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

1.1 Product identifier
MD 520 Impression disinfection

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

Relevant identified uses
MD 520 is a highly effective, formaldehyde-free, ready-to-use solution for simultaneous disinfection and cleaning in the Dürr-Hygojet of contaminated dental impressions (alginate, silicones, polyether rubber, polysulphides, hydrocolloids) and impression trays.

Product Categories [PC]
PC0 - Other
Disinfectants

Uses advised against
None, if handled according to order.

Remark
The product is intended for professional use.

1.3 Details of the supplier of the safety data sheet
Supplier (manufacturer/importer/only representative/downstream user/distributor)
orochemie GmbH + Co. KG
Street : Max-Planck-Straße 27
Postal code/city : 70806 Kornwestheim
Telephone : +49 7154 1308-0
Telefax : +49 7154 1308-40

Information contact :
DÜRR DENTAL SE, Höpfigheimer Str. 17, 74321 Bietigheim-Bissingen, Germany
Tel: +49 7142 705-0, Fax: +49 7142 705-500, info@duerrdental.com
in Great Britain/Ireland:
DÜRR DENTAL [Products] UK Ltd., 14 Linnell Way - Telford Way Industrial Estate, Kettering Northants NN16 8PS, United Kingdom
Tel: +44 1536 526740, Fax.: +44 1536 526749, info@duerruk.com

1.4 Emergency telephone number
INT: +49 6132 84463 (24 h/7 d)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]
Aquatic Chronic 3 ; H412 - Hazardous to the aquatic environment : Category 3 ; Harmful to aquatic life with long lasting effects.
Eye Irrit. 2 ; H319 - Serious eye damage/eye irritation : Category 2A ; Causes serious eye irritation.
Skin Irrit. 2 ; H315 - Skin corrosion/irritation : Category 2 ; Causes skin irritation.
Skin Sens. 1 ; H317 - Skin sensitisation : Category 1 ; May cause an allergic skin reaction.
STOT SE 3 ; H335 - STOT-single exposure : Category 3 ; May cause respiratory irritation.

Classification procedure
The classification was carried out according to the calculation method of Regulation No. (EC) 1272/2008 [CLP] as well as in-house investigations.

2.2 Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]
Hazard pictograms
Safety Data Sheet  
according to Regulation (EC) No. 1907/2006 (REACH)

Trade name : MD 520 Impression disinfection  
Revision : 02.01.2018  
Print date : 02.01.2018  
Version (Revision) : 3.0.1 (3.0.0)

Exclamation mark (GHS07)

Signal word  
Warning

Hazard components for labelling  
GLUTARAL ; CAS No. : 111-30-8

Hazard statements
H315 Causes skin irritation.  
H317 May cause an allergic skin reaction.  
H319 Causes serious eye irritation.  
H335 May cause respiratory irritation.  
H412 Harmful to aquatic life with long lasting effects.

Precautionary statements
P280 Wear protective gloves and eye/face protection.  
P333+P313 If skin irritation or rash occurs: Get medical advice/attention.  
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P403+P233 Store in a well-ventilated place. Keep container tightly closed.  
P501 Dispose of contents/container to hazardous or special waste collection point.

2.3 Other hazards
None

SECTION 3: Composition / information on ingredients

3.2 Mixtures
Description  
MD 520 contains aldehydes, quaternary ammonium compounds, alcohols, non-ionic surfactants, complexing and auxiliary agents in aqueous solution.

