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

### 1.1 Product identifier

**Trade name/designation** EC 35

**Unique Formula Identifier** UFI: 0F00-Q072-G00V-4D36

**Product category** PC-CLN-15.OTH Other cleaners for specific personal items

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

**Sector of uses [SU]**
SU20 Health services
SU22 Professional uses: Public domain (administration, education, entertainment, services, craftsmen)
SU3 Industrial uses

**Product Categories [PC]**
PC35 Washing and cleaning products

**Use of the substance/mixture**
Liquid, mildly acidic cleaning concentrate for the daily ultrasonic cleaning of dental prostheses.

### 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, EN) +49 761 19240

## * SECTION 2: Hazards identification

### * 2.1 Classification of the substance or mixture

| Classification according to Regulation (EC) No 1272/2008 [CLP] | Classification procedure |
|---|---|
| Aquatic Chronic 2, H411 | Calculation method. |

**Hazard statements for environmental hazards**
H411 Toxic to aquatic life with long lasting effects.

**Remark**
Classification procedure for serious eye damage/eye irritation: Bridging principle ' Substantially similar mixtures.'

### * 2.2 Label elements

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

**Hazard pictograms**



GHS09

**Hazard statements**
H411 Toxic to aquatic life with long lasting effects.

* **Precautionary statements**
P102 Keep out of reach of children.
P273 Avoid release to the environment.
P301 + P330 + P331 IF SWALLOWED: rinse mouth. Do NOT induce vomiting.
P312 Call a POISON CENTER/doctor if you feel unwell.

**Other labelling**
Labelling for contents according to regulation (EC) No. 648/2004:
< 5% anionic surfactants
< 5% amphoteric surfactants
< 5% oxygen-based bleaching agents
perfumes

### 2.3 Other hazards

**Adverse human health effects and symptoms**
This product contains a substance that has endocrine disrupting properties with respect to humans.

**Adverse environmental effects**
Aquatic Acute 3 H402: Harmful to aquatic life.
This product contains a substance that has endocrine disrupting properties with respect to non-target organisms.

**Results of PBT and vPvB assessment**
The product does not contain any PBT-/vPvB-substances according to the recipe.
The product does not contain any PMT-/vPvM-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 | Index No | Substance name | Concentration | Classification according to Regulation (EC) No 1272/2008 [CLP] | SCL/ M/ ATE |
|---|---|---|---|---|---|---|
| 67-63-0 | 200-661-7 | 603-117-00-0 | propan-2-ol | < 5 weight-% | Flam. Liq. 2; H225<br>Eye Irrit. 2; H319<br>STOT SE 3; H336 | |
| 85586-07-8 | 287-809-4 | | Sulfuric acid, mono-C12-14-alkyl esters, sodium salts | < 5 weight-% | Acute Tox. 4; H302<br>Skin Irrit. 2; H315<br>Eye Dam. 1; H318<br>Aquatic Chronic 3; H412 | Eye Dam. 1;H318: C>=20%<br>Eye Irrit. 2;H319: 10%<=C<20% |

| CAS No | EC No | Index No | Substance name | Concentration | Classification according to Regulation (EC) No 1272/2008 [CLP] | SCL/ M/ ATE |
|---|---|---|---|---|---|---|
| 79-21-0 | 201-186-8 | 607-094-00-8 | peracetic acid ...% | < 1 weight-% | Flam. Liq. 3; H226<br>Org. Perox. D ; H242<br>Met. Corr. 1 ; H290<br>Acute Tox. 3 ; H301<br>Acute Tox. 2; H310<br>Acute Tox. 2; H330<br>Skin Corr. 1A; H314<br>Eye Dam. 1; H318<br>STOT SE 3; H335<br>Aquatic Acute 1; H400<br>Aquatic Chronic 1; H410; EUH071 | Skin Corr. 1A;H314: C>=10%<br>Skin Corr. 1B;H314: 5%<=C<10%<br>Skin Corr. 1C;H314: 3%<=C<5%<br>Skin Irrit. 2;H315: 1%<=C<3%<br>Eye Dam. 1;H318: C>=3%<br>Eye Irrit. 2;H319: 1%<=C<3%<br>STOT SE 3;H335: C>=1%<br>M=10 (Aquatic Acute 1)<br>M=100 (Aquatic Chronic 1)<br>ATE(oral): 80 mg/kg<br>ATE(dermal): 60 mg/kg<br>ATE(inhalation dust/mist): 0.2 mg/L |

