



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

### 1.1. Product identifier

Name of product elma clean 75 (EC 75)

### 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)

Ammoniated cleaning concentrate for laboratory and workshop as well as cleaning of jewellery.

### 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-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; R38

Xi; R41

R67

#### R-phrases

38 Irritating to skin.

41 Risk of serious damage to eyes.

67 Vapours may cause drowsiness and dizziness.

#### ! 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	Calculation method.
Eye Dam. 1	H318	Calculation method.
STOT SE 3	H336	Calculation method.
Aquatic Chronic 3	H412	Calculation method.

#### Hazard Statements

H315 Causes skin irritation.

H318 Causes serious eye damage.

H336 May cause drowsiness or dizziness.



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.  
H336 May cause drowsiness or dizziness.  
H412 Harmful to aquatic life with long lasting effects.

### Precautionary Statements

P233 Keep container tightly closed.  
P271 Use only outdoors or in a well-ventilated area.  
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 or doctor/physician.  
P312 Call a POISON CENTER or doctor/physician if you feel unwell.

### Hazardous ingredients for labeling

1-methoxy-2-propanol, ammonia ....%, fatty alcohol C 10-12, ethoxylated, propan-2-ol, Sulfonic acids, C14-17-sec-alkane, sodium salts

### 2.3. Other hazards

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

Aquatic Acute 2 H401: Toxic to aquatic life.

### ! Information pertaining to special dangers for human and environment

May cause respiratory irritation.

### 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 concentrate from anionic and nonionic surfactants, ammonia solution, solvent and complexing agent.



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

Printed 14.07.2015  
revision 02.07.2015 (GB) Version 3.1  
**elma clean 75 (EC 75)**

**Hazardous ingredients**

CAS No	EC No	Name	[% weight]	Classification according to 67/548/EEC
68920-66-1		fatty alcohol-PEG-ether	5 - 15	Xn R22; Xi R36
67254-71-1	931-952-3	fatty alcohol C 10-12, ethoxylated	< 5	Xn R22; Xi R41
1336-21-6	215-647-6	ammonia ....%	< 5	C R34; N R50
67-63-0	200-661-7	propan-2-ol	< 5	F R11; Xi R36; R67
97489-15-1	307-055-2	Sulfonic acids, C14-17-sec-alkane, sodium salts	5 - 15	Xn R22; Xi R38-41
107-98-2	203-539-1	1-methoxy-2-propanol	< 20	R10; R67

CAS No	EC No	Name	[% weight]	Classification according to Regulation (EC) No 1272/2008 [CLP/GHS]
68920-66-1		fatty alcohol-PEG-ether	5 - 15	Acute Tox. 4, H302 / Eye Irrit. 2, H319
67254-71-1	931-952-3	fatty alcohol C 10-12, ethoxylated	< 5	Acute Tox. 4, H302 / Eye Dam. 1, H318
1336-21-6	215-647-6	ammonia ....%	< 5	Met. Corr. 1, H290 / Acute Tox. 4, H302 / Acute Tox. 4, H332 / Skin Corr. 1B, H314 / Eye Dam. 1, H318 / STOT SE 3, H335 / Aquatic Acute 1, H400 / Aquatic Chronic 2, H411
67-63-0	200-661-7	propan-2-ol	< 5	Flam. Liq. 2, H225 / Eye Irrit. 2, H319 / STOT SE 3, H336
97489-15-1	307-055-2	Sulfonic acids, C14-17-sec-alkane, sodium salts	5 - 15	Acute Tox. 4, H302 / Skin Irrit. 2, H315 / Eye Dam. 1, H318 / Aquatic Chronic 3, H412
107-98-2	203-539-1	1-methoxy-2-propanol	< 20	Flam. Liq. 3, H226 / STOT SE 3, H336

**REACH**

CAS No	Name	REACH registration number
68920-66-1	fatty alcohol-PEG-ether	Not relevant (polymer).
67254-71-1	fatty alcohol C 10-12, ethoxylated	Not relevant (polymer).
1336-21-6	ammonia ....%	01-2119488876-14
67-63-0	propan-2-ol	Not yet available from supplier.
97489-15-1	Sulfonic acids, C14-17-sec-alkane, sodium salts	01-2119489924-20
107-98-2	1-methoxy-2-propanol	01-2119457435-35

**SECTION 4: First aid measures**

**4.1. Description of first aid measures**

**General information**

Remove contaminated soaked clothing immediately.  
Take affected person into fresh air.