Hazardous ingredients
PROPAN-2-OL ; REACH registration No. : 01-2119457558-25 ; EC No. : 200-661-7; CAS No. : 67-63-0  
Weight fraction : ≥ 1 - < 5 %  
Classification 1272/2008 [CLP] : Flam. Liq. 2 ; H225 Eye Irrit. 2 ; H319 STOT SE 3 ; H336

CALCIUMCHLORIDE-2-HYDRATE ; REACH registration No. : - ; EC No. : 233-140-8; CAS No. : 10035-04-8  
Weight fraction : ≥ 1 - < 5 %  
Classification 1272/2008 [CLP] : Eye Irrit. 2 ; H319

GLUTARAL ; REACH registration No. : - ; EC No. : 203-856-5; CAS No. : 111-30-8  
Weight fraction : ≥ 0,5 - < 1 %  
Classification 1272/2008 [CLP] : Acute Tox. 2 ; H301 Resp. Sens. 1 ; H334 Skin Corr. 1B ; H314 Eye Dam. 1 ; H318 Skin Sens. 1 ; H317 STOT SE 3 ; H335 Aquatic Acute 1 ; H400 Aquatic Chronic 3 ; H412

BENZYL DIMETHYL ALKYL AMMONIUM CHLORIDE ; EC No. : 269-919-4; CAS No. : 68391-01-5  
Weight fraction : < 0,5 %  
Classification 1272/2008 [CLP] : Skin Corr. 1B ; H314 Eye Dam. 1 ; H318 Acute Tox. 4 ; H302 Aquatic Acute 1 ; H400 Aquatic Chronic 1 ; H410

Additional information  
Full text of H- and EUH-phrases: see section 16.

SECTION 4: First aid measures
4.1 Description of first aid measures

General information
Remove contaminated, saturated clothing immediately. In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

Following inhalation
Provide fresh air. In case of respiratory tract irritation, consult a physician.

In case of skin contact
Wash with plenty of water. When in doubt or if symptoms are observed, get medical advice.

After eye contact
In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist.

After ingestion
If swallowed, immediately drink: Water Never give anything by mouth to an unconscious person or a person with cramps. Do NOT induce vomiting. Call a physician immediately.

4.2 Most important symptoms and effects, both acute and delayed
Irritating to eyes, respiratory system and skin. May cause an allergic skin reaction.

4.3 Indication of any immediate medical attention and special treatment needed
None

SECTION 5: Firefighting measures

5.1 Extinguishing media
Suitable extinguishing media
Carbon dioxide (CO2) Extinguishing powder Water spray Water mist The product itself does not burn. Co-ordinate firefighting measures to the fire surroundings.

Unsuitable extinguishing media
Full water jet

5.2 Special hazards arising from the substance or mixture
None known.

Hazardous combustion products
None known.

5.3 Advice for firefighters
Adapt protective equipment to surrounding fire.

Special protective equipment for firefighters
Adapt protective equipment to surrounding fire.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures
Use personal protection equipment. See protective measures under point 7 and 8.

For non-emergency personnel
Use personal protection equipment. See protective measures under point 7 and 8.

For emergency responders
Personal protection equipment
See protective measures under point 7 and 8.

6.2 Environmental precautions
Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil.

6.3 Methods and material for containment and cleaning up
For cleaning up
Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents). Collect in closed and suitable containers for disposal.

Other information
Treat the recovered material as prescribed in the section on waste disposal.

6.4 Reference to other sections
None

SECTION 7: Handling and storage

7.1 Precautions for safe handling
Keep/Store only in original container. Please note safety instructions and directions for use on the drum. Handle and open container with care. Provide adequate ventilation. Do not breathe vapour/aerosol.

Protective measures
Measures to prevent fire
Usual measures for fire prevention. When using do not smoke.

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. Keep in a cool, well-ventilated place. Do not store in temperatures below 5 °C.

Hints on joint storage
Store the foodstuffs separately.

7.3 Specific end use(s)
None

SECTION 8: Exposure controls/personal protection

8.1 Control parameters
Occupational exposure limit values

<table>
<thead>
<tr>
<th>Substance</th>
<th>Limit value type (country of origin)</th>
<th>Limit value</th>
</tr>
</thead>
<tbody>
<tr>
<td>PROPAN-2-OL, CAS No.: 67-63-0</td>
<td>TLV/STEL ( GB )</td>
<td>500 ppm / 1250 mg/m³</td>
</tr>
<tr>
<td></td>
<td>Limit value type (country of origin)</td>
<td>400 ppm / 999 mg/m³</td>
</tr>
<tr>
<td>GLUTARAL, CAS No.: 111-30-8</td>
<td>TLV/STEL ( GB )</td>
<td>0,05 ppm / 0,2 mg/m³</td>
</tr>
<tr>
<td></td>
<td>Limit value type (country of origin)</td>
<td>0,1 ppm / 0,42 mg/m³</td>
</tr>
</tbody>
</table>

Peak limitation: = 1

Remark: Y

DNEL/DMEL and PNEC values
There are no data available on the preparation itself.

