



elma tec clean A2

Print date 05.09.2023
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Version 2.0 (en)
replaces version of 09.08.2022 (1.9)

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

1.1 Product identifier

Trade name/designation elma tec clean A2
Unique Formula Identifier UFI: YR40-00QW-T00M-7F7E
Product category PC-CLN-OTH Other cleaning, care and maintenance products (excludes biocidal products)

Hazard components

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

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

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-Informationen-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 Dam. 1, H318	Calculation method.
STOT SE 3, H336	Calculation method.
Aquatic Chronic 3, H412	Calculation method.



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Hazard statements for health hazards

H315 Causes skin irritation.
H318 Causes serious eye damage.
H336 May cause drowsiness or dizziness.

Hazard statements for environmental hazards

H412 Harmful to aquatic life with long lasting effects.

2.2 Label elements

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

Hazard components

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

Hazard pictograms



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.
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.
P310 Immediately call a doctor.
P302 + P352 IF ON SKIN: Wash with plenty of water.
P301 + P330 + P331 IF SWALLOWED: rinse mouth. Do NOT induce vomiting.

Other labelling

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

- 5 - 15% anionic surfactants
- 5 - 15% non-ionic surfactants
- 5 - 15% soap

2.3 Other hazards

Adverse human health effects and symptoms

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

May cause respiratory irritation.

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.



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SECTION 3: Composition / information on ingredients

3.1 Substances

not applicable

3.2 Mixtures

Hazardous ingredients

CAS No.	EC No.	Substance name	Concentration	Classification according to Regulation (EC) No 1272/2008 [CLP]	SCL/ M/ ATE
107-98-2	203-539-1	1-methoxy-2-propanol	< 20 weight-%	Flam. Liq. 3; H226 STOT SE 3; H336	
68604-33-1	271-685-3	Fatty acids, C14-18 and C16-18-unsatd., ammonium salts	5 - 15 weight-%	Aquatic Chronic 3; H412	
97489-15-1	307-055-2	Sulfonic acids, C14-17-sec-alkane, sodium salts	5 - 15 weight-%	Acute Tox. 4; H302 Skin Irrit. 2; H315 Eye Dam. 1; H318 Aquatic Chronic 3; H412	Skin Irrit. 2;H315: C>10% Eye Dam. 1;H318: C>15% Eye Irrit. 2;H319: 10%<C=<15%
68920-66-1		fatty alcohol-PEG-ether	5 - 15 weight-%	Acute Tox. 4; H302 Eye Irrit. 2; H319 Aquatic Chronic 3; H412	
67254-71-1	931-952-3	fatty alcohol C 10-12, ethoxylated	< 5 weight-%	Acute Tox. 4; H302 Eye Dam. 1; H318	ATE(oral): 500 mg/kg
67-63-0	200-661-7	propan-2-ol	< 5 weight-%	Flam. Liq. 2; H225 Eye Irrit. 2; H319 STOT SE 3; H336	
1336-21-6	215-647-6	ammonia ...%	< 5 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
01-2119457435-35	1-methoxy-2-propanol
01-2120770276-50	Fatty acids, C14-18 and C16-18-unsatd., ammonium salts
01-2119489924-20	Sulfonic acids, C14-17-sec-alkane, sodium salts
Not relevant (polymer).	fatty alcohol-PEG-ether
Not relevant (polymer).	fatty alcohol C 10-12, ethoxylated
01-2119457558-25	propan-2-ol
01-2119488876-14	ammonia ...%

Additional information

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



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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 with 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.

Following ingestion

Do NOT induce vomiting.
Rinse mouth immediately and drink plenty of water.
If swallowed seek medical advice immediately and show the doctor packing or label.

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

Keep under medical supervision for at least 48 hours.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

alcohol resistant foam
Extinguishing powder
Water spray jet

Unsuitable extinguishing media

none

5.2 Special hazards arising from the substance or mixture

Hazardous combustion products

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

5.3 Advice for firefighters

Special protective equipment for firefighters

Do not inhale explosion and combustion gases.



