

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, as amended by  
Commission Regulation (EU) 2020/878

## OPTISAL® PLUS

|         |                |              |                                 |
|---------|----------------|--------------|---------------------------------|
| Version | Revision Date: | SDS Number:  | Date of last issue: 05.03.2026  |
| 1.1     | 05.05.2026     | 100000000047 | Date of first issue: 05.03.2026 |
|         |                |              | Country / Language : DE / EN    |

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

#### 1.1 Product identifier

Product name : OPTISAL® PLUS

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

Use of the Sub-  
stance/Mixture : Surface disinfection and cleaning for non-invasive medical  
devices with mechanical action  
Acc. to Biocidal Products Regulation (BPR): Disinfection and  
cleaning of surfaces and inventory in medical, industrial and  
public areas. Suitable for use in the food sector.

#### 1.3 Details of the supplier of the safety data sheet

Company : Dr. Schumacher GmbH  
Am Roggenfeld 3  
34323 Malsfeld

Telephone : +49 566494960

Telefax : +49 56648444

E-mail address of person : sds.sap-ehs@schumacher-online.com  
responsible for the SDS

#### 1.4 Emergency telephone number

INTERNATIONAL: +49 - (0) 6132 - 84463, GBK GmbH (24h - 7d/w - 365d/a)

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### SECTION 2: Hazards identification

#### 2.1 Classification of the substance or mixture

##### Classification (REGULATION (EC) No 1272/2008)

|                                                                   |                                                |
|-------------------------------------------------------------------|------------------------------------------------|
| Acute toxicity, Category 4                                        | H302: Harmful if swallowed.                    |
| Skin corrosion, Category 1B                                       | H314: Causes severe skin burns and eye damage. |
| Serious eye damage, Category 1                                    | H318: Causes serious eye damage.               |
| Specific target organ toxicity - single ex-<br>posure, Category 3 | H335: May cause respiratory irritation.        |
| Short-term (acute) aquatic hazard, Cate-<br>gory 1                | H400: Very toxic to aquatic life.              |

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Long-term (chronic) aquatic hazard, Category 2

H411: Toxic to aquatic life with long lasting effects.

### 2.2 Label elements

#### Labelling (REGULATION (EC) No 1272/2008)

Hazard pictograms :



Signal word : Danger

|                   |      |                                                  |
|-------------------|------|--------------------------------------------------|
| Hazard statements | H302 | Harmful if swallowed.                            |
|                   | H314 | Causes severe skin burns and eye damage.         |
|                   | H335 | May cause respiratory irritation.                |
|                   | H400 | Very toxic to aquatic life.                      |
|                   | H411 | Toxic to aquatic life with long lasting effects. |

Precautionary statements : **Prevention:**

|      |                                                                               |
|------|-------------------------------------------------------------------------------|
| P273 | Avoid release to the environment.                                             |
| P280 | Wear protective gloves/ protective clothing/ eye protection/ face protection. |

#### **Response:**

|                    |                                                                                                                                  |
|--------------------|----------------------------------------------------------------------------------------------------------------------------------|
| P301 + P330 + P331 | IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.                                                                               |
| P303 + P361 + P353 | IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.                           |
| P304 + P340        | IF INHALED: Remove person to fresh air and keep comfortable for breathing.                                                       |
| P305 + P351 + P338 | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. |
| P308 + P311        | IF exposed or concerned: Call a POISON CENTER/ doctor.                                                                           |

#### **Disposal:**

|      |                                                                     |
|------|---------------------------------------------------------------------|
| P501 | Dispose of contents/ container to an approved waste disposal plant. |
|------|---------------------------------------------------------------------|

#### Hazardous components which must be listed on the label:

N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine

2-aminoethanol

Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides

didecyldimethylammonium chloride

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### Reduced Labelling (<= 125 ml)

Hazard pictograms :



Signal word : Danger

Hazard statements : H314 Causes severe skin burns and eye damage.

Precautionary statements : **Prevention:**

P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

**Response:**

P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.

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

P308 + P311 IF exposed or concerned: Call a POISON CENTER/ doctor.

**Disposal:**

P501 Dispose of contents/ container to an approved waste disposal plant.

### Additional Labelling

EUH208 Contains N-dodecylpropane-1,3-diamine. May produce an allergic reaction.

