



elma clean 65 (EC 65)

Print date 16.09.2022
Revision date 08.09.2022
Version 3.0 (en)
replaces version of 13.05.2020 (2.9)

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

*** 1.1 Product identifier**

Trade name/designation elma clean 65 (EC 65)
Unique Formula Identifier UFI:9X20-D07K-D007-A902
Product category PC-CLN-OTH Other cleaning, care and maintenance products (excludes biocidal products)

Hazard components

Sulfonic acids, C14-17-sec-alkane, sodium salts, isotridecanol, ethoxylated

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)

Product Categories [PC]

PC35 Washing and cleaning products

Use of the substance/mixture

Neutral cleaning concentrate with corrosion inhibitor for laboratory and workshop.

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

Department responsible for information:
Chemie/Labor: Email: chemlab@elma-ultrasonic.com
Website www.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

Eye Dam. 1, H318 Bridging principle "Substantially similar mixtures".

Hazard statements for health hazards

H318 Causes serious eye damage.

Lieferant / Supplier:
Carl Roth GmbH + Co KG
Schoemperlenstr. 3-5
76185 Karlsruhe, Germany
+49 721 5606 0
sicherheit@carlroth.de



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Hazard pictograms



GHS05

* **2.2 Label elements**

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

Signal word

Danger

Hazard statements

H318 Causes serious eye damage.

Precautionary statements

P102 Keep out of reach of children.

P280 Wear eye/face protection.

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.

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

P301 + P312 IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.

* **Other labelling**

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

5 - 15% anionic surfactants

15 - 30% non-ionic surfactants

< 5% soap

< 5% phosphates

* **2.3 Other hazards**

* **Adverse human health effects and symptoms**

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

Skin Irrit. 3 H316: Causes mild skin 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.

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 |
|------------|--------|-------------------------|-----------------|--|-------------|
| 68920-66-1 | | fatty alcohol-PEG-ether | 5 - 15 weight-% | Acute Tox. 4; H302 Eye Irrit. 2; H319 Aquatic Chronic 3; H412 | |



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| CAS No. | EC No. | Substance name | Concentration | Classification according to Regulation (EC) No 1272/2008 [CLP] | SCL/ M/ ATE |
|------------|-----------|---|-----------------|---|---|
| 97489-15-1 | 307-055-2 | Sulfonic acids, C14-17-sec-alkane, sodium salts | 5 - 10 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% |
| 102-71-6 | 203-049-8 | triethanolamine [2,2',2''-nitrilotriethanol] | < 5 weight-% | | |
| 67-63-0 | 200-661-7 | propan-2-ol | < 5 weight-% | Flam. Liq. 2; H225 Eye Irrit. 2; H319 STOT SE 3; H336 | |
| 69011-36-5 | 931-138-8 | isotridecanol, ethoxylated | < 5 weight-% | Acute Tox. 4; H302 Eye Dam. 1; H318 | Eye Dam. 1;H318: C>10% Eye Irrit. 2;H319: 1%<C=<10% |

| REACH No. | Substance name |
|-------------------------|---|
| Not relevant (polymer) | fatty alcohol-PEG-ether |
| 01-2119489924-20 | Sulfonic acids, C14-17-sec-alkane, sodium salts |
| 01-2119486482-31 | triethanolamine [2,2',2''-nitrilotriethanol] |
| 01-2119457558-25 | propan-2-ol |
| Not relevant (polymer). | isotridecanol, ethoxylated |

Additional information

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

Remark

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

*** SECTION 4: First aid measures**

*** 4.1 Description of first aid measures**

*** 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.
If swallowed seek medical advice immediately and show the doctor packing or label.
Rinse mouth immediately and drink plenty of water.
Medical treatment necessary.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms

No further informations available.