| REACH No. | Substance name |
|---|---|
| 01-2119457558-25 | propan-2-ol |
| 01-2119489463-28 | Sulfuric acid, mono-C12-14-alkyl esters, sodium salts |
| 01-2119531330-56 | peracetic acid ...% |

**Additional information**
Aqueous, mildly acid mixture with anionic and amphoteric surfactants, organic acid and salts, oxygen developing compound, dyestuff and perfumes.

**Remark**
Mildly acid cleaning concentrate for metallic and plastic dental plates and prosthetics with hygienically refreshing action based on active oxygen.

## SECTION 4: First aid measures

### 4.1 Description of first aid measures

**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.
In the event of persistent symptoms receive medical teatment.

### 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 ($CO_2$)

### 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
Sulphur dioxide ($SO_2$)

### 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.

### 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.

### 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**
Handle and open container with care.
Avoid contact with eyes and skin.
The product is not combustible.

**Advices on general occupational hygiene**
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.
Container should not be closed gas-tight.

**Further information on storage conditions**
Keep locked up and out of reach of children.
Protect from heat and direct solar radiation.
Keep cool.
Store in a dark place.
Do not keep at temperatures below -5°C.
Do not keep at temperatures above 35°C.
The blue color of the product may become weaker with long storage - this does not change the functional properties of the product.
Storage time: 12 months.

### 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/m³(ppm)]<br>Short-term(ml/m³) 400 (1)<br>(1) 15 minutes reference period<br>(IE) |
| 67-63-0 | 200-661-7 | Propan-2-ol | 400 [ml/m³(ppm)]<br>999 [mg/m³]<br>Short-term(ml/m³) 500<br>Short-term(mg/m³) 1250<br>(UK) |
| 79-21-0 | 201-186-8 | Peracetic acid | Short-term(ml/m³) 0,4 (1)(2)<br>(1) Inhalable fraction<br>(2) 15 minutes average value<br>(IE) |

**DNEL worker**

| CAS No | Substance name | DNEL value | DNEL type | Remark |
|---|---|---|---|---|
| 67-63-0 | propan-2-ol | 888 mg/kg bw/day | long-term dermal (systemic) | Assessment factor 1 |
| 67-63-0 | propan-2-ol | 500 mg/m³ | long-term inhalative (systemic) | Assessment factor 1 |
| 79-21-0 | peracetic acid ...% | 0.56 mg/m³ | long-term inhalative (systemic) | Assessment factor 30 |
| 85586-07-8 | Sulfuric acid, mono-C12-14-alkyl esters, sodium salts | 4060 mg/kg | long-term dermal (systemic) | Assessment factor 12 |
| 85586-07-8 | Sulfuric acid, mono-C12-14-alkyl esters, sodium salts | 285 mg/m³ | long-term inhalative (systemic) | Assessment factor 3 |

**PNEC**

| CAS No | Substance name | PNEC Value | PNEC type | Remark |
|---|---|---|---|---|
| 79-21-0 | peracetic acid ...% | 0.051 mg/L | sewage treatment plant (STP) | Assessment factor 100 |
| 85586-07-8 | Sulfuric acid, mono-C12-14-alkyl esters, sodium salts | 0.131 mg/L | aquatic, freshwater | Assessment factor 1 |
| 85586-07-8 | Sulfuric acid, mono-C12-14-alkyl esters, sodium salts | 1.35 mg/L | sewage treatment plant (STP) | Assessment factor 100 |