DNEL/DMEL
| Limit value type: | DNEL Consumer (systemic) ( PROPAN-2-OL ; CAS No.: 67-63-0 ) |
| Exposure route:   | Dermal |
| Exposure frequency: | Long-term (repeated) |
| Limit value:      | 319 mg/kg |
| Safety factor:    | 24 h |
| Limit value type: | DNEL Consumer (systemic) ( ALKYL-BENZYL-DIMETHYL AMMONIUM CHLORIDE ; CAS No.: 68424-85-1 ) |
Exposure route : Oral
Exposure frequency : Long-term (repeated)
Limit value : 3,4 mg/kg
Limit value type : DNEL Consumer (systemic) ( ALKYL-BENZYL-DIMETHYL AMMONIUM CHLORIDE ; CAS No. : 68424-85-1 )
Exposure route : Dermal
Exposure frequency : Long-term (repeated)
Limit value : 3,4 mg/kg
Limit value type : DNEL Consumer (systemic) ( PROPAN-2-OL ; CAS No. : 67-63-0 )
Exposure route : Inhalation
Exposure frequency : Long-term (repeated)
Limit value : 89 mg/m³
Limit value type : DNEL Consumer (systemic) ( PROPAN-2-OL ; CAS No. : 67-63-0 )
Exposure route : Oral
Exposure frequency : Long-term (repeated)
Limit value : 26 mg/kg
Safety factor : 24 h
Limit value type : DNEL Consumer (systemic) ( ALKYL-BENZYL-DIMETHYL AMMONIUM CHLORIDE ; CAS No. : 68424-85-1 )
Exposure route : Inhalation
Exposure frequency : Long-term (repeated)
Limit value : 1,64 mg/m³
Limit value type : DNEL Consumer (systemic) ( PROPAN-2-OL ; CAS No. : 67-63-0 )
Exposure route : Dermal
Exposure frequency : Long-term (repeated)
Limit value : 888 mg/kg
Safety factor : 24 h
Limit value type : DNEL Consumer (systemic) ( ALKYL-BENZYL-DIMETHYL AMMONIUM CHLORIDE ; CAS No. : 68424-85-1 )
Exposure route : Inhalation
Exposure frequency : Long-term (repeated)
Limit value : 3,96 mg/m³
Limit value type : DNEL Consumer (systemic) ( PROPAN-2-OL ; CAS No. : 67-63-0 )
Exposure route : Dermal
Exposure frequency : Long-term (repeated)
Limit value : 5,7 mg/kg
Safety factor : 24 h
Limit value type : DNEL Consumer (systemic) ( ALKYL-BENZYL-DIMETHYL AMMONIUM CHLORIDE ; CAS No. : 68424-85-1 )
Exposure route : Inhalation
Exposure frequency : Long-term (repeated)
Limit value : 500 mg/m³
Limit value type : DNEL Consumer (systemic) ( PROPAN-2-OL ; CAS No. : 67-63-0 )
Exposure route : Dermal
Exposure frequency : Long-term (repeated)
Limit value : 5,7 mg/kg
Safety factor : 24 h
Limit value type : DNEL Consumer (systemic) ( ALKYL-BENZYL-DIMETHYL AMMONIUM CHLORIDE ; CAS No. : 68424-85-1 )