### 2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

Ecological information: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

Toxicological information: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

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### SECTION 3: Composition/information on ingredients

#### 3.2 Mixtures

##### Components

| Chemical name                                                         | CAS-No.<br>EC-No.<br>Index-No.<br>Registration number     | Classification                                                                                                                                                                                                                                                                                                                       | Concentration<br>(% w/w) |
|-----------------------------------------------------------------------|-----------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|
| N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine                        | 2372-82-9<br>219-145-8<br>01-2119980592-29                | Acute Tox. 3; H301<br>Skin Corr. 1B; H314<br>STOT RE 2; H373<br>(Kidney)<br>Aquatic Acute 1;<br>H400<br>Aquatic Chronic 1;<br>H410                                                                                                                                                                                                   | >= 5 - < 10              |
| 2-aminoethanol                                                        | 141-43-5<br>205-483-3<br>603-030-00-8<br>01-2119486455-28 | Acute Tox. 4; H302<br>Acute Tox. 4; H332<br>Acute Tox. 4; H312<br>Skin Corr. 1B; H314<br>Eye Dam. 1; H318<br>STOT SE 3; H335<br>(Respiratory Tract)<br>Aquatic Chronic 3;<br>H412<br><br>specific concentration<br>limit<br>STOT SE 3; H335<br>>= 5 %<br><br>Acute toxicity esti-<br>mate<br><br>Acute oral toxicity:<br>1.089 mg/kg | >= 5 - < 10              |
| Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides | 68424-85-1<br>270-325-2<br>01-2119965180-41               | Acute Tox. 4; H302<br>Skin Corr. 1B; H314<br>Eye Dam. 1; H318<br>Aquatic Acute 1;<br>H400<br>Aquatic Chronic 1;<br>H410<br><br>Acute toxicity esti-                                                                                                                                                                                  | >= 5 - < 10              |

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|---------------------------------------|------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|
|                                       |                                                            | mate                                                                                                                                                                                                                                                                                    |                      |
|                                       |                                                            | Acute oral toxicity:<br>1.000 mg/kg                                                                                                                                                                                                                                                     |                      |
| Alcohols, C9-11-branched, ethoxylated | 169107-21-5                                                | Acute Tox. 4; H302<br>Eye Dam. 1; H318                                                                                                                                                                                                                                                  | $\geq 1 - < 3$       |
| didecyldimethylammonium chloride      | 7173-51-5<br>230-525-2<br>612-131-00-6<br>01-2119945987-15 | Acute Tox. 3; H301<br>Skin Corr. 1B; H314<br>Eye Dam. 1; H318<br>Aquatic Acute 1;<br>H400<br>Aquatic Chronic 2;<br>H411<br><br>M-Factor (Acute aquatic toxicity): 10<br>M-Factor (Chronic aquatic toxicity): 10<br><br>Acute toxicity estimate<br><br>Acute oral toxicity:<br>329 mg/kg | $\geq 1 - < 2,5$     |
| N-dodecylpropane-1,3-diamine          | 5538-95-4<br>226-902-6<br>01-2120862678-37                 | Acute Tox. 4; H302<br>Skin Corr. 1; H314<br>Skin Sens. 1; H317<br>Eye Dam. 1; H318<br>Aquatic Acute 1;<br>H400                                                                                                                                                                          | $\geq 0,25 - < 1$    |
| dodecylamine                          | 124-22-1<br>204-690-6<br>01-2119484818-20                  | Acute Tox. 4; H302<br>Aquatic Acute 1;<br>H400<br>Aquatic Chronic 1;<br>H410<br><br>M-Factor (Acute aquatic toxicity): 10<br>M-Factor (Chronic aquatic toxicity): 10<br><br>Acute toxicity estimate<br><br>Acute oral toxicity:                                                         | $\geq 0,025 - < 0,1$ |

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|  |  |             |  |
|--|--|-------------|--|
|  |  | 2.000 mg/kg |  |
|--|--|-------------|--|

For explanation of abbreviations see section 16.