### 8.2 Exposure controls

**Personal protection equipment**

**Eye/face protection**
safety goggles

**Environmental exposure controls**

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

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

**Physical state**
liquid

**Colour**
blue

**Odour**
Peppermintlike

**Safety relevant basis data**

| | Value | Method | Source, Remark |
|---|---|---|---|
| Odour threshold: | | | propan-2-ol: 2.5 - 490 mg/m3 (1 - 196 ppm). |
| Melting point/freezing point | solidifying range<br>≤ -5 °C | | |
| Boiling point or initial boiling point and boiling range | approx. 100 °C | | |
| flammability | solid | | not applicable |
| flammability | gaseous | | not applicable |
| Lower and upper explosion limit | Upper explosion limit<br>13 Vol-% | | Value of propan-2-ol. |
| Lower and upper explosion limit | Lower explosion limit<br>2 Vol-% | | Value of propan-2-ol. |
| Flash point | 57.5 °C | DIN EN ISO 13736 | Does not maintain the combustion. |
| Auto-ignition temperature | 200 °C | | Value of peracetic acid. |
| Decomposition temperature | | | not determined |
| pH | in delivery state<br>4- 5 (20°C) | | |
| Viscosity | dynamic<br>1.5 mPa*s (20°C) | | |
| Viscosity | kinematic<br>1.5 mm²/s (20°C) | calculated. | |
| Solubility(ies) | Water solubility | | miscible |
| Partition coefficient n-octanol/water (log value) | 0.78 | | Value of sulfuric acid, mono-C12-14-alkyl esters, sodium salts. |
| Vapour pressure | approx. 23 hPa (20°C) | | |
| Density and/or relative density | 1.029 g/cm³ (20°C) | | |
| Relative vapour density | 2.07 | | Value of propan-2-ol. |

| | Value | Method | Source, Remark |
|---|---|---|---|
| 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.

**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.

**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**
not applicable (contains organic peroxides).

**Oxidising solids**

**Assessment/classification**
not applicable (liquid).

**Organic peroxides**

**Assessment/classification**
The mixture contains < 1,0 % available oxygen from the organic peroxides and ≤ 1,0 % hydrogen peroxide.

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

No decomposition if used as directed within the 12 months storage stability.

### 10.3 Possibility of hazardous reactions

No hazardous reactions known.

### 10.4 Conditions to avoid

Heat and direct solar radiation.

### 10.5 Incompatible materials

Impurities of all kinds.
Metal ions, metal salts, metals, alkalies, reducing agents.

### 10.6 Hazardous decomposition products

no

## * 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 No85586-07-8 Sulfuric acid, mono-C12-14-alkyl esters, sodium salts<br>LD50: 1200 mg/kg<br>Species Rat | | |
| | CAS No79-21-0 peracetic acid ...%<br>80 mg/kg | ATE: Acute Toxicity Estimate | |
| Acute dermal toxicity | > 5000 mg/kg | ATE: Acute Toxicity Estimate | |
| | CAS No79-21-0 peracetic acid ...%<br>60 mg/kg | ATE (acute toxicity estimate) | |
| Acute inhalation toxicity | Acute inhalation toxicity (vapour)<br>> 50 mg/L | ATE: Acute Toxicity Estimate | |
| | Acute inhalation toxicity (dust/mist) | | not relevant |
| | CAS No67-63-0 propan-2-ol<br>Acute inhalation toxicity (vapour)<br>LC50: 72.6 mg/L<br>Species Rat<br>Exposure time 4 h | | |
| | CAS No79-21-0 peracetic acid ...%<br>Acute inhalation toxicity (dust/mist)<br>0.2 mg/L | ATE: Acute Toxicity Estimate | |

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

**Skin corrosion/irritation**

**Animal data**

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

**Serious eye damage/irritation**

**Animal data**

| Result / Evaluation | Method | Source, Remark |
|---|---|---|
| slightly irritant | 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.

