

ELMA RED 1:9

 $\begin{array}{c} 06.12.2022 \\ 22.09.2022 \end{array}$ Print date Revision date 4.4 (en) Version 04.05.2022 (4.3) replaces version of

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

* 1.1 Product identifier

Trade name/designation ELMA RED 1:9

Unique Formula Identifier UFI: N940-G08X-9004-WRA3

Product category PC-CLN-OTH Other cleaning, care and maintenance products

(excludes biocidal products)

Hazard components

1-methoxy-2-propanol, ammonia ...%

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

Sector of uses [SU]

SU22 Professional uses: Public domain (administration, education, entertainment, services, craftsmen)

SU3 Industrial uses

Process categories [PROC]

PROC8a Transfer of substance or mixture (charging and discharging) at non- dedicated facilities

PROC9 Transfer of substance or mixture into small containers (dedicated filling line, including weighing)

PROC13 Treatment of articles by dipping and pouring

Environmental release categories [ERC]ERC8a Widespread use of non-reactive processing aid (no inclusion into or onto article, indoor)

ERC8b Widespread use of reactive processing aid (no inclusion into or onto article, indoor)

ERC6b Use of reactive processing aid at industrial site (no inclusion into or onto article)

Product Categories [PC] PC35 Washing and cleaning products

Use of the substance/mixture

Cleaning concentrate for aqueous cleaning of disassembled watches and metal precision parts in devices for watch cleaning.

Uses advised against

Do not use for injecting or spraying.

1.3 Details of the supplier of the safety data sheet

Supplier

Elma Schmidbauer GmbH Gottlieb-Daimler-Str. 17 D-78224 Singen (Htwl.)
Telephone +49 7731 882-0
Telefax +49 7731 882-266
E-mail info@elma-ultrasonic.com

Website www.elma-ultrasonic.com

Department responsible for information:

Chemie/Labor: Email: chemlab@elma-ultrasonic.com

* 1.4 Emergency telephone number

Vergiftungs-Informations-Zentrale Freiburg (Sprache/Language: DE, +49 761 19240 EN)

* SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 [CLP]	Classification procedure
Skin Irrit. 2, H315	Calculation method.
Eye Irrit. 2, H319	Calculation method.
STOT SE 3, H336	Calculation method.
Aquatic Chronic 3, H412	Calculation method.



ELMA RED 1:9

Print date $\begin{array}{c} 06.12.2022 \\ 22.09.2022 \end{array}$ Revision date 4.4 (en) 04.05.2022 (4.3) Version replaces version of

Hazard statements for health hazards

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H336 May cause drowsiness or dizziness.

Hazard statements for environmental hazards

H412 Harmful to aquatic life with long lasting effects.

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

Hazard pictograms



GHS07

Signal word

Warning

Hazard statements

H315 Causes skin irritation. H319 Causes serious eye irritation.

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. P312 Call a POISON CENTER/doctor if you feel unwell.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P337 + P313 If eye irritation persists: Get medical advice/attention. P302 + P352 IF ON SKIN: Wash with plenty of water.

P332 + P313 If skin irritation occurs: Get medical advice/attention.

P301 + P330 + P331 IF SWALLOWED: rinse mouth. Do NOT induce vomiting.

Other labelling Labelling for contents according to regulation (EC) No. 648/2004:

< 5% anionic surfactants

15 - 30% soap

2.3 Other hazards

Adverse human health effects and symptoms

May cause respiratory irritation.

Vapours of the concentrate may cause drowsiness and dizziness.

This product does not contain a substance that has endocrine disrupting properties with respect to humans as no components meets the criteria.

Adverse environmental effects

Aquatic Acute 2 H401: Toxic to aquatic life.

This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.