**In case of inhalation**

Remove the casualty into fresh air and keep him immobile.  
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.  
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)**

Keep under medical supervision for at least 48 hours.

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**SECTION 5: Firefighting measures**

**5.1. Extinguishing media**

**Suitable extinguishing media**

Alcohol-resistant foam

Dry powder

Water spray jet

**Unsuitable extinguishing media**

no

**5.2. Special hazards arising from the substance or mixture**

In the event of fire the following can be released:

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

Ammonia

Carbon monoxide (CO)

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

**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**

Ensure adequate ventilation.

Use personal protection.

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

**! For emergency responders**

Ensure adequate ventilation.

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.

**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

Avoid formation of aerosols.

Care for thoroughly room ventilation, if necessary use in well ventilated area with local exhaust ventilation at workplace.

Use only in well-ventilated areas.

#### 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

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

Store cool and at distance to acids or alkalies.

#### 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/m <sup>3</sup> ]	[ppm]	Remark
107-98-2	1-methoxypropan-2-ol	TWA, 8 hours	375	100	Sk, R10
		Short-term	560	150	
7664-41-7	ammonia	8 hours	14	20	EU
		Short-term	36	50	
7664-41-7	Ammonia, anhydrous	WEL, 8 hours	18	25	R10-23-34-
		Short-term	25	35	50
67-63-0	propan-2-ol	WEL, 8 hours	999	400	R11, 36, 67
		Short-term	1250	500	



**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	375	100	skin
		Short-term	568	150	

**Additional advice**

**8.2. Exposure controls**

**! Respiratory protection**

Breathing apparatus in the event of aerosol or mist formation.

Breathing apparatus in the event of high concentrations.

Multi-purpose filter ABEK/P3

**Hand protection**

Gloves (alkali- and solvent-resistant)

Glove material specification [make/type, thickness, permeation time/life]: Butyl, 0,5mm, >=8h.

**Eye protection**

tightly fitting goggles

**Limitation and surveillance of the environment**

Avoid penetration into the subsoil/soil.

Do not discharge into surface waters.

Neutralization is necessary before a waste water is discharged into sewage treatment plants.

**Appropriate engineering controls**

Technical exhaustion if there is a long-term exposition

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

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

**Appearance**

liquid

**Colour**

light yellow

**Odour**

similar to ammonia

**Odour threshold**

1-methoxy-2-propanol: 38 - 360 mg/m3 (10 - 96 ppm).

ammonia: 5ppm (3.5mg/m3).

propan-2-ol: 2.5 - 490 mg/m3 (1 - 196 ppm).

**Important health, safety and environmental information**

	Value	Temperature	at	Method	Remark
<b>pH value</b>	10,5 - 11	20 °C			
<b>starts to boil</b>	78 °C				
<b>solidifying point</b>	ca. 0 °C				
<b>Flash point</b>	36,5 °C			DIN EN ISO 13736	Does not maintain the combustion.
<b>Flammable (solid)</b>	not applicable				
<b>Flammability (gas)</b>	not applicable				
<b>Ignition temperature</b>	not determined				



