ca.14,5 %

**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: 1.0

### Sources of key data used

Own measurements.

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

R 20 Harmful by inhalation.

R 22 Harmful if swallowed.

R 34 Causes burns.

R 35 Causes severe burns.

R 37 Irritating to respiratory system.

R 38 Irritating to skin.

R 41 Risk of serious damage to eyes.

R 50 Very toxic to aquatic organisms.

EUH071 Corrosive to the respiratory tract.

H226 Flammable liquid and vapour.

H290 May be corrosive to metals.

H302 Harmful if swallowed.

H314 Causes severe skin burns and eye damage.

H315 Causes skin irritation.

H318 Causes serious eye damage.

H331 Toxic if inhaled.

H332 Harmful if inhaled.

H335 May cause respiratory irritation.

H370 Causes damage to organs (or state all organs affected, if known) (state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard).

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.