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



ELMA RED 1:9

Print date 06.12.2022
Revision date 22.09.2022
Version 4.4 (en)
replaces version of 04.05.2022 (4.3)

3.2 Mixtures

Hazardous ingredients					
CAS No.	EC No.	Substance name	Concentration	Classification according to Regulation (EC) No 1272/2008 [CLP]	SCL/ M/ ATE
68604-33-1	271-685-3	Fatty acids, C14-18 and C16- 18-unsatd., ammonium salts	15 - 30 weight-%	Aquatic Chronic 3; H412	
107-98-2	203-539-1	1-methoxy-2-propanol	15 - 25 weight-%	Flam. Liq. 3; H226 STOT SE 3; H336	
15763-76-5	239-854-6	sodium cumenesulphonate	< 5 weight-%	Eye Irrit. 2; H319	
164524-02-1	629-764-9	potassium cumenesulphonate	< 5 weight-%	Eye Irrit. 2; H319	
1336-21-6	215-647-6	ammonia%	< 3 weight-%	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	STOT SE 3;H335: C>=5% M=1 (Aquatic Acute 1)

REACH No.	Substance name
01-2120770276-50	Fatty acids, C14-18 and C16-18-unsatd., ammonium salts
01-2119457435-35	1-methoxy-2-propanol
01-2119489411-37	sodium cumenesulphonate
01-2119489427-24	potassium cumenesulphonate
01-2119488876-14	ammonia%

Additional information

Aqueous mixture with surfactants, complexing agent, ammonium hydroxide with cosolvent and dyestuff.

* SECTION 4: First aid measures

* 4.1 Description of first aid measures

General information

Remove contaminated, saturated clothing immediately. Remove casualty to fresh air and keep warm and at rest.

Following inhalation

Remove casualty to fresh air and keep warm and at rest. In the event of symptoms refer for medical treatment.

Following skin contact

In case of contact with skin wash off immediately with plenty of water. In case of skin irritation, consult a physician.

After eye contact

After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an ophthalmologist immediately.



ELMA RED 1:9

Print date $\begin{array}{c} 06.12.2022 \\ 22.09.2022 \end{array}$ Revision date 4.4 (en) 04.05.2022 (4.3) Version replaces version of

Following ingestion

Do NOT induce vomiting. Seek medical advice immediately. Rinse mouth immediately and drink plenty of water.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms

No further informations available.

4.3 Indication of any immediate medical attention and special treatment needed

Notes for the doctor

No further informations available.

* SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

Water alcohol resistant foam Carbon dioxide (CO2) Water spray jet Water mist

5.2 Special hazards arising from the substance or mixture

Hazardous combustion products In the event of fire the following can be released: Ammonia (NH3) Nitrogen oxides (NOx) Carbon monoxide Sulphur dioxide (SO2)

* 5.3 Advice for firefighters

Special protective equipment for firefighters

Do not inhale explosion and combustion gases.

* SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel Provide adequate ventilation. Use personal protection equipment. Special danger of slipping by leaking/spilling product.

For emergency responders Ensure adequate ventilation. Personal protection equipment Use personal protection. Forms slippery surfaces with water. Special danger of slipping by leaking/spilling product.

6.2 Environmental precautions

Do not allow to enter into surface water or drains.



ELMA RED 1:9

Print date $\begin{array}{c} 06.12.2022 \\ 22.09.2022 \end{array}$ Revision date 4.4 (en) 04.05.2022 (4.3) Version replaces version of

6.3 Methods and material for containment and cleaning up

For containment

Suitable material for taking up:

Sand

Sawdust

Universal binder

Kieselguhr

Flush away residues with water.

After taking up the material dispose according to regulation.

* 6.4 Reference to other sections

Safe handling: see section 7

Personal protection equipment: see section 8

* SECTION 7: Handling and storage

7.1 Precautions for safe handling

Protective measures

Avoid:

generation/formation of aerosols

Do not inhale gases/vapours/aerosols.

Use only in well-ventilated areas.