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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.

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



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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.
Do not keep at temperatures above 35°C.
Storage time: 5 years.

7.3 Specific end use(s)

Recommendation

no further

*** 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/m ³ (ppm)] 375 [mg/m ³] Short-term(ml/m ³) 150 Short-term(mg/m ³) 568 skin resorptive 2000/39/EC
107-98-2	203-539-1	1-Methoxypropan-2-ol	100 [ml/m ³ (ppm)] 375 [mg/m ³] Short-term(ml/m ³) 150 (1) Short-term(mg/m ³) 568 (1) (1) 15 minutes reference period (IE)
67-63-0	200-661-7	Propan-2-ol	200 [ml/m ³ (ppm)] Short-term(ml/m ³) 400 (1) (1) 15 minutes reference period (IE)
107-98-2	203-539-1	1-Methoxypropan-2-ol	100 [ml/m ³ (ppm)] 375 [mg/m ³] Short-term(ml/m ³) 150 Short-term(mg/m ³) 560 (UK)
67-63-0	200-661-7	Propan-2-ol	400 [ml/m ³ (ppm)] 999 [mg/m ³] Short-term(ml/m ³) 500 Short-term(mg/m ³) 1250 (UK)
7664-41-7	231-635-3	ammonia	20 [ml/m ³ (ppm)] 14 [mg/m ³] Short-term(ml/m ³) 50 Short-term(mg/m ³) 36 EU

*** DNEL worker**

CAS No.	Substance name	DNEL value	DNEL type	Remark
67-63-0	propan-2-ol	500 mg/m ³	long-term inhalative (systemic)	Assessment factor 1
67-63-0	propan-2-ol	888 mg/kg bw/day	long-term dermal (systemic)	Assessment factor 1
1336-21-6	ammonia ...%	6.8 mg/kg	long-term dermal (systemic)	Assessment factor 10
1336-21-6	ammonia ...%	14 mg/m ³	long-term inhalative (local)	
1336-21-6	ammonia ...%	47.6 mg/m ³	long-term inhalative (systemic)	Assessment factor 10
97489-15-1	Sulfonic acids, C14-17-sec-alkane, 5 mg/kg bw/day sodium salts		long-term dermal (systemic)	Assessment factor 40



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CAS No.	Substance name	DNEL value	DNEL type	Remark
107-98-2	1-methoxy-2-propanol	183 mg/kg bw/day	long-term dermal (systemic)	
107-98-2	1-methoxy-2-propanol	369 mg/m ³	long-term inhalative (systemic)	
97489-15-1	Sulfonic acids, C14-17-sec-alkane, sodium salts	35 mg/m ³	long-term inhalative (systemic)	Assessment factor 10

*

PNEC

CAS No.	Substance name	PNEC Value	PNEC type	Remark
1336-21-6	ammonia ...%	0.001 mg/L	aquatic, freshwater	Assessment factor 20
97489-15-1	Sulfonic acids, C14-17-sec-alkane, sodium salts	0.06 mg/L	aquatic, freshwater	Assessment factor 10
97489-15-1	Sulfonic acids, C14-17-sec-alkane, sodium salts	600 mg/L	sewage treatment plant (STP)	Assessment factor 1
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

8.2 Exposure controls

Appropriate engineering controls

Technical measures to prevent exposure

Technical exhaustion for long-term expositions or higher bath temperatures.