**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

**Information on other hazards**

| | Effective dose | Method,Evaluation | Source, Remark |
|---|---|---|---|
| Endocrine disrupting properties | CAS No79-21-0 peracetic acid ...% | questionable | |

**Other information**

Test on similar mixture (elma clean 35 (EC 35), Batch 0146030246): OECD 405(rabbit): not irritating to eyes.

## * SECTION 12: Ecological information

### * 12.1 Toxicity

**Aquatic toxicity**

| | Effective dose | Method,Evaluation | Source, Remark |
|---|---|---|---|
| Acute (short-term) fish toxicity | LC50: 15.3 mg/L | calculated. | |
| | CAS No85586-07-8 Sulfuric acid, mono-C12-14-alkyl esters, sodium salts<br>LC50: 3.6 mg/L<br>Species Oncorhynchus mykiss (Rainbow trout)<br>Test duration 96 h | | |
| | CAS No79-21-0 peracetic acid ...%<br>LC50: 0.078 mg/L<br>Species Lepomis macrochirus (Bluegill)<br>Test duration 96 h | | |
| Chronic (long-term) fish toxicity | CAS No85586-07-8 Sulfuric acid, mono-C12-14-alkyl esters, sodium salts<br>NOEC ≥ 1.357 mg/L<br>Species Pimephales promelas (fathead minnow)<br>Test duration 42 d | | |
| | CAS No79-21-0 peracetic acid ...%<br>NOEC 0.00069 mg/L<br>Species Danio rerio (zebrafish)<br>Test duration 33 d | | |
| | EqNOEC 0.016 mg/L | calculated - additivity formula (CLP I 4.1.3.5.2 b).<br>Aquatic Chronic 2 H411: EqNOEC > 0,01 mg/l ≤ 0,1 mg/l . | |
| Acute (short-term) toxicity to crustacea | EC50 38.7 mg/L | calculated. | |
| | CAS No85586-07-8 Sulfuric acid, mono-C12-14-alkyl esters, sodium salts<br>EC50 4.7 mg/L<br>Species Daphnia magna (Big water flea)<br>Test duration 48 h | | |

| | Effective dose | Method,Evaluation | Source, Remark |
|---|---|---|---|
| | CAS No79-21-0 peracetic acid ...%<br>EC50 0.27 mg/L<br>Test duration 48 h | | |
| Chronic (long-term) toxicity to aquatic invertebrate | CAS No85586-07-8 Sulfuric acid, mono-C12-14-alkyl esters, sodium salts<br>NOEC 0.14 mg/L<br>Species Daphnia magna (Big water flea)<br>Test duration 21 d | | |
| | CAS No79-21-0 peracetic acid ...%<br>NOEC 0.0121 mg/L<br>Species Daphnia magna (Big water flea)<br>Test duration 21 d | OECD 211 | |
| | EqNOEC 0.25 mg/L | calculated - additivity formula (CLP I 4.1.3.5.2 b). | |
| Acute (short-term) toxicity to algae and cyanobacteria | EC50 10.5 mg/L | calculated. | |
| | CAS No85586-07-8 Sulfuric acid, mono-C12-14-alkyl esters, sodium salts<br>EC50 > 20 mg/L<br>Test duration 72 h | | |
| | CAS No79-21-0 peracetic acid ...%<br>EC50 0.05 mg/L<br>Species Selenastrum capricornutum<br>Test duration 72 h | OECD 201 | |
| Chronic (long-term) toxicity to aquatic algae and cyanobacteria | CAS No85586-07-8 Sulfuric acid, mono-C12-14-alkyl esters, sodium salts<br>NOEC: 0.6 mg/L<br>Species Desmodesmus subspicatus<br>Test duration 72 h | Regulation (EC) No. 440/2008, Annex C.3 | |
| | CAS No79-21-0 peracetic acid ...%<br>NOEC: 0.031 mg/L<br>Species Selenastrum capricornutum<br>Test duration 72 h | OECD 201 | |
| | EqNOEC 0.57 mg/L | calculated - additivity formula (CLP I 4.1.3.5.2 b). | |
| Toxicity to other aquatic plants/organisms | not determined | | |
| Toxicity to microorganisms | not determined | | |

* **Assessment/classification**
Harmful to aquatic life.
Toxic to aquatic life with long lasting effects.