If local exhaust ventilation is not possible or not sufficient, the entire working area should be ventilated by technical means. Take the usual precautions when handling with chemicals.

Avoid contact with eyes and skin.

No special fire protection measures are necessary.

Advices on general occupational hygiene Make available sufficient washing facilities

Keep away from food and drink.

* 7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep/Store only in original container.

Keep container tightly closed.

Storage class

12 non-combustible liquids that cannot be assigned to any of the above storage classes

Materials to avoid

Do not store together with:

Acid

alkali

Further information on storage conditions

Keep in a cool, well-ventilated place. Keep locked up and out of reach of children.

Protect from heat and direct solar radiation.

Do not keep at temperatures below 5°C.

Storage time: 3 years.

7.3 Specific end use(s)

Recommendation

no further



ELMA RED 1:9
Print date
Revision date
Version
replaces version 06.12.2022 22.09.2022 4.4 (en) 04.05.2022 (4.3) replaces version of

* SECTION 8: Exposure controls/personal protection

* 8.1 Control parameters

Occupational exposure limit values

CAS No.	EC No.	Substance name	occupational exposure limit value
107-98-2	203-539-1	1-Methoxypropanol-2	100 [ml/m³(ppm)] 375 [mg/m³] Short-term(ml/m³) 150 Short-term(mg/m³) 568 skin resorptive 2000/39/EC
107-98-2	203-539-1	1-Methoxypropan-2-ol	100 [ml/m³(ppm)] 375 [mg/m³] Short-term(ml/m³) 150 (1) Short-term(mg/m³) 568 (1) (1) 15 minutes reference period (IE)
107-98-2	203-539-1	1-Methoxypropan-2-ol	100 [ml/m³(ppm)] 375 [mg/m³] Short-term(ml/m³) 150 Short-term(mg/m³) 560 (UK)
7664-41-7	231-635-3	ammonia	20 [ml/m³(ppm)] 14 [mg/m³] Short-term(ml/m³) 50 Short-term(mg/m³) 36 EU

DNEL worker

CAS No.	Substance name	DNEL value	DNEL type	Remark
1336-21-6	ammonia%	6.8 mg/kg	long-term dermal (systemic	e) Assessment factor 10
1336-21-6	ammonia%	14 mg/m³	long-term inhalative (local)	
1336-21-6	ammonia%	47.6 mg/m³	long-term inhalative (systemic)	Assessment factor 10
107-98-2	1-methoxy-2-propanol	183 mg/kg bw/day	/day long-term dermal (systemic)	
107-98-2	1-methoxy-2-propanol	369 mg/m³	long-term inhalative (systemic)	
15763-76-5	sodium cumenesulphonate	37.4 mg/m³	long-term inhalative (systemic)	Assessment factor 25
15763-76-5	sodium cumenesulphonate	191 mg/kg bw/day	long-term dermal (systemic) Assessment factor 100
164524-02-1	potassium cumenesulphonate	37.4 mg/m³	long-term inhalative (systemic)	Assessment factor 25
164524-02-1	potassium cumenesulphonate	191 mg/kg bw/day	long-term dermal (systemic	e) Assessment factor 100

PNEC

CAS No.	Substance name	PNEC Value	PNEC type	Remark
1336-21-6	ammonia%	0.001 mg/L	aquatic, freshwater	Assessment factor 20
107-98-2	1-methoxy-2-propanol	10 mg/L	aquatic, freshwater	Assessment factor 100
107-98-2	1-methoxy-2-propanol	100 mg/L	sewage treatment plant (STP)	Assessment factor 10
15763-76-5	sodium cumenesulphonate	0.1 mg/L	aquatic, freshwater	Assessment factor 1000
15763-76-5	sodium cumenesulphonate	100 mg/L	sewage treatment plant (STP)	Assessment factor 10
164524-02-1	potassium cumenesulphonate	0.1 mg/L	sediment, freshwater	Assessment factor 1000
164524-02-1	potassium cumenesulphonate	100 μg/kg	sewage treatment plant (STP)	Assessment factor 10