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 yellow

Odour

like:

Ammonia



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Safety relevant basis data

	Value	Method	Source, Remark
Odour threshold:			1-methoxy-2-propanol: 38 - 360 mg/m ³ (10 - 96 ppm).
Odour threshold:			ammonia: 5ppm (3.5mg/m ³).
Odour threshold:			propan-2-ol: 2.5 - 490 mg/m ³ (1 - 196 ppm).
Melting point/freezing point	Solidifying point approx. 0 °C		
Boiling point or initial boiling point and boiling range	78 °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	36.5 °C	DIN EN ISO 13736	Does not maintain the combustion.
Auto-ignition temperature	270 °C		Value of 1-methoxy-2-propanol.
Decomposition temperature			not determined
pH	in delivery state 10.5- 11 (20°C)		
Viscosity	dynamic 39 mPa*s (20°C)		
Solubility(ies)	Water solubility		miscible
Partition coefficient n-octanol/water (log value)	0.24		Value of Sulfonic acids, C14-17-sec-alkane, sodium salts.
Vapour pressure	approx. 91 hPa (20°C)		
Density and/or relative density	0.99- 1 g/cm ³ (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.



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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.

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.



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Corrosive to metals

Safety characteristics

	Value	Method, Result	Source, Remark
Corrosion rate (mm aluminium/year)	2.7 mm/a	UN Test, Part III of sub-section 37.4	
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).
Evaporation rate			propan-2-ol: 1.5 (ASTM D3539) / 11 (DIN 53170) .
Solvent content	18 %		
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 alkalis.

Evolution of ammonia under influence of alkalis.

10.4 Conditions to avoid

Heat and direct solar radiation.

10.5 Incompatible materials

Reactions with strong acids.

Oxidising agent

Alkali (lye)



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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	3082 mg/kg	ATE: Acute Toxicity Estimate	The acute oral toxicity is corresponding to GHS-category 5.
	CAS No.68920-66-1 fatty alcohol-PEG-ether LD50: 1920 mg/kg Species Rat		
	CAS No.67254-71-1 fatty alcohol C 10-12, ethoxylated 500 mg/kg	ATE: Acute Toxicity Estimate	
	CAS No.97489-15-1 Sulfonic acids, C14-17-sec-alkane, sodium salts LD50: approx. 1250 mg/kg Species Rat		
	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.1336-21-6 ammonia ...% Acute inhalation toxicity (vapour) LC50: 11.59 mg/L Species Rat Exposure time 1 h		
	CAS No.67-63-0 propan-2-ol Acute inhalation toxicity (vapour) LC50: 72.6 mg/L Species Rat Exposure time 4 h		
	CAS No.107-98-2 1-methoxy-2-propanol Acute inhalation toxicity (vapour) 25.5 mg/L Species Rat Exposure time 4 h		LCLo

Skin corrosion/irritation

Animal data

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



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Serious eye damage/irritation

Animal data

Result / Evaluation	Method	Source, Remark
Risk of serious damage to eyes.	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.

Narcotic effects

Assessment/classification

Narcotic 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.



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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: 3.1 mg/L	calculated.	
	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.68920-66-1 fatty alcohol-PEG-ether LC50: 1.26 mg/L		
	CAS No.97489-15-1 Sulfonic acids, C14-17-sec-alkane, sodium salts LC50: 2.8 mg/L		
	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	CAS No.97489-15-1 Sulfonic acids, C14-17-sec-alkane, sodium salts NOEC 0.85 mg/L Species Oncorhynchus mykiss (Rainbow trout) Test duration 28 d	OECD 204	
	EC50 8.5 mg/L	calculated.	
	CAS No.1336-21-6 ammonia ...% EC50 2.94 mg/L Species Daphnia magna (Big water flea) Test duration 48 h		