PNEC
Limit value type : PNEC aquatic, freshwater ( PROPAN-2-OL ; CAS No. : 67-63-0 )
Limit value : 140,9 mg/l
Limit value type : PNEC aquatic, freshwater ( ALKYL-BENZYL-DIMETHYL AMMONIUM CHLORIDE ; CAS No. : 68424-85-1 )
Limit value : 0,0009 mg/l
Limit value type : PNEC aquatic, marine water ( ALKYL-BENZYL-DIMETHYL AMMONIUM CHLORIDE ; CAS No. : 68424-85-1 )
Limit value : 0,00096 mg/l
Limit value type : PNEC aquatic, marine water ( PROPAN-2-OL ; CAS No. : 67-63-0 )
Limit value : 140,9 mg/l
Limit value type : PNEC (Industrial) ( PROPAN-2-OL ; CAS No. : 67-63-0 )
Exposure route : Soil
Limit value : 28 mg/kg
Limit value type : PNEC sediment, freshwater ( PROPAN-2-OL ; CAS No. : 67-63-0 )
Limit value : 140,9 mg/l
Limit value type : PNEC (Industrial) ( ALKYL-BENZYL-DIMETHYL AMMONIUM CHLORIDE ; CAS No. : 68424-85-1 )
Exposure route : Soil
Limit value : 28 mg/kg
Limit value type : PNEC sediment, freshwater ( ALKYL-BENZYL-DIMETHYL AMMONIUM CHLORIDE ; CAS No. : 68424-85-1 )
Limit value : 140,9 mg/l
Limit value type : PNEC (Industrial) ( PROPAN-2-OL ; CAS No. : 67-63-0 )
Exposure route : Soil
Limit value : 28 mg/kg
Limit value type : PNEC sediment, freshwater ( PROPAN-2-OL ; CAS No. : 67-63-0 )
Limit value : 552 mg/kg
Limit value type : PNEC sediment, freshwater (ALKYL-BENZYL-DIMETHYL AMMONIUM CHLORIDE ; CAS No. : 68424-85-1 )
Limit value : 12,27 mg/kg
Limit value type : PNEC sediment, marine water (PROPA-N-2-OL ; CAS No. : 67-63-0 )
Limit value : 552 mg/kg
Limit value type : PNEC sediment, marine water (ALKYL-BENZYL-DIMETHYL AMMONIUM CHLORIDE ; CAS No. : 68424-85-1 )
Limit value : 13,09 mg/kg
Limit value type : PNEC Secondary Poisoning (PROPA-N-2-OL ; CAS No. : 67-63-0 )
Limit value : 160 mg/kg
Limit value type : PNEC sewage treatment plant (STP) (PROPA-N-2-OL ; CAS No. : 67-63-0 )
Limit value : 2251 mg/l
Limit value type : PNEC sewage treatment plant (STP) (ALKYL-BENZYL-DIMETHYL AMMONIUM CHLORIDE ; CAS No. : 68424-85-1 )
Limit value : 0,4 mg/l

8.2 Exposure controls

Personal protection equipment
Eye/face protection
Eye glasses with side protection DIN EN 166

Skin protection
Hand protection
Short-term exposure (Level 2: < 30 min): disposable gloves to EN374 category III, e.g. nitrile rubber, material thickness 0.1 mm.
Long-term exposure (Level 6: < 480 min): protective gloves to EN374 category III, e.g. nitrile rubber, material thickness 0.7 mm.
When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits.

Body protection
Body protection: not required.

Respiratory protection
Usually no personal respiratory protection necessary.

General health and safety measures
Keep away from food, drink and animal feedingstuffs. Avoid contact with skin, eyes and clothes. Remove contaminated, saturated clothing. Wash hands before breaks and after work. Separate storage of work clothes. When using do not eat, drink, smoke, sniff.