ELMA RED 1:9

06.12.2022 22.09.2022 Print date Revision date 4.4 (en) 04.05.2022 (4.3) Version replaces version of

8.2 Exposure controls

Appropriate engineering controls

Technical measures to prevent exposure

Technical exhaustion if there is a long-term exposition

Personal protection equipment

Eye/face protection

tightly fitting goggles

Hand protection

Gloves (alkali- and solvent-resistant)

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

Respiratory protection
Respiratory protection necessary at: aerosol or mist formation high concentrations Suitable respiratory protection apparatus: Multi-purpose filter ABEK/P3

Environmental exposure controls

Technical measures to prevent exposure

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.

* SECTION 9: Physical and chemical properties

* 9.1 Information on basic physical and chemical properties

Physical state

liquid

Colour

light red

Odour

like:

Ammonia

Safety relevant basis data

	Value	Method	Source, Remark
Odour threshold:			1-methoxy-2-propanol: 38 - 360 mg/m3 (10 - 96 ppm).
Odour threshold:			ammonia: 5ppm (3.5mg/m3).
Melting point/freezing point	solidifying range ≤ -5 °C		
Boiling point or initial boiling point and boiling range	≥ 100 °C		
flammability	solid		not applicable
flammability	gaseous		not applicable
Lower and upper explosion limit	Upper explosion limit 13.7 Vol-%		Value of 1-methoxy-2- propanol.
Lower and upper explosion limit	Lower explosion limit 1.5 Vol-%		Value of 1-methoxy-2- propanol.
Flash point	> 65 °C	DIN 51755 part 1	Does not maintain the combustion.



ELMA RED 1:9

Print date $\begin{array}{c} 06.12.2022 \\ 22.09.2022 \end{array}$ Revision date 4.4 (en) 04.05.2022 (4.3) Version replaces version of

	Value	Method	Source, Remark
Auto-ignition temperature	270 °C		Value of 1-methoxy-2- propanol.
Decomposition temperature			not determined
рН	in delivery state 10.6 (20°C)		
Viscosity	dynamic 14.4 mPa*s (20°C)		
Solubility(ies)	Water solubility		miscible
Partition coefficient n-octanol/water (log value)	-0.437		Value of 1-methoxy-2- propanol.
Vapour pressure	approx. 81 hPa (20°C)		
Density and/or relative density	1.008 g/cm³ (20°C)		
Relative vapour density	3.11		Value of 1-methoxy-2- propanol.
particle characteristics			not applicable (liquid).

9.2 Other information

Information with regard to physical hazard classes

Explosives

Assessment/classification

The mixture does not contain any explosive substances (CLP I 2.1.4.3 a). CLP I 2.1.4.3 a: The classification procedure needs not to be applied because there are no chemical groups present in the molecule which are associated with explosive properties.

flammable gases

Assessment/classification

not applicable (liquid).

Aerosols

Assessment/classification

not relevant - no aerosol.

The classification criteria for this hazard class are not met by definition.

Oxidising gas

Assessment/classification

not applicable (liquid).

Gases under pressure

Assessment/classification

not applicable (liquid, no dissolved gas under pressure).

flammable liquids

Assessment/classification Flash point > 35 °C, does not maintain the combustion. The mixture is not classified as flammable liquids.

flammable solids

Assessment/classification

not applicable (liquid).

Self-reactive substances and mixtures

Assessment/classification

The mixture does not contain any self-reactive substances (CLP I 2.8.4.2 a).

CLP I 2.8.4.2 a: There are no chemical groups present in the molecule associated with explosive or self reactive properties.