### SECTION 4: First aid measures

#### 4.1 Description of first aid measures

- |                         |                                                                                                                                                                                                                                                    |
|-------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| General advice          | : Take off immediately all contaminated clothing.<br>If you feel unwell, seek medical advice (show the label where possible).                                                                                                                      |
| If inhaled              | : Move to fresh air in case of accidental inhalation of vapours or decomposition products.<br>If symptoms persist, call a physician.                                                                                                               |
| In case of skin contact | : Immediate medical treatment is necessary as untreated wounds from corrosion of the skin heal slowly and with difficulty.<br>Wash off immediately with plenty of water for at least 15 minutes.<br>If skin irritation persists, call a physician. |
| In case of eye contact  | : Small amounts splashed into eyes can cause irreversible tissue damage and blindness.<br>In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice.<br>If eye irritation persists, consult a specialist.   |
| If swallowed            | : DO NOT induce vomiting unless directed to do so by a physician or poison control center.<br>Rinse mouth.<br>Obtain medical attention.                                                                                                            |

#### 4.2 Most important symptoms and effects, both acute and delayed

- |       |                                                                                                          |
|-------|----------------------------------------------------------------------------------------------------------|
| Risks | : Harmful if swallowed.<br>Causes severe skin burns and eye damage.<br>May cause respiratory irritation. |
|-------|----------------------------------------------------------------------------------------------------------|

#### 4.3 Indication of any immediate medical attention and special treatment needed

- |           |                          |
|-----------|--------------------------|
| Treatment | : Treat symptomatically. |
|-----------|--------------------------|

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### SECTION 5: Firefighting measures

#### 5.1 Extinguishing media

Suitable extinguishing media : The product itself does not burn.  
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media : High volume water jet

#### 5.2 Special hazards arising from the substance or mixture

Specific hazards during fire-fighting : Do not allow run-off from fire fighting to enter drains or water courses.

Hazardous combustion products : Carbon oxides  
Nitrogen oxides (NO<sub>x</sub>)  
Chlorine compounds

#### 5.3 Advice for firefighters

Special protective equipment for firefighters : Wear self-contained breathing apparatus for firefighting if necessary.

Further information : Collect contaminated fire extinguishing water separately. This must not be discharged into drains.  
Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.  
For safety reasons in case of fire, cans should be stored separately in closed containments.  
Use a water spray to cool fully closed containers.

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### SECTION 6: Accidental release measures

#### 6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions : Ensure adequate ventilation.  
Use personal protective equipment.

#### 6.2 Environmental precautions

Environmental precautions : Prevent product from entering drains.  
Prevent further leakage or spillage if safe to do so.  
If the product contaminates rivers and lakes or drains inform respective authorities.

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### 6.3 Methods and material for containment and cleaning up

Methods for cleaning up : Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13).  
Keep in suitable, closed containers for disposal.

### 6.4 Reference to other sections

See sections: 7, 8, 11, 12 and 13.

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## SECTION 7: Handling and storage

### 7.1 Precautions for safe handling

Advice on safe handling : Avoid formation of aerosol.  
Do not breathe vapours/dust.  
Avoid contact with skin and eyes.  
For personal protection see section 8.  
Smoking, eating and drinking should be prohibited in the application area.  
Provide sufficient air exchange and/or exhaust in work rooms.  
To avoid spills during handling keep bottle on a metal tray.  
Dispose of rinse water in accordance with local and national regulations.

Advice on protection against fire and explosion : Do not spray on a naked flame or any incandescent material.  
Keep away from open flames, hot surfaces and sources of ignition.

Hygiene measures : When using do not eat or drink. When using do not smoke.  
Wash hands before breaks and at the end of workday.

### 7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers : No smoking. Keep in a well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Observe label precautions. Electrical installations / working materials must comply with the technological safety standards.

Storage class (TRGS 510) : 8B

Further information on storage stability : No decomposition if stored and applied as directed.