Occupational exposure controls
Technical measures to prevent exposure
Provide adequate ventilation.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties
Appearance : liquid
Colour : yellow
Odour : characteristic

Safety relevant basis data
Melting point/melting range : (1013 hPa) No data available
Initial boiling point and boiling range : (1013 hPa) ca. 100 °C
Decomposition temperature : (1013 hPa) No data available not applicable
Flash point :
Safety Data Sheet
according to Regulation (EC) No. 1907/2006 (REACH)

Trade name : MD 520 Impression disinfection
Revision : 02.01.2018
Print date : 02.01.2018

9.2 Other information
None

SECTION 10: Stability and reactivity

10.1 Reactivity
None, if handled according to order.

10.2 Chemical stability
Stable under recommended storage and handling conditions (see section 7). Exothermal reaction with alkalis.

10.3 Possibility of hazardous reactions
Exothermal reaction with alkalis.

10.4 Conditions to avoid
No information available.

10.5 Incompatible materials
Alkali (lye), concentrated.

10.6 Hazardous decomposition products
None known.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute effects
Acute oral toxicity
Parameter : LD50
Exposure route : Oral
Species : Rat
Effective dose : 5005 mg/kg
Method : OECD 401

Practical experience/human evidence
May cause sensitisation especially in sensitive humans. Long contact: irritating of skin/eyes/respiratory tract.

Acute dermal toxicity
Parameter : LD50 ( PROPN-2-OL ; CAS No. : 67-63-0 )
Exposure route : Dermal
Species : Rabbit
Effective dose : 12800 mg/kg
Parameter : LD50 ( PROPN-2-OL ; CAS No. : 67-63-0 )
Exposure route : Dermal

Page : 7 / 14
Species: Rabbit
Effective dose: 13900 mg/kg
Method: OECD 402
Parameter: LD50 (CALCIUMCHLORIDE-2-HYDRATE; CAS No.: 10035-04-8)
Exposure route: Dermal
Species: Rat
Effective dose: > 6500 mg/kg
Parameter: LD50 (GLUTARAL; CAS No.: 111-30-8)
Exposure route: Dermal
Species: Rat
Effective dose: > 2000 mg/kg
Parameter: LD50 (GLUTARAL; CAS No.: 111-30-8)
Exposure route: Dermal
Species: Rabbit
Effective dose: 1749 mg/kg
Parameter: LD50 (BENZYL DIMETHYL ALKYL AMMONIUM CHLORIDE; CAS No.: 68391-01-5)
Exposure route: Dermal
Effective dose: 3340 mg/kg
Exposure time: 24 h

Acute inhalation toxicity
Parameter: LC50 (PROPAN-2-OL; CAS No.: 67-63-0)
Exposure route: Inhalation
Species: Rat
Effective dose: > 25 mg/l
Exposure time: 6 h
Method: OECD 403
Parameter: LC50 (PROPAN-2-OL; CAS No.: 67-63-0)
Exposure route: Inhalation
Species: Rat
Effective dose: 72,6 mg/l
Exposure time: 4 h
Parameter: LC50 (GLUTARAL; CAS No.: 111-30-8)
Exposure route: Inhalation
Species: Rat
Effective dose: 480 mg/m³
Exposure time: 4 h

Irritant and corrosive effects
Irritating to eyes, respiratory system and skin.

Sensitisation
May cause sensitisation by skin contact.

Repeate dose toxicity (subacute, subchronic, chronic)

Subacute oral toxicity
Parameter: NOEL(C) (GLUTARAL; CAS No.: 111-30-8)
Exposure route: Oral
Species: Rat
Effective dose: 5 mg/kg
Exposure time: 24 h

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)
No information available.

11.5 Additional information
The classification was carried out according to the calculation method of Regulation No. (EC) 1272/2008 [CLP] as well as in-house investigations.
12.1 Toxicity

Aquatic toxicity

There are no data available on the preparation itself.