ELMA RED 1:9

Print date 06.12.2022
Revision date 22.09.2022
Version 4.4 (en)
replaces version of 04.05.2022 (4.3)

Pyrophoric liquids

* Assessment/classification

The mixture does not contain any pyrophoric substances - not spontaneously flammable (CLP I 2.9.4.1). CLP I 2.9.4.1: The classification procedure for pyrophoric liquids need not be applied when experience in manufacture or handling shows that the substance or mixture does not ignite spontaneously on coming into contact with air at normal temperatures (i.e. the substance is known to be stable at room temperature for prolonged periods of time (days)).

Pyrophoric solids

* Assessment/classification

not applicable (liquid).

* self-heating substances and mixtures

* Assessment/classification

The mixture does not contain any self-heating substances.

* Substances or mixtures which, in contact with water, emit flammable gases

* Assessment/classification

not relevant - in contact with water releases no flammable gases (CLP I 2.12.4.1). CLP I 2.12.4.1: The classification procedure for this class need not be applied if: (a) the chemical structure of the substance or mixture does not contain metals or metalloids; or (b) experience in production or handling shows that the substance or mixture does not react with water, e.g. the substance is manufactured with water or washed with water; or (c) the substance

or mixture is known to be soluble in water to form a stable mixture.

* Oxidising liquids

Assessment/classification

The mixture does not contain any oxidising substances.

* Oxidising solids

Assessment/classification

not applicable (liquid).

* Organic peroxides

* Assessment/classification

The mixture does not contain any organic peroxides.

* Corrosive to metals

Safety characteristics

	Value	Method, Result	Source, Remark
Corrosion rate (mm aluminium/year)	< 6.25 mm/a	Expert judgement and weight of evidence determination.	
Corrosion rate (mm steel/year)	< 6.25 mm/a	Expert judgement and weight of evidence determination.	

Assessment/classification

Based on available data, the classification criteria are not met.

* Desensitised explosives

Assessment/classification

The mixture does not contain any desensitised explosive substances.

Other safety characteristics

	Value	Method	Source, Remark
Evaporation rate			Water: 0.36 (ASTM D3539).
Evaporation rate			1-methoxy-2-propanol: 0.75 (ASTM D3539).
Solvent content	< 25 weight-%		



ELMA RED 1:9

Print date 06.12.2022
Revision date 22.09.2022
Version 4.4 (en)
replaces version of 04.05.2022 (4.3)

	Value	Method	Source, Remark
Explosive properties			none
Oxidising properties			none

* Other information

No further relevant informations available.

* SECTION 10: Stability and reactivity

* 10.1 Reactivity

Exothermic reaction with:

Acid

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 alkalies. Evolution of ammonia under influence of alkalies.

10.4 Conditions to avoid

Heat and direct solar radiation.

10.5 Incompatible materials

Reactions with strong acids. Oxidising agent Alkali (lye)

10.6 Hazardous decomposition products

Ammonia

* SECTION 11: Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

* Acute toxicity

* Animal data

	Effective dose	Method,Evaluation	Source, Remark
Acute oral toxicity	> 5000 mg/kg	ATE: Acute Toxicity Estimate	
	CAS No.1336-21-6 ammonia% LD50: 350 mg/kg Species Rat		
Acute dermal toxicity	> 5000 mg/kg	ATE: Acute Toxicity Estimate	
Acute inhalation toxicity	Acute inhalation toxicity (vapour) > 50 mg/L	ATE: Acute Toxicity Estimate	
	CAS No.107-98-2 1- methoxy-2-propanol Acute inhalation toxicity (vapour) 25.5 mg/L Species Rat Exposure time 4 h		LCLo



ELMA RED 1:9

Print date 06.12.2022
Revision date 22.09.2022
Version 4.4 (en)
replaces version of 04.05.2022 (4.3)

Effective dose

Method, Evaluation

Source, Remark

CAS No.1336-21-6 ammonia ...%

LC50: 11.59 mg/L Species

Rat

Exposure time 1 h

* Assessment/classification

Based on available data, the classification criteria are not met.