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	Value	Temperature	at	Method	Remark
<b>Self ignition temperature</b>					not spontaneously flammable
<b>Lower explosion limit</b>	1,7 Vol-%				Value of 1-methoxy-2-propanol.
<b>Upper explosion limit</b>	11,5 - 13,7 Vol-%				Value of 1-methoxy-2-propanol.
<b>Vapour pressure</b>	ca. 91 hPa	20 °C			
<b>Relative density</b>	0,99 - 1 g/cm <sup>3</sup>	20 °C			
<b>Vapour density</b>	3,11				Value of 1-methoxy-2-propanol.
<b>Solubility in water</b>					miscible
<b>Solubility/other</b>	not determined				
<b>Partition coefficient n-octanol/water (log P O/W)</b>	0,24				Value of Sulfonic acids, C14-17-sec-alkane, sodium salts.
<b>Decomposition temperature</b>	not determined				
<b>Viscosity</b>	not determined				
<b>Solvent concentration</b>	18 %				
<b>Vapourisation rate</b>	1-methoxy-2-propanol: 0.75 (ASTM D3539). propan-2-ol: 1.5 (ASTM D3539). Water: 0.36 (ASTM D3539).				
<b>Oxidising properties</b>	no				
<b>Explosive properties</b>	no				
<b>9.2. Other information</b>	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

No decomposition if used as directed.

### 10.3. Possibility of hazardous reactions

Reactions with strong oxidising agents.  
Reactions with strong acids and alkalis.  
Evolution of ammonia under influence of alkalis.

### 10.4. Conditions to avoid

Heat and direct solar radiation.

### 10.5. Incompatible materials

#### Materials to avoid

Reactions with strong acids.  
Reactions with oxidising agents.  
Reactions with alkalis.

### 10.6. Hazardous decomposition products

Ammonia

## ! SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

#### Acute toxicity/Irritability/Sensitization

	Value/Validation	Species	Method	Remark
<b>LD50 acute oral</b>	3391 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>	irritant			
<b>Irritability eye</b>	risk of strong eye injuries			
<b>Skin sensitization</b>	non-sensitizing			

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

Narcotic effect: STOT SE 3 H336: May cause drowsiness or dizziness.  
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.  
ammonia : LD50(oral, rat): 350 mg/kg, LC50(inhalation, rat, 1h): 11.59 mg/l .

**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 mg/l		calculated	After neutralization a reduction in harmful effect can be observed.
<b>Daphnia</b>	EC50 17 mg/l		calculated	
<b>Algae</b>	EC50 22,2 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.

propan-2-ol: Accumulation in organisms is not expected (log Pow: 0.05).

ammonia: Accumulation in organisms is not expected.

Sulfonic acids, C14-17-sec-alkane, sodium salts: Accumulation in organisms is not expected (log Pow: 0.24).

fatty alcohol C 10-12, ethoxylated: Bioaccumulation is improbable.

fatty alcohol-PEG-ether: not available.

**12.4. Mobility in soil**

propan-2-ol: Dissolves in water. Highly mobile in soil.

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

ammonia ...%: The ammonium ion will be adsorbed by the soil; very soluble in water.

Sulfonic acids, C14-17-sec-alkane, sodium salts: Moderate adsorption on soil.

fatty alcohol-PEG-ether: not available.

fatty alcohol C 10-12, 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. 1285 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 2 H401: Toxic to aquatic life. After neutralization: Aquatic Acute 3 H402: Harmful to aquatic life.

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

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

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**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 18 %

### 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: 3.0

#### Sources of key data used

Own measurements.

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

R 10 Flammable.

R 11 Highly flammable.

R 22 Harmful if swallowed.

R 34 Causes burns.

R 36 Irritating to eyes.

R 38 Irritating to skin.

R 41 Risk of serious damage to eyes.

R 50 Very toxic to aquatic organisms.

R 67 Vapours may cause drowsiness and dizziness.

H225 Highly flammable liquid and vapour.

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.

H319 Causes serious eye irritation.

H332 Harmful if inhaled.

H335 May cause respiratory irritation.

H336 May cause drowsiness or dizziness.

H400 Very toxic to aquatic life.

H411 Toxic to aquatic life with long lasting effects.

H412 Harmful to aquatic life with long lasting effects.