**Acute (short-term) fish toxicity**

- Parameter: LC50 (ALKYL-BENZYL-DIMETHYL AMMONIUM CHLORIDE; CAS No.: 68424-85-1)
  - Species: Fish
  - Evaluation parameter: Acute (short-term) fish toxicity
  - Effective dose: 0,85 mg/l
  - Exposure time: 96 h

- Parameter: LC50 (GLUTARAL; CAS No.: 111-30-8)
  - Species: Pimephales promelas (fathead minnow)
  - Evaluation parameter: Acute (short-term) fish toxicity
  - Effective dose: 5,4 mg/l
  - Exposure time: 96 h

- Parameter: LC50 (PROPAN-2-OL; CAS No.: 67-63-0)
  - Species: Pimephales promelas (fathead minnow)
  - Evaluation parameter: Acute (short-term) fish toxicity
  - Effective dose: 9640 mg/l
  - Exposure time: 96 h

- Parameter: LC50 (CALCIUM CHLORIDE-2-HYDRATE; CAS No.: 10035-04-8)
  - Species: Lepomis macrochirus (Bluegill)
  - Evaluation parameter: Acute (short-term) fish toxicity
  - Effective dose: 10650 mg/l
  - Exposure time: 96 h

- Parameter: LC50 (PROPAN-2-OL; CAS No.: 67-63-0)
  - Species: Leuciscus idus (golden orfe)
  - Evaluation parameter: Acute (short-term) fish toxicity
  - Effective dose: > 100 mg/l
  - Exposure time: 48 h

- Parameter: LC50 (ALKYL-BENZYL-DIMETHYL AMMONIUM CHLORIDE; CAS No.: 68424-85-1)
  - Species: Fish
  - Evaluation parameter: Acute (short-term) fish toxicity
  - Effective dose: > 0,1 - 1 mg/l
  - Exposure time: 96 h

- Parameter: LC50 (ALKYL-BENZYL-DIMETHYL AMMONIUM CHLORIDE; CAS No.: 68424-85-1)
  - Species: Pimephales promelas (fathead minnow)
  - Evaluation parameter: Acute (short-term) fish toxicity
  - Effective dose: 0,28 mg/l
  - Exposure time: 96 h

- Parameter: LC50 (ALKYL-BENZYL-DIMETHYL AMMONIUM CHLORIDE; CAS No.: 68424-85-1)
  - Species: Fish
  - Evaluation parameter: Acute (short-term) fish toxicity
  - Effective dose: 0,515 mg/l

**Chronic (long-term) fish toxicity**

- Parameter: NOEC (ALKYL-BENZYL-DIMETHYL AMMONIUM CHLORIDE; CAS No.: 68424-85-1)
  - Species: Pimephales promelas (fathead minnow)
  - Evaluation parameter: Chronic (long-term) fish toxicity
  - Effective dose: 0,032 mg/l
  - Exposure time: 816 h