* Skin corrosion/irritation

Animal data

Result / Evaluation Method Source, Remark
Irritant. Calculation method.

* Serious eye damage/irritation

Animal data

Result / Evaluation Method Source, Remark
Irritant. Calculation method.

* Sensitisation to the respiratory tract

* Assessment/classification

Based on available data, the classification criteria are not met.

* Skin sensitisation

Animal data

Result / Evaluation Dose / Concentration Method Source, Remark not sensitising.

Calculation method.

Germ cell mutagenicity

* Assessment/classification

Based on available data, the classification criteria are not met.

Carcinogenicity

* Assessment/classification

Based on available data, the classification criteria are not met.

Reproductive toxicity

* Assessment/classification

Based on available data, the classification criteria are not met.

* Overall Assessment on CMR properties

The mixture is not classified as mutagen / not classified as carcinogen / not classified as reproductive toxicant.

STOT-single exposure

* STOT SE 1 and 2

* Assessment/classification

Based on available data, the classification criteria are not met.

* STOT SE 3

* Irritation to respiratory tract

* Other information

May cause respiratory irritation.

* Assessment/classification

Based on available data, the classification criteria are not met.



ELMA RED 1:9

06.12.2022 22.09.2022 4.4 (en) 04.05.2022 (4.3) Print date Revision date Version replaces version of

Narcotic effects

Assessment/classificationNarcotic effect: STOT SE 3 H336: May cause drowsiness or dizziness.

STOT-repeated exposure

Assessment/classification
The mixture is not classified as specific target organ toxicant (repeated exposure). Based on available data, the classification criteria are not met.

Aspiration hazard

Assessment/classification

The mixture is not classified as aspiration hazardous. Based on available data, the classification criteria are not met.

11.2 Information on other hazards

Symptoms related to the physical, chemical and toxicological characteristics

	Effective dose	Method,Evaluation	Source, Remark
Endocrine disrupting properties			This product does not contain a substance that has endocrine disrupting properties with respect to humans as no components meets the criteria.

Other information

Has degreasing effect on the skin.

* SECTION 12: Ecological information

- * 12.1 Toxicity
- Aquatic toxicity

	Effective dose	Method,Evaluation	Source, Remark
Acute (short-term) fish toxicity	LC50: 5.2 mg/L	calculated.	After neutralisation, reduction in toxic effects is observed.
	CAS No.1336-21-6 ammonia% LC50: 0.16- 1.1 mg/L Species Oncorhynchus mykiss (Rainbow trout) Test duration 96 h		
	CAS No.68604-33-1 Fatty acids, C14-18 and C16-18-unsatd., ammonium salts LC50: ≥ 21 mg/L Test duration 96 h		
Chronic (long-term) fish toxicity	CAS No.1336-21-6 ammonia% NOEC 0.022 mg/L Species Oncorhynchus mykiss (Rainbow trout) Test duration 73 d		
Acute (short-term) toxicity to crustacea	EC50 18.1 mg/L	calculated.	
	CAS No.1336-21-6 ammonia% EC50 2.94 mg/L Species Daphnia magna (Big water flea) Test duration 48 h		



ELMA RED 1:9

Print date 06.12.2022 22.09.2022 Revision date 4.4 (en) Version 04.05.2022 (4.3) replaces version of

