1. Identification of the substance/mixture and of the company/undertaking

Product identifier

Name of product elma lab clean A25 (ELC A25)

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

Recommended intended purpose(s)
Aqueous strongly alkaline foam-inhibited cleaning concentrate for hard surfaces in industry and laboratory.

! 2. Hazards identification

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

C; R35

R-phrases

35	Causes severe burns.

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

35	Causes severe burns.

S-phrases

1/2	Keep locked up and out of the reach of children.
23	Do not breathe spray.
26	In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
27	Take off immediately all contaminated clothing.
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
potassium-hydroxide

! Information pertaining to special dangers for human and environment
Inhalation of spray may be harmful, may cause strong respiratory irritation and may cause damage to mucous membranes/lung.
Harmful if swallowed.

! 3. Composition/information on ingredients

Description
Aqueous strongly alkaline foam-inhibited mixture of potassium hydroxide, amphoteric and non-ionic surfactants, complexing agents and phosphates.

! Hazardous ingredients

CAS No	EC No	Name	[% weight]	Classification according to 67/548/EEC
1310-58-3	215-181-3	potassium-hydroxide	5 - 15	Xn R22; C R35
		C10- fatty alcohol, ethoxylated	< 5	Xi R38-41
69011-36-5		isotridecanol, ethoxylated	< 5	Xn R22; Xi R41
7320-34-5	230-785-7	tetrapotassium pyrophosphate	< 5	Xi R36

! 4. 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 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.
Call for a doctor immediately.
Refer to medical treatment.
Rinse out mouth and give plenty of water to drink.

Physician's information / possible dangers
Risk of stomach perforation

Treatment (Advice to doctor)
Keep under medical supervision for at least 48 hours.

5. Firefighting measures

Suitable extinguishing media
water
Fire-extinguishing activities according to surrounding.
Foam
Dry powder
Carbon dioxide

Special hazards arising from the substance or mixture
In case of fire formation of dangerous gases possible.

Special protective equipment for fire-fighters
Do not inhale explosion and/or combustion gases.

Additional information
Fire residues and contaminated firefighting water must be disposed of in accordance with the local regulations.

6. Accidental release measures

Personal precautions
Use personal protection.
High risk of slipping due to leakage/spillage of product.

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

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

7. Handling and storage

Advice on safe handling
Use only alkali-resistant equipment.
When diluting, always stir product into water.
Open and handle container with care!

Advice on protection against fire and explosion
The product is not combustible.

Requirements for storage rooms and vessels
Provide alkali-resistant floor.
Keep only in unopened 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.
Do not keep at temperatures above 30°C.

Information on storage stability
Storage time: 3 years.

8. Exposure controls/personal protection

Additional advice on system design
Technical exhaustion in case of exposition in sprayed aerosols.

Ingredients with occupational exposure limits to be monitored

CAS No	Name	Code	[mg/m3]	[ppm]	Remark
1310-58-3	Potassium hydroxide	8 hours			R22, 35
		Short-term	2		

Additional advice

Respiratory protection
Breathing apparatus in the event of aerosol or mist formation.

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, permeation time/life]: NR, 0,5mm, >=8h.

Eye protection
tightly fitting goggles

Skin protection
Alkali-resistant protective clothing

General protective measures
Do not inhale gases/vapours/aerosols.

Hygiene measures
Provide washing facilities at place of work.
Remove soiled or soaked clothing immediately.
Keep away from food and drink.

9. Physical and chemical properties

Form	**Colour**	**Odour**
liquid	dark brown	mild

Important health, safety and environmental information

	Value	Temperature	at	Method	Remark
pH value in delivery state	ca. 12	20 °C	10 g/l		strong alkaline
boiling range	>= 100 °C				
Flash point					No flash point below 100°C.
Density	ca. 1,15 g/cm3				
Solubility in water					miscible
Solvent concentration	0 %				

Oxidizing properties
no

Explosive properties
no

10. Stability and reactivity

Conditions to avoid
Reactions with acids.
Evolution of heat.
Corrodes aluminium.

Materials to avoid
Strong exothermic reaction with acids.
Reactions with light metals, with evolution of hydrogen.

Hazardous decomposition products
Carbon monoxide
Nitrous oxides (NOx)
Corrosive gases/vapours
Phosphorus oxides (e.g. P2O5)

11. Toxicological information

Acute toxicity/Irritability/Sensitization

	Value/Validation	Species	Method	Remark
Irritability skin	strong corrosive			
Irritability eye	strong corrosive			

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

12. Ecological information

Data on elimination (persistence and degradability)

	Elimination rate	Method of analysis	Method	Validation
Physico-chemical degradability	100 %		Neutralization, pH-measurement	Alkaline properties can be eliminated up to 100% by neutralization.
Biological degradability	>= 65 %		OECD 302 B	Moderately/partially biodegradable

Additional ecological information

	Value	Method	Remark
COD	ca. 364 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.
Do not allow uncontrolled leakage of product into the environment.

13. Disposal considerations

Waste code No.	Name of waste
20 01 29*	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.

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

Recommended cleansing agent
Water

14. Transport information

Land and inland navigation transport ADR/RID
UN 1814 POTASSIUM HYDROXIDE SOLUTION, 8, II, (E)
Marine transport IMDG
UN 1814 POTASSIUM HYDROXIDE SOLUTION, 8, II
Air transport ICAO/IATA-DGR
UN 1814 POTASSIUM HYDROXIDE SOLUTION, 8, II

15. Regulatory information

VOC standard
VOC content 0 %

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.

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 35 Causes severe burns.
R 36 Irritating to eyes.
R 38 Irritating to skin.
R 41 Risk of serious damage to eyes.