**Acute (short-term) daphnia toxicity**

- Parameter: EC50 (GLUTARAL; CAS No.: 111-30-8)
  - Species: Daphnia magna (Big water flea)
<table>
<thead>
<tr>
<th>Evaluation parameter</th>
<th>Parameter</th>
<th>Species</th>
<th>Effective dose</th>
<th>Exposure time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute (short-term) daphnia toxicity</td>
<td>EC50</td>
<td>Daphnia magna (Big water flea)</td>
<td>5 mg/l</td>
<td>48 h</td>
</tr>
<tr>
<td></td>
<td>EC50</td>
<td>Daphnia magna (Big water flea)</td>
<td>0,016 mg/l</td>
<td>48 h</td>
</tr>
<tr>
<td></td>
<td>EC50</td>
<td>Daphnia magna (Big water flea)</td>
<td>&gt; 0,01 - 0,1 mg/l</td>
<td>48 h</td>
</tr>
<tr>
<td></td>
<td>EC50</td>
<td>Daphnia magna (Big water flea)</td>
<td>&gt; 0,016 mg/l</td>
<td>24 h</td>
</tr>
<tr>
<td></td>
<td>EC50</td>
<td>Daphnia magna (Big water flea)</td>
<td>0,0042 mg/l</td>
<td>504 h</td>
</tr>
<tr>
<td>Chronic (long-term) daphnia toxicity</td>
<td>NOEC</td>
<td>Daphnia magna (Big water flea)</td>
<td>0,24 mg/l</td>
<td>504 h</td>
</tr>
<tr>
<td></td>
<td>NOEC</td>
<td>Daphnia magna (Big water flea)</td>
<td>0,0042 mg/l</td>
<td>504 h</td>
</tr>
<tr>
<td>Acute (short-term) algae toxicity</td>
<td>EC50</td>
<td>Pseudokirchneriella subcapitata</td>
<td>&gt; 1000 mg/l</td>
<td>72 h</td>
</tr>
<tr>
<td></td>
<td>EC50</td>
<td>CALCIUMCHLORIDE-2-HYDRATE ; CAS No. : 10035-04-8</td>
<td>&gt; 0,016 mg/l</td>
<td>24 h</td>
</tr>
</tbody>
</table>
Species : Algae
Evaluation parameter : Acute (short-term) algae toxicity
Effective dose : 3800 mg/l
Exposure time : 72 h
Parameter : EC50 ( PROPA-2-OL ; CAS No. : 67-63-0 )
Species : Scenedesmus subspicatus
Evaluation parameter : Acute (short-term) algae toxicity
Effective dose : > 100 mg/l
Exposure time : 72 h
Parameter : IC50 ( GLUTARAL ; CAS No. : 111-30-8 )
Species : Selenastrum capricornutum
Evaluation parameter : Acute (short-term) algae toxicity
Effective dose : 0,81 mg/l
Exposure time : 120 h
Parameter : IC50 ( ALKYL-BENZYL-DIMETHYL AMMONIUM CHLORIDE ; CAS No. : 68424-85-1 )
Species : Pseudokirchneriella subcapitata
Evaluation parameter : Acute (short-term) algae toxicity
Effective dose : > 0,01 - 0,1 mg/l
Exposure time : 72 h
Parameter : ErC50 ( ALKYL-BENZYL-DIMETHYL AMMONIUM CHLORIDE ; CAS No. : 68424-85-1 )
Species : Pseudokirchneriella subcapitata
Evaluation parameter : Acute (short-term) algae toxicity
Effective dose : 0,049 mg/l
Exposure time : 72 h
Method : OECD 201

Chronic (long-term) algae toxicity
Parameter : NOEC ( ALKYL-BENZYL-DIMETHYL AMMONIUM CHLORIDE ; CAS No. : 68424-85-1 )
Species : Pseudokirchneriella subcapitata
Evaluation parameter : Chronic (long-term) algae toxicity
Effective dose : > 0,001 - 0,01 mg/l
Method : OECD 201

Bacteria toxicity
Parameter : EC50 ( PROPA-2-OL ; CAS No. : 67-63-0 )
Evaluation parameter : Bacteria toxicity
Effective dose : > 100 mg/l
Parameter : EC50 ( ALKYL-BENZYL-DIMETHYL AMMONIUM CHLORIDE ; CAS No. : 68424-85-1 )
Species : Bacteria toxicity
Effective dose : 7,75 mg/l
Exposure time : 3 h
Method : OECD 209
Parameter : EC10 ( PROPA-2-OL ; CAS No. : 67-63-0 )
Species : Pseudomonas putida
Evaluation parameter : Bacteria toxicity
Effective dose : 5175 mg/l
Exposure time : 18 h

12.2 Persistence and degradability

Abiotic degradation
No data available.

Biodegradation
Parameter : BOD (% of COD) ( GLUTARAL ; CAS No. : 111-30-8 )
Inoculum : Biodegradation
Effective dose : 74 %
Exposure time : 672 h
Method : OECD 301D/ EEC 92/69/V, C.4-E
All active agents are biodegradable at the dilution rates arising in the sewage system.