Effective dose Method, Evaluation Source, Remark CAS No.68604-33-1 Fatty acids, C14-18 and C16-18unsatd., ammonium salts EC50 ≥ 4.2 mg/L Chronic (long-term) toxicity to CAS No.1336-21-6 aquatic invertebraté ammonia ...% NOEC 0.79 mg/L Species Daphnia magna (Big water flea) Test duration 96 h CAS No.68604-33-1 Fatty acids, C14-18 and C16-18unsatd., ammonium salts NOEC 0.11 mg/L Test duration 21 d Acute (short-term) toxicity to algae EC50 161 mg/L calculated. and cyanobacteria CAS No.1336-21-6 ammonia ...% EC50 330 mg/L Species Chlorella vulgaris Test duration 5 d CAS No.68604-33-1 Fatty acids, C14-18 and C16-18unsatd., ammonium salts EC50 > 44 mg/L Test duration 72 h CAS No.68604-33-1 Fatty Chronic (long-term) toxicity to acids, C14-18 and C16-18aquatic algae and cyanobacteria unsatd., ammonium salts NOEC: 20 mg/L Test duration 72 h Toxicity to other aquatic not determined plants/organisms Toxicity to microorganisms not determined

Assessment/classification

Toxic to aquatic life.

Harmful to aquatic life with long lasting effects.

* 12.2 Persistence and degradability

	Value	Method	Source, Remark
Biodegradation	Degradation rate > 90 %	calculated.	DOC reduction Readily biodegradable (according to OECD criteria).
Biodegradation	Degradation rate 100 %	Neutralization, pH- measurement	
Biodegradation	Degradation rate 96 % Test duration 28 d	OECD 301E/ EEC 92/69/V, C.4-B	CAS No.107-98-2 1- methoxy-2-propanol
Biodegradation			CAS No.1336-21-6 ammonia%
			The methods for determining the biological degradability are not applicable to inorganic substances.
Biodegradation	Degradation rate 93 % Test duration 28 d	OECD 301B/ ISO 9439/ EEC 92/69/V, C.4-C	CAS No.68604-33-1 Fatty acids, C14-18 and C16-18-unsatd., ammonium salts



ELMA RED 1:9

Print date 06.12.2022
Revision date 22.09.2022
Version 4.4 (en)
replaces version of 04.05.2022 (4.3)

Method, Evaluation

Source, Remark

to the recipe.

	Value	Method	Source, Remark
Biodegradation	Degradation rate 99 % Test duration 28 d	OECD 301B/ ISO 9439/ EEC 92/69/V, C.4-C	CAS No.15763-76-5 sodium cumenesulphonate
Biodegradation	Degradation rate > 60 % Test duration 28 d	OECD 301B/ ISO 9439/ EEC 92/69/V, C.4-C	CAS No.164524-02-1 potassium cumenesulphonate

12.3 Bioaccumulative potential

Assessment/classification

1-methoxy-2-propanol: Accumulation in organisms is not expected. sodium cumenesulphonate: Bioaccumulation is improbable. potassium cumenesulphonate: Bioaccumulation is improbable. ammonia: Accumulation in organisms is not expected.

ammonia: Accumulation in organisms is not expected. Fatty acids, C14-18 and C16-18-unsatd., ammonium salts: Because of the n-octanol/water partition coefficient accumulation in organisms is possible (log Pow >3).

12.4 Mobility in soil

Assessment/classification

1-methoxy-2-propanol: Dissolves in water. Highly mobile in soil. sodium cumenesulphonate: Adsorption on soil is not expected. potassium cumenesulphonate: Adsorption on soil is not expected. ammonia ...%: The ammonium ion will be adsorbed by the soil; very soluble in water. Fatty acids, C14-18 and C16-18-unsatd., ammonium salts: strong adsorption on soil, immobile.

12.5 Results of PBT and vPvB assessment

The product does not contain any PBT-/vPvB-substances according to the recipe.

Effective dose

* 12.6 Endocrine disrupting properties

Endocrine disrupting properties		,	This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.
12.7 Other adverse effects			
	Value	Method	Source, Remark
Ozone depletion potential (ODP):			Based on available data, the classification criteria are not met.
Additional ecotoxicological informatio	n		
	Value	Method	Source, Remark
Chemical oyxgen demand (COD)	approx. 1.2 gO2/g	calculated.	
AOX			The product does not contain any organically bound halogens according

Additional information

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 discharge of product into the environment.

No further relevant informations available.