**12.2 Persistence and degradability**

| | Value | Method | Source, Remark |
|---|---|---|---|
| Biodegradation | Degradation rate > 90 % | calculated. | DOC reduction<br>Readily biodegradable (according to OECD criteria). |

| | Value | Method | Source, Remark |
|---|---|---|---|
| Biodegradation | Degradation rate 90- 100 %<br>Test duration 28 d | OECD 301D/ EEC 92/69/V, C.4-E | CAS No85586-07-8 Sulfuric acid, mono-C12-14-alkyl esters, sodium salts |
| Biodegradation | Degradation rate 95 %<br>Test duration 21 d | OECD 301E/ EEC 92/69/V, C.4-B | CAS No67-63-0 propan-2-ol |
| Biodegradation | Degradation rate 66- 98 %<br>Test duration 28 d | OECD 301E/ EEC 92/69/V, C.4-B | CAS No79-21-0 peracetic acid ...%<br><br>Biodegradable. |

### 12.3 Bioaccumulative potential

**Assessment/classification**
propan-2-ol: Accumulation in organisms is not expected (log Pow: 0.05).
Sulfuric acid, mono-C12-14-alkyl esters, sodium salts: Accumulation in organisms is not expected (log Pow: 0.78).
peracetic acid: No bioaccumulation.

### 12.4 Mobility in soil

**Assessment/classification**
propan-2-ol: Dissolves in water. Highly mobile in soil.
Sulfuric acid, mono-C12-14-alkyl esters, sodium salts: Moderate to strong adsorption on soil (log Koc: 2.5-3.2).
peracetic acid: In soil and waste water rapid decomposition takes place to oxygen and acetic acid.

### 12.5 Results of PBT and vPvB assessment

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

### 12.6 Endocrine disrupting properties

| | Effective dose | Method,Evaluation | Source, Remark |
|---|---|---|---|
| Endocrine disrupting properties | CAS No79-21-0 peracetic acid ...% | questionable | |

### 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) | approx. 0.15 gO2/g | calculated. | |
| AOX | | | 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 3 H402: Harmful to aquatic life.
Chronic aquatic environmental hazards: Aquatic Chronic 2 H411: Toxic to aquatic life with long lasting effects.
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 |

| Waste code packaging | Waste name |
|---|---|
| 150110 * | packaging containing residues of or contaminated by hazardous substances |

**Appropriate disposal / Product**
Do not dispose with household waste. Do not discharge into the drains.
Dispose of waste according to applicable legislation.

**Appropriate disposal / Package**
Non-contaminated packages may be recycled.

**Other disposal recommendations**
Application solution / cleaning solution :
Product is allowed to discharge into sewage treatment plants, but in accordance with official regulations.

## * SECTION 14: Transport information

| | Land transport (ADR/RID) | Sea transport (IMDG) | Air transport (ICAO-TI / IATA-DGR) |
|---|---|---|---|
| **14.1 UN number or ID number** | UN 3082 | UN 3082 | UN 3082 |
| **14.2 UN proper shipping name** | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (peracetic acid ...%) | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (peracetic acid ...%) | Environmentally hazardous substance, liquid, n.o.s. (peracetic acid ...%) |
| **14.3 Transport hazard class(es)** | 9 | 9 | 9 |
| **14.4 Packing group** | III | III | III |
| **14.5 Environmental hazards** | ENVIRONMENTALLY HAZARDOUS | ENVIRONMENTALLY HAZARDOUS | ENVIRONMENTALLY HAZARDOUS |

### 14.6 Special precautions for user

Due to the gas-permeable lid required for this product air transport prohibited according to IATA 5.0.2.13.2.
no further

