



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

1.1. Product identifier

Name of product elma clean 25 (EC 25)

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

Identified uses

Sector of uses [SU]

SU20 - Health services

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)

Cleaning solution, ready for use, for the removal of alginates and dental plasters.

1.3. Details of the supplier of the safety data sheet

Manufacturer/distributor

Elma Hans Schmidbauer GmbH & Co. KG
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
Phone +49 7731 882-287
Fax +49 7731 882-266

1.4. Emergency telephone number

Emergency advice

Vergiftungs-Informations-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; R36

R-phrases

36 Irritating to eyes.

2.2. Label elements

Labelling according to 1999/45/EC

Remarks for labelling

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

Xi Irritant



R-phrases

36 Irritating to eyes.



S-phrases

- 2 Keep out of the reach of children.
24/25 Avoid contact with skin and eyes.
26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
46 If swallowed, seek medical advice immediately and show this container or label.

2.3. Other hazards

! 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, mildly alkaline mixture with complexing agent, anionic surfactants and cosolvent.

! Hazardous ingredients

CAS No	EC No	Name	Concent ration	Classification according to 67/548/EEC
107-98-2	203-539-1	1-methoxy-2-propanol	5 - 10	R10; R67
71-23-8	200-746-9	1-propanol	5 - 10	F R11; Xi R41; R67

CAS No	EC No	Name	Concent ration	Classification according to Regulation (EC) No 1272/2008 [CLP/ GHS]
107-98-2	203-539-1	1-methoxy-2-propanol	5 - 10	Flam. Liq. 3, H226 / STOT SE 3, H336
71-23-8	200-746-9	1-propanol	5 - 10	Flam. Liq. 2, H225 / Eye Dam. 1, H318 / STOT SE 3, H336

REACH

CAS No	Name	REACH registration number
107-98-2	1-methoxy-2-propanol	01-2119457435-35
71-23-8	1-propanol	01-2119486761-29

! 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 with warm water.

Consult a doctor if skin irritation persists.

In case of eye contact

In case of contact with eyes rinse with plenty of water carefully. In the event of persistent symptoms seek medical treatment.

In case of ingestion

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.



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.

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.

5.3. Advice for firefighters

Special protective equipment for fire-fighters

Do not inhale explosion and/or combustion gases.

! SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Use personal protection.

For emergency responders

Use personal protective clothing.

Use personal protection.

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, sawdust, general-purpose binder, kieselguhr).

Flush away residues with hot water.

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

Care for thoroughly room ventilation.

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

No special measures necessary.

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 oxidizing agents.

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 35 °C.

Information on storage stability

Storage time: 5 years.

7.3. Specific end use(s)

! Recommendation(s) for intended use

no further

! SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Ingredients with occupational exposure limits to be monitored

CAS No	Name	Code	[mg/m3]	[ppm]	Remark
107-98-2	1-methoxypropan-2-ol	TWA, 8 hours Short-term	375 560	100 150	Sk, R10
71-23-8	propan-1-ol	WEL, 8 hours	500	200	Sk, R11-41-67

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
107-98-2	1-methoxy-2-propanol	8 hours Short-term	375 568	100 150	skin

Additional advice

8.2. Exposure controls

Eye protection

safety 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

Odour

alcoholic

Odour threshold1-methoxy-2-propanol: 10 - 360 mg/m³.1-propanol: 0.075 - 150 mg/m³.**Important health, safety and environmental information**

	Value	Temperature	at	Method	Remark
pH value	ca. 11,7	20 °C			
starts to boil	>= 90 °C				
solidifying point	<= 0 °C				
Flash point	38,5 °C			DIN EN ISO 13736	Does not maintain the combustion.
Flammable (solid)	not applicable				
Flammability (gas)	not applicable				
Ignition temperature	not determined				
Self ignition temperature					not spontaneously flammable
Lower explosion limit	1,7 Vol-%				Value of 1-methoxy-2-propanol.
Upper explosion limit	11,5 - 13,7 Vol-%				Value of 1-methoxy-2-propanol.
Vapour pressure	23 - 56 hPa	20 °C			
Relative density	1,098 g/cm ³	20 °C			
Vapour density	3,11				Value of 1-methoxy-2-propanol.
Solubility in water					miscible
Solubility/other	not determined				
Partition coefficient n-octanol/water (log P O/W)	0,34				Value of 1-propanol.
Decomposition temperature	>= 90 °C				



	Value	Temperature	at	Method	Remark
Viscosity	not determined				
Solvent concentration	< 15 %				
Vapourisation rate	1-methoxy-2-propanol: 0.75 (ASTM D3539). Water: 0.36 (ASTM D3539). 1-propanol: 0.89 (ASTM D3539).				
Oxidising properties	no				
Explosive properties	no				
9.2. Other information	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 strong oxidising agents.

10.4. Conditions to avoid

Heat and direct solar radiation.

10.5. Incompatible materials

Materials to avoid

Reactions with strong oxidising agents.

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
LD50 acute oral	> 5000 mg/kg	rat	calculated	
LD50 acute dermal	> 5000 mg/kg		ATE (acute toxicity estimate)	



	Value/Validation	Species	Method	Remark
LC50 acute inhalation	> 50 mg/l ()		ATE (acute toxicity estimate)	vapours
Irritability skin	low irritant effect			
Irritability eye	irritant			The product was classified on the basis of the calculation procedure of the preparation directive (1999/45/EC).
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.

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 > 150 mg/l		calculated	
Daphnia	EC50 > 200 mg/l		calculated	
Algae	EC50 > 250 mg/l		calculated	

12.2. Persistence and degradability

Physico-chemical degradability

100 %

Neutralization, pH-measurement

Biological degradability

> 90 %

DOC decrease

calculated

readily degradable

12.3. Bioaccumulative potential

1-methoxy-2-propanol: Accumulation in organisms is not expected.

1-propanol: Accumulation in organisms is not expected (log Pow: 0.34).

12.4. Mobility in soil

1-methoxy-2-propanol: Dissolves in water. Highly mobile in soil.

1-propanol: Adsorption on soil is not expected.

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	380 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.

The mixture is not classified as acute/chronic hazardous to the aquatic environment.

Do not allow uncontrolled leakage of product into the environment.

! SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste code No.	Name of waste
07 06 01*	aqueous washing liquids and mother liquors

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 or citric acid 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.

! 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 + 40 - 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 11,1 %

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: 2.9

Sources of key data used
Own measurements.

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

R 10 Flammable.
R 11 Highly flammable.
R 41 Risk of serious damage to eyes.
R 67 Vapours may cause drowsiness and dizziness.

H225 Highly flammable liquid and vapour.
H226 Flammable liquid and vapour.
H318 Causes serious eye damage.
H336 May cause drowsiness or dizziness.