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4.3 Indication of any immediate medical attention and special treatment needed

Notes for the 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
alcohol resistant foam
Extinguishing powder

5.2 Special hazards arising from the substance or mixture

Hazardous combustion products

In case of fire formation of dangerous gases possible.
In the event of fire the following can be released:
Nitrogen oxides (NO_x)
Carbon monoxide
Phosphorus oxides
Sulphur oxides

*** 5.3 Advice for firefighters**

*** Special protective equipment for firefighters**
Do not inhale explosion and combustion gases.

*** Additional information**

Co-ordinate fire-fighting measures to the fire surroundings.
The product itself does not burn.

*** SECTION 6: Accidental release measures**

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Use personal protection equipment.
Special danger of slipping by leaking/spilling product.

For emergency responders

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



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*** SECTION 7: Handling and storage**

*** 7.1 Precautions for safe handling**

*** Protective measures**

Handle and open container with care.
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

Further information on storage conditions

Keep locked up and out of reach of children.
Protect from heat and direct solar radiation.
Keep in a cool, well-ventilated place.
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 |
|----------|-----------|-----------------|--|
| 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) |
| 102-71-6 | 203-049-8 | Triethanolamine | 5 [mg/m ³] (IE) |
| 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) |

*** 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 |
| 97489-15-1 | Sulfonic acids, C14-17-sec-alkane, sodium salts | 5 mg/kg bw/day | long-term dermal (systemic) | Assessment factor 40 |
| 102-71-6 | triethanolamine [2,2',2''-nitrilotriethanol] | 1 mg/m ³ | long-term inhalative (local) | |
| 102-71-6 | triethanolamine [2,2',2''-nitrilotriethanol] | 7.5 mg/kg bw/day | long-term dermal (systemic) | Assessment factor 50 |



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| CAS No. | Substance name | DNEL value | DNEL type | Remark |
|------------|---|----------------------|---------------------------------|----------------------|
| 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 |
|------------|---|------------|------------------------------|-----------------------|
| 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 |
| 102-71-6 | triethanolamine [2,2',2''-nitrilotriethanol] | 0.32 mg/L | aquatic, freshwater | Assessment factor 50 |
| 102-71-6 | triethanolamine [2,2',2''-nitrilotriethanol] | 10 mg/L | sewage treatment plant (STP) | Assessment factor 100 |

8.2 Exposure controls

Personal protection equipment

Eye/face protection
tightly fitting goggles

Environmental exposure controls

Technical measures to prevent exposure
Avoid penetration into the subsoil/soil.
Do not discharge into surface waters.

Additional information

Occupational exposure limits for propan-2-ol.
Occupational exposure limits for triethanolamine.

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

9.1 Information on basic physical and chemical properties

Physical state

liquid

Colour

yellowish

Odour

mild

Safety relevant basis data

| | Value | Method | Source, Remark |
|--|--|--------|---|
| Odour threshold: | | | propan-2-ol: 2.5 - 490 mg/m ³ (1 - 196 ppm). |
| 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 approx. 12 Vol-% | | Value of propan-2-ol. |
| Lower and upper explosion limit | Lower explosion limit 2 Vol-% | | Value of propan-2-ol. |



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| | Value | Method | Source, Remark |
|---|---------------------------------------|------------------|---|
| Flash point | 59 °C | DIN EN ISO 13736 | Does not maintain the combustion. |
| Auto-ignition temperature | 324 °C | | Value of triethanolamine. |
| Decomposition temperature | ≥ 100 °C | | |
| pH | in delivery state approx. 7 (20°C) | | |
| Viscosity | | | not determined |
| 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 | 23- 42 hPa (20°C) | | |
| Density and/or relative density | 1.04 g/cm ³ | | |
| Relative vapour density | 2.07 | | Value of propan-2-ol. |
| 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).

* **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.



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* **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 | | | propan-2-ol: 1.5 (ASTM D3539) / 11 (DIN 53170) . |
| Solvent content | < 5 % | | |



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| | 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

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 alkalis above 50°C.