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

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	Effective dose	Method, Evaluation	Source, Remark
Chronic (long-term) toxicity to aquatic invertebrate	CAS No.68604-33-1 Fatty acids, C14-18 and C16-18-unsatd., ammonium salts EC50 ≥ 4.2 mg/L		
	CAS No.68920-66-1 fatty alcohol-PEG-ether EC50 2.5 mg/L		
	CAS No.97489-15-1 Sulfonic acids, C14-17-sec-alkane, sodium salts EC50 9.2 mg/L Species Daphnia magna (Big water flea) Test duration 48 h	OECD 202	
Acute (short-term) toxicity to algae and cyanobacteria	CAS No.1336-21-6 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 C16-18-unsatd., ammonium salts NOEC 0.11 mg/L Test duration 21 d		
	CAS No.97489-15-1 Sulfonic acids, C14-17-sec-alkane, sodium salts NOEC 0.36 mg/L Species Daphnia magna (Big water flea) Test duration 22 d		
Chronic (long-term) toxicity to aquatic algae and cyanobacteria	EC50 13 mg/L	calculated.	
	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 C16-18-unsatd., ammonium salts EC50 > 44 mg/L Test duration 72 h		
Toxicity to other aquatic plants/organisms	CAS No.68920-66-1 fatty alcohol-PEG-ether EC50 2.3 mg/L		
	CAS No.97489-15-1 Sulfonic acids, C14-17-sec-alkane, sodium salts EC50 62.1 mg/L Species Scenedesmus subspicatus Test duration 72 h		
Toxicity to microorganisms	CAS No.68604-33-1 Fatty acids, C14-18 and C16-18-unsatd., ammonium salts NOEC: 20 mg/L Test duration 72 h		
	CAS No.68920-66-1 fatty alcohol-PEG-ether EC10: 0.33 mg/L		
	not determined		
	not determined		



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Assessment/classification

Toxic to aquatic life.

12.2 Persistence and degradability

	Value	Method	Source, Remark
Biodegradation	Degradation rate \geq 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	Degradation rate 95 % Test duration 21 d	OECD 301E/ EEC 92/69/V, C.4-B	CAS No.67-63-0 propan-2- ol
Biodegradation	Degradation rate 100 % Test duration 28 d	OECD 301D/ EEC 92/69/V, C.4-E	CAS No.68920-66-1 fatty alcohol-PEG-ether
Biodegradation	Degradation rate 89 % Test duration 28 d	OECD 301E/ EEC 92/69/V, C.4-B	CAS No.97489-15-1 Sulfonic acids, C14-17-sec- alkane, sodium salts
Biodegradation	Degradation rate 78 % Test duration 28 d	OECD 301B/ ISO 9439/ EEC 92/69/V, C.4-C	CAS No.97489-15-1 Sulfonic acids, C14-17-sec- alkane, sodium salts
Biodegradation	Degradation rate > 70 % Test duration 28 d	OECD 301A/ ISO 7827/ EEC 92/69/V, C.4-A	CAS No.67254-71-1 fatty alcohol C 10-12, ethoxylated
Biodegradation	Degradation rate > 60 % Test duration 28 d	OECD 301B/ ISO 9439/ EEC 92/69/V, C.4-C	CAS No.67254-71-1 fatty alcohol C 10-12, ethoxylated
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

12.3 Bioaccumulative potential

Assessment/classification

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.

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).



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12.4 Mobility in soil

Assessment/classification

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: Koc: > 1816, strong adsorption on soil.
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.

12.6 Endocrine disrupting properties

	Effective dose	Method, Evaluation	Source, Remark
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 information

	Value	Method	Source, Remark
Chemical oxygen demand (COD) AOX	approx. 1286 mgO ₂ /g	calculated.	The product does not contain any organically bound halogens according to the recipe.

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.
Chronic aquatic environmental hazards: Aquatic Chronic 3 H412: Harmful to aquatic life with long lasting effects.
Do not allow uncontrolled discharge of product into the environment.
No further relevant informations available.

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 (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.

Appropriate disposal / Package

Non-contaminated packages may be recycled.



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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	-	-	-
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)

Remark
No hazardous material as defined by the prescriptions.

Air transport (ICAO-TI / IATA-DGR)

Remark
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.

Restrictions of occupation

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

Other regulations (EU)

To follow:
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 18.1 %

15.2 Chemical Safety Assessment

National regulations

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



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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

EN: European Standard

IATA: International Air Transport Association

ICAO: International Civil Aviation Organization

IMDG: International Maritime Dangerous Goods

IMO: International Maritime Organization

ISO: International Organization for Standardization

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)

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.



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

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Indication of changes

* Data changed compared with the previous version