### 14.7 Maritime transport in bulk according to IMO instruments

not relevant

### * Land transport (ADR/RID)

| | |
|---|---|
| UN number or ID number | UN 3082 |
| UN proper shipping name | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (peracetic acid ...%) |
| Transport hazard class(es) | 9 |
| Hazard label(s) | 9 |
| Classification code | M6 |
| Packing group | III |
| Environmental hazards | ENVIRONMENTALLY HAZARDOUS |
| Limited quantity (LQ) | 5 L |
| Special provisions | 274, 335, 375, 601 |
| Tunnel restriction code | - |

*** Sea transport (IMDG)**

| | |
|---|---|
| UN number or ID number | UN 3082 |
| UN proper shipping name | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (peracetic acid ...%) |
| Transport hazard class(es) | 9 |
| Packing group | III |
| Environmental hazards | ENVIRONMENTALLY HAZARDOUS |
| Limited quantity (LQ) | 5 L |
| Marine pollutant | No |
| EmS | F-A, S-F |

*** Air transport (ICAO-TI / IATA-DGR)**

| | |
|---|---|
| UN number or ID number | UN 3082 |
| UN proper shipping name | Environmentally hazardous substance, liquid, n.o.s. (peracetic acid ...%) |
| Transport hazard class(es) | 9 |
| Packing group | III |
| Environmental hazards | ENVIRONMENTALLY HAZARDOUS |

* **Remark**
Due to the gas-permeable lid required for this product air transport prohibited according to IATA 5.0.2.13.2.

## * 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.

*** Other regulations (EU)**

* **To follow:**
Regulation (EC) No. 648/2004 (Detergents regulation)
Directive 2012/18/EU, Annex I: E2.

**Directive 2010/75/EU on industrial emissions [Industrial Emissions Directive] VOC**
VOC content, delivery state 3.4 %

**15.2 Chemical Safety Assessment**

*** National regulations**

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

## * SECTION 16: Other information

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**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
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
VOC: Volatile organic compounds
vPvB: very persistent, very bioaccumulative
Flam. Liq. 2: Flammable Liquids, Category 2
Flam. Liq. 3: Flammable Liquids, Category 3
Org. Perox. D: Organische Peroxide, Typ D
Met. Corr. 1: Corrosive to metals, Category 1
Acute Tox. 3, H301: Acute Toxicity (oral), Category 3
Acute Tox. 4, H302: Acute Toxicity (oral), Category 4
Acute Tox. 2, H310: Acute toxicity (dermal), Category 2
Skin Corr. 1A: Skin corrosion, Sub-category 1A
Skin Irrit. 2: Skin irritation, Category 2
Eye Dam. 1: Serious eye damage, Category 1
Eye Irrit. 2: Eye irritation, Category 2
STOT SE 3, H335: Specific target organ toxicity (single exposure), Category 3
STOT SE 3, H336: Specific target organ toxicity (single exposure), Category 3 (narcotic effects)
Aquatic Acute 1: Short-term (acute) aquatic hazard, Category 1
Aquatic Chronic 1: Long-term (chronic) aquatic hazard, Category 1
Aquatic Chronic 2: Long-term (chronic) aquatic hazard, Category 2
Aquatic Chronic 3: Long-term (chronic) aquatic hazard, Category 3
Acute Tox. 2, H330: Acute Toxicity (inhalation), Category 2

**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. |
| H242 | Heating may cause a fire. |
| H290 | May be corrosive to metals. |
| H301 | Toxic if swallowed. |
| H302 | Harmful if swallowed. |
| H310 | Fatal in contact with skin. |
| H314 | Causes severe skin burns and eye damage. |

| | |
|---|---|
| H315 | Causes skin irritation. |
| H318 | Causes serious eye damage. |
| H319 | Causes serious eye irritation. |
| H330 | Fatal if inhaled. |
| H335 | May cause respiratory irritation. |
| H336 | May cause drowsiness or dizziness. |
| H400 | Very toxic to aquatic life. |
| H410 | Very 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