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

1.1. Product identifier

Name of product elma clean 65 (EC 65)

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

Product categories [PC]
PC35 - Washing and cleaning products (including solvent based products)

Process categories [PROC]
PROC8a - Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non-dedicated facilities
PROC9 - Transfer of substance or preparation into small containers (dedicated filling line, including weighing)
PROC13 - Treatment of articles by dipping and pouring

Environmental release categories [ERC]
ERC8a - Wide dispersive indoor use of processing aids in open systems

Uses advised against

Remark
Do not use for injecting or spraying.

Recommended intended purpose(s)
Neutral cleaning concentrate with corrosion inhibitor for laboratory and workshop.

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

Hazard classes and Hazard categories	Hazard Statements	Classification procedure
Eye Dam. 1	**H318**	**Bridging principle ' Substantially similar mixtures.'**

Hazard Statements
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

H318	Causes serious eye damage.

Precautionary Statements

P102	Keep out of reach of children.
P280	Wear eye protection/face protection.
P301 + P312	IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.
P301 + P330 + P331	IF SWALLOWED: rinse mouth. Do NOT induce vomiting.
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.

Hazardous ingredients for labeling
isotridecanol, ethoxylated, Sulfonic acids, C14-17-sec-alkane, sodium salts

2.3. Other hazards
Acute Tox. 5 (oral) H303: May be harmful if swallowed.
Skin Irrit. 3 H316: Causes mild skin irritation.

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 mildly alkaline mixture of anionic and nonionic surfactants, phosphates, corrosion inhibitor, complexing agents and cosolvent.

Hazardous ingredients

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
68920-66-1		fatty alkohol-PEG-ether	5 - 15	Acute Tox. 4, H302 / Eye Irrit. 2, H319 / Aquatic Chronic 3, H412
67-63-0	200-661-7	propan-2-ol	< 5	Flam. Liq. 2, H225 / Eye Irrit. 2, H319 / STOT SE 3, H336

Hazardous ingredients (continued)

CAS No	EC No	Name	[% weight]	Classification according to Regulation (EC) No 1272/2008 [CLP/ GHS]
97489-15-1	**307-055-2**	**Sulfonic acids, C14-17-sec-alkane, sodium salts**	**5 - 10**	**Acute Tox. 4, H302 / Skin Irrit. 2, H315 / Eye Dam. 1, H318 / Aquatic Chronic 3, H412**
102-71-6	**203-049-8**	**triethanolamine [2,2',2''-nitrilotriethanol]**	**< 5**	

REACH

CAS No	Name	REACH registration number
69011-36-5	isotridecanol, ethoxylated	Not relevant (polymer).
68920-66-1	fatty alkohol-PEG-ether	Not relevant (polymer).
67-63-0	propan-2-ol	01-2119457558-25
97489-15-1	Sulfonic acids, C14-17-sec-alkane, sodium salts	01-2119489924-20
102-71-6	triethanolamine [2,2',2''-nitrilotriethanol]	01-2119486482-31

Additional advice
Aqueous neutral cleaning concentrate for metal, glass and synthetic materials.

SECTION 4: First aid measures

4.1. Description of first aid measures
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.
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.

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)
If swallowed or in the event of vomiting, risk of entering the lungs.

SECTION 5: Firefighting measures

5.1. Extinguishing media
Suitable extinguishing media
water
Fire-extinguishing activities according to surrounding.
Alcohol-resistant foam
Dry powder

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 (NOx)
Carbon monoxide (CO)

Phosphorus oxides (e.g. phosphoruspentoxide)
Sulfur oxide

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.
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 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
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
No special measures necessary.

7.2. Conditions for safe storage, including any incompatibilities
Requirements for storage rooms and vessels
Keep only in original container.

Further information on storage conditions
Keep container tightly closed.
Keep locked up, out of reach of children
Protect from heat and direct solar radiation.
Keep in a cool place.
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
67-63-0	propan-2-ol	WEL, 8 hours Short-term	999 1250	400 500	R11, 36, 67

DNEL-/PNEC-values
DNEL worker

CAS No	Substance name	Value	Code	Remark
102-71-6	triethanolamine [2,2',2''-nitrilotriethanol]	7,5 mg/kg bw/day	DNEL long-term dermal (systemic)	
		1 mg/m3	DNEL long-term inhalative (local)	
67-63-0	propan-2-ol	888 mg/kg bw/day	DNEL long-term dermal (systemic)	
		500 mg/m3	DNEL long-term inhalative (systemic)	
97489-15-1	Sulfonic acids, C14-17-sec-alkane, sodium salts	5 mg/kg bw/day	DNEL long-term dermal (systemic)	