ELMA RED 1:9

Print date $\begin{array}{c} 06.12.2022 \\ 22.09.2022 \end{array}$ Revision date 4.4 (en) 04.05.2022 (4.3) Version replaces version of

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Waste codes/waste designations according to EWC/AVV

Waste code product Waste name

200129 * detergents containing hazardous substances

Appropriate disposal / 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.

Appropriate disposal / Package

Non-contaminated packages may be recycled.

SECTION 14: Transport information

	Land transport (ADR/RID)	Sea transport (IMDG)	Air transport (ICAO-TI / IATA- DGR)
14.1 UN number or ID number	-	-	-
14.2 UN proper shipping name	-	-	-
14.3 Transport hazard class(es)	-	-	-
14.4 Packing group	-	-	-
14.5 Environmental hazards	No	No	No

14.6 Special precautions for user

none

14.7 Maritime transport in bulk according to IMO instruments

not relevant

Land transport (ADR/RID)

Remark

Not classified for this transport carrier.

Sea transport (IMDG)

No hazardous material as defined by the prescriptions.

Air transport (ICAO-TI / 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
- **EU** legislation

Authorisations

not relevant

Restrictions on use

Regulation (EC) No 1907/2006 (REACH), Annex XVII No 3 + 40 - not relevant if used as directed. Regulation (EC) No 1907/2006 (REACH), Annex XVII No 75 - not relevant if used as directed.



ELMA RED 1:9

Print date $\begin{array}{c} 06.12.2022 \\ 22.09.2022 \end{array}$ Revision date 4.4 (en) Version 04.05.2022 (4.3) replaces version of

Restrictions of occupation

Observe restrictions to employment for juvenils according to the 'juvenile work protection guideline' (94/33/EC).

Other regulations (EU)

Regulation (EC) No. 648/2004 (Detergents regulation) Directive 2012/18/EU, Annex I: not mentioned.

Directive 2010/75/EU on industrial emissions [Industrial Emissions Directive] VOC

VOC content, delivery state 23 %

15.2 Chemical Safety Assessment

For this mixture a chemical safety assessment were not carried out.

SECTION 16: Other information

Abbreviations and acronyms

For abbreviations and acronyms, see: ECHA Guidance on information requirements and chemical safety assessment, chapter R.20 (Table of terms and abbreviations).

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road

ASTM: American Society for Testing and Materials

ATE: Acute Toxicity Estimate
AVV: Waste Shipment Ordinance (DE) DGR: Dangerous Goods Regulations (IATA)

DIN: German Institute for Standardization / German Industrial Standard

DNEL: derived no-effect level

DOC: Dissolved Organic Carbon
IATA: International Air Transport Association
ICAO: International Civil Aviation Organization IMDG: International Maritime Dangerous Goods IMO: International Maritime Organization

JArbSchG: Youth Labor Protection Act (DE)

LDL0: Lowest Lethal (fatal) Dose

OECD: Organisation for Economic Cooperation and Development

PBT: persistent and bioaccumulative and toxic PNEC: Predicted No Effect Concentration

RID: Dangerous goods regulations for transport by rail SCL: Specific concentration limit

TI: Technical Instruction

TRGS: Technical Rules for Hazardous Substances

VOC: Volatile organic compounds

vPvB: very persistent, very bioaccumulative

Key literature references and sources for data

Own measurements.

European Chemicals Agency, http://echa.europa.eu/.

Informations from our suppliers.

Additional information

National and local regulations concerning chemicals shall be observed.

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.

Relevant H- and EUH-phrases (Number and full text)

	• ` ` `
H226	Flammable liquid and vapour.
H290	May be corrosive to metals.
H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.



ELMA RED 1:9
Print date 06.12.2022 22.09.2022 4.4 (en) 04.05.2022 (4.3) Revision date Version replaces version of

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.

Indication of changes
* Data changed compared with the previous version