10.4 Conditions to avoid

Heat and direct solar radiation.

10.5 Incompatible materials

Reactions with concentrated acids and alkalis above 50°C.

10.6 Hazardous decomposition products

No decomposition if used as directed.

* 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 | 4380 mg/kg | ATE: Acute Toxicity Estimate | The acute oral toxicity is corresponding to GHS-category 5. |
| | CAS No.69011-36-5 isotridecanol, ethoxylated 500 mg/kg | ATE: Acute Toxicity Estimate | |
| | CAS No.68920-66-1 fatty alcohol-PEG-ether LD50: 1920 mg/kg Species Rat | | |
| | CAS No.97489-15-1 Sulfonic acids, C14-17-sec- alkane, sodium salts LD50: approx. 1250 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 | |



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| Effective dose | Method, Evaluation | Source, Remark |
|--|--------------------|----------------|
| CAS No.67-63-0 propan-2-ol Acute inhalation toxicity (vapour) LC50: 72.6 mg/L Species Rat Exposure time 4 h | | |

Skin corrosion/irritation

Animal data

| Result / Evaluation | Method | Source, Remark |
|---------------------|---------------------|----------------|
| mediocre irritant | Calculation method. | |

Serious eye damage/irritation

Animal data

| Result / Evaluation | Method | Source, Remark |
|---------------------------------|--|----------------|
| Risk of serious damage to eyes. | Bridging principle "Substantially similar mixtures". | |

* **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 |
|---|----------------------|---------------------|----------------|
| The mixture is not classified as skin sensitiser. | | 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**
The mixture is not classified as specific target organ toxicant (single exposure).
Based on available data, the classification criteria are not met.

* **STOT SE 3**

* **Irritation to respiratory tract**

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



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* **Narcotic effects**

* **Assessment/classification**

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

* **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: 6.3 mg/L 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 | calculated. | |
| Chronic (long-term) fish toxicity | 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 | |
| Acute (short-term) toxicity to crustacea | EC50 10.1 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 | calculated. OECD 202 | |



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| | Effective dose | Method, Evaluation | Source, Remark |
|---|--|--------------------|----------------|
| Chronic (long-term) toxicity to aquatic invertebrate | 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 | | |
| Acute (short-term) toxicity to algae and cyanobacteria | EC50 10.3 mg/L | calculated. | |
| | 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 | | |
| Chronic (long-term) toxicity to aquatic algae and cyanobacteria | CAS No.68920-66-1 fatty alcohol-PEG-ether EC10: 0.33 mg/L | | |
| Toxicity to other aquatic plants/organisms | not determined | | |
| Toxicity to microorganisms | not determined | | |

* **Assessment/classification**

Toxic to aquatic life.

12.2 Persistence and degradability

| | Value | Method | Source, Remark |
|----------------|---|---|--|
| Biodegradation | Degradation rate > 85 % | calculated. | DOC reduction Readily biodegradable (according to OECD criteria). |
| Biodegradation | Degradation rate 96 % Test duration 19 d | OECD 301E/ EEC 92/69/V, C.4-B | CAS No.102-71-6 triethanolamine [2,2',2''-nitrilotriethanol] |
| Biodegradation | Degradation rate > 60 % Test duration 28 d | OECD 301B/ ISO 9439/ EEC 92/69/V, C.4-C | CAS No.69011-36-5 isotridecanol, ethoxylated |
| 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 |

12.3 Bioaccumulative potential

Assessment/classification

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 alcohol-PEG-ether: not available.

triethanolamine: Accumulation in organisms is not expected (BCF: <0,4).



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12.4 Mobility in soil

Assessment/classification

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 alcohol-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 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. 620 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.
The mixture is not classified as chronic hazardous to the aquatic environment.
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.
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 | 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)

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.

*** 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 $\leq 3\%$

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)

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. |
| 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. |

Indication of changes

* Data changed compared with the previous version