12.3 Bioaccumulative potential
No information available.

12.4 Mobility in soil
   Known or predicted distribution to environmental compartments
   There are no data available on the preparation itself.
   Adsorption/Desorption

12.5 Results of PBT and vPvB assessment
No information available.

12.6 Other adverse effects
No information available.

12.7 Additional ecotoxicological information
Prevent from flowing into surface water/ground water.

SECTION 13: Disposal considerations

13.1 Waste treatment methods
   Product/Packaging disposal
   Waste codes/waste designations according to EWC/AVV
   Waste code product
   Concentrate/larger quantities: 18 01 06* (disinfectant).
   Waste treatment options
   Appropriate disposal / Product
   Dispose according to legislation. Consult the appropriate local waste disposal expert about waste disposal.
   Appropriate disposal / Package
   Non-contaminated packages may be recycled. Handle contaminated packages in the same way as the substance itself.

SECTION 14: Transport information

14.1 UN number
No dangerous goods in sense of this transport regulation.

14.2 UN proper shipping name
No dangerous goods in sense of this transport regulation.

14.3 Transport hazard class(es)
No dangerous goods in sense of this transport regulation.

14.4 Packing group
No dangerous goods in sense of this transport regulation.

14.5 Environmental hazards
No dangerous goods in sense of this transport regulation.

14.6 Special precautions for user
None

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code
not applicable

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
National regulations
Restrictions of occupation
According to directive 94/33/EC, juveniles are only allowed to handle this product as long as all effects of dangerous substances are prevented.

15.2 Chemical Safety Assessment
For this mixture a chemical safety assessment has not been carried out.

SECTION 16: Other information

16.1 Indication of changes
02. Classification of the substance or mixture · 02. Label elements · 02. Labelling according to Regulation (EC) No. 1272/2008 [CLP] · 02. Special rules for supplemental label elements for certain mixtures

16.2 Abbreviations and acronyms

ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE = Acute Toxicity Estimates
CAS = Chemical Abstracts Service
CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]
CMR = Carcinogen, Mutagen or Reproductive toxicant
CO₂ = Carbon dioxide
DMEL = Derived Minimal Effect Level
DNEL = Derived No Effect Level
EC = European Commission
EC50 = Half maximal effective concentration
EN = European Standard (Norm)
EU = European Union
EUH statement = CLP-specific Hazard statement
EWC = European Waste Catalogue
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
H statement = GHS Hazard statement
IATA = International Air Transport Association ICAO-TI = International Civil Aviation Organization-Technical Instructions
IMDG = International Maritime Dangerous Goods
LC50 = Median lethal concentration
LD50 = Median lethal dose
LogPow = Logarithm of the octanol/water partition coefficient
NOEC/NOEL = No observed effect concentration/level
OECD = Organisation for Economic Co-operation and Development
PBT = Persistent, Bioaccumulative and Toxic
PNEC = Predicted No Effect Concentration
REACH = Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation [Regulation (EC) No. 1907/2006]
RID = The Regulations concerning the International Carriage of Dangerous Goods by Rail
RM3 = Risk Management Measure
RRN = REACH Registration Number
STOT-RE = Specific Target Organ Toxicity - Repeated Exposure
STOT-SE = Specific Target Organ Toxicity - Single Exposure
SVHC = Substances of Very High Concern
TLV/STEL = Threshold limit value/short-term exposure limit
TLV/TWA = Threshold limit value/time weighted average
UN = United Nations
VOC = Volatile Organic Compound
vPvB = Very Persistent and Very Bioaccumulative

16.3 Key literature references and sources for data
None

16.4 Classification for mixtures and used evaluation method according to regulation (EC) 1272/2008 [CLP]
16.5 Relevant H- and EUH-phrases (Number and full text)

H225    Highly flammable liquid and vapour.
H301    Toxic if swallowed.
H302    Harmful if swallowed.
H314    Causes severe skin burns and eye damage.
H317    May cause an allergic skin reaction.
H318    Causes serious eye damage.
H319    Causes serious eye irritation.
H330    Fatal if inhaled.
H334    May cause allergy or asthma symptoms or breathing difficulties 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.

16.6 Training advice

None

16.7 Additional information

Notice the directions for use on the label.

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.