PNEC

CAS No	Substance name	Value	Code	Remark
102-71-6	triethanolamine [2,2',2''-nitrilotriethanol]	10 mg/l	PNEC sewage treatment plant (STP)	
		0,32 mg/l	PNEC aquatic, freshwater	
97489-15-1	Sulfonic acids, C14-17-sec-alkane, sodium salts	0,04 mg/l	PNEC aquatic, freshwater	
		600 mg/l	PNEC sewage treatment plant (STP)	

! Additional advice
Occupational exposure limits for propan-2-ol.
Occupational exposure limits for triethanolamine.

8.2. Exposure controls
Eye protection
tightly fitting goggles

Limitation and surveillance of the environment
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	Colour	Odour
liquid	yellowish	mild

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

Important health, safety and environmental information

	Value	Temperature	at	Method	Remark
pH value	ca. 7	20 °C			
starts to boil	> 100 °C				
solidifying range	< -5 °C				
Flash point	59 °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	2 Vol-%				Value of propan-2-ol.
Upper explosion limit	ca. 12 Vol-%				Value of propan-2-ol.
Vapour pressure	23 - 42 hPa	20 °C			
Relative density	1,04 g/cm3				
Vapour density	2,07				Value of propan-2-ol.
Solubility in water					miscible
Solubility/other	not determined				
Partition coefficient n-octanol/water (log P O/W)	0,24				Value of Sulfonic acids, C14-17-sec-alkane, sodium salts.
Decomposition temperature	>= 100 °C				
Viscosity	not determined				

	Value	Temperature	at	Method	Remark
Solvent content	< 5 %				

Vapourisation rate
propan-2-ol: 1.5 (ASTM D3539) / 11 (DIN 53170) .
Water: 0.36 (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
No hazardous reactions known if used as directed.

10.2. Chemical stability
Stable at ambient temperature.

10.3. Possibility of hazardous reactions
Reactions with concentrated acids and alkalies above 50°C.

10.4. Conditions to avoid
Heat and direct solar radiation.

10.5. Incompatible materials
Substances to avoid
Reactions with concentrated acids and alkalies above 50°C.

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	4410 mg/kg		ATE (acute toxicity estimate)	
LD50 acute dermal	> 5000 mg/kg		ATE (acute toxicity estimate)	
LC50 acute inhalation	> 50 mg/l ()		ATE (acute toxicity estimate)	vapours

	Value/Validation	Species	Method	Remark
Skin irritation	mediocre irritant			
Eye irritation	risk of strong eye injuries			
Skin sensitization	The mixture is not classified as skin sensitiser.			

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 6,2 mg/l		calculated	
Daphnia	EC50 10,1 mg/l		calculated	
Algae	EC50 10,3 mg/l		calculated	

12.2. Persistence and degradability

Biological degradability	> 85 %	DOC decrease	calculated	readily degradable

12.3. Bioaccumulative potential
propan-2-ol: Accumulation in organisms is not expected (log Pow: 0.05).
isotridecanol, ethoxylated: Bioaccumulation is improbable.
Sulfonic acids, C14-17-sec-alkane, sodium salts: Accumulation in organisms is not expected (log Pow: 0.24).
fatty alkohol-PEG-ether: not available.
triethanolamine: Accumulation in organisms is not expected (BCF: <0,4).

12.4. Mobility in soil
propan-2-ol: Dissolves in water. Highly mobile in soil.
isotridecanol, ethoxylated: Koc: >5000, immobile, strong adsorption on soil.
Sulfonic acids, C14-17-sec-alkane, sodium salts: Moderate adsorption on soil.
fatty alkohol-PEG-ether: not available.
triethanolamine: Adsorption on soil is not expected (Koc: 10).

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	ca. 620 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 2 H401: Toxic 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.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

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

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 <=3 %

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: 2.8
Sources of key data used
Own measurements.
European Chemicals Agency, http://echa.europa.eu/.
Informations from our suppliers.

H225 Highly flammable liquid and vapour.
H302 Harmful if swallowed.
H315 Causes skin irritation.
H318 Causes serious eye damage.
H319 Causes serious eye irritation.
H336 May cause drowsiness or dizziness.
H412 Harmful to aquatic life with long lasting effects.