### 7.3 Specific end use(s)

Specific use(s) : No data available

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### SECTION 8: Exposure controls/personal protection

#### 8.1 Control parameters

##### Occupational Exposure Limits

| Components                                     | CAS-No.                                                                                                                                                                                           | Value type (Form of exposure) | Control parameters                | Basis       |
|------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------|-----------------------------------|-------------|
| N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine | 2372-82-9                                                                                                                                                                                         | AGW (Inhalable fraction)      | 0,05 mg/m <sup>3</sup>            | DE TRGS 900 |
|                                                | Peak-limit: excursion factor (category): 8;(II)                                                                                                                                                   |                               |                                   |             |
|                                                | Further information: When there is compliance with the OEL and biological tolerance values, there is no risk of harming the unborn child                                                          |                               |                                   |             |
|                                                |                                                                                                                                                                                                   | MAK (inhalable fraction)      | 0,05 mg/m <sup>3</sup>            | DE DFG MAK  |
|                                                | Further information: Damage to the embryo or foetus is unlikely when the MAK value or the BAT value is observed                                                                                   |                               |                                   |             |
| 2-aminoethanol                                 | 141-43-5                                                                                                                                                                                          | TWA                           | 1 ppm<br>2,5 mg/m <sup>3</sup>    | 2006/15/EC  |
|                                                | Further information: Indicative, Identifies the possibility of significant uptake through the skin                                                                                                |                               |                                   |             |
|                                                |                                                                                                                                                                                                   | STEL                          | 3 ppm<br>7,6 mg/m <sup>3</sup>    | 2006/15/EC  |
|                                                | Further information: Indicative, Identifies the possibility of significant uptake through the skin                                                                                                |                               |                                   |             |
|                                                |                                                                                                                                                                                                   | AGW (Vapour and aerosols)     | 0,2 ppm<br>0,5 mg/m <sup>3</sup>  | DE TRGS 900 |
|                                                | Peak-limit: excursion factor (category): 1;(I)                                                                                                                                                    |                               |                                   |             |
|                                                | Further information: Skin absorption, When there is compliance with the OEL and biological tolerance values, there is no risk of harming the unborn child, Substance sensitizing through the skin |                               |                                   |             |
|                                                |                                                                                                                                                                                                   | MAK                           | 0,2 ppm<br>0,51 mg/m <sup>3</sup> | DE DFG MAK  |
|                                                | Further information: Danger of sensitization of the skin, Damage to the embryo or foetus is unlikely when the MAK value or the BAT value is observed                                              |                               |                                   |             |

#### 8.2 Exposure controls

##### Individual protection measures, such as personal protective equipment (PPE)

Eye/face protection : Safety glasses with side-shields conforming to EN166

Hand protection : Chemical protective gloves made of nitrile, layer thickness at least 0.2 mm, breakthrough time (wearing time) approx. 480 minutes or gloves with the same protective effect.

Material : This recommendation is based exclusively on the chemical compatibility and the test according to EN 374-1

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Type A/B under laboratory conditions.

|                          |   |                                                                                                           |
|--------------------------|---|-----------------------------------------------------------------------------------------------------------|
| Remarks                  | : | The suitability for a specific workplace should be discussed with the producers of the protective gloves. |
| Skin and body protection | : | Long sleeved clothing                                                                                     |
| Respiratory protection   | : | No personal respiratory protective equipment normally required.                                           |

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### SECTION 9: Physical and chemical properties

#### 9.1 Information on basic physical and chemical properties

|                                                  |   |                                |
|--------------------------------------------------|---|--------------------------------|
| Physical state                                   | : | liquid                         |
| Form                                             | : | liquid                         |
| Colour                                           | : | light yellow                   |
| Odour                                            | : | amine-like                     |
| Melting point/ range                             | : | 10 °C                          |
| Boiling point/boiling range                      | : | ca. 100 °C                     |
| Upper explosion limit / Upper flammability limit | : | not determined                 |
| Lower explosion limit / Lower flammability limit | : | not determined                 |
| Flash point                                      | : | not determined                 |
| Decomposition temperature                        | : | No data available              |
| pH                                               | : | 11                             |
| Viscosity                                        | : |                                |
| Viscosity, kinematic                             | : | not determined                 |
| Solubility(ies)                                  | : |                                |
| Water solubility                                 | : | (20 °C)<br>completely miscible |
| Partition coefficient: n-octanol/water           | : | No data available              |

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| Vapour pressure         | : | not determined                  |
| Density                 | : | 1,007 g/cm <sup>3</sup> (20 °C) |
| Relative vapour density | : | not determined                  |

### 9.2 Other information

No data available

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## SECTION 10: Stability and reactivity

### 10.1 Reactivity

No decomposition if stored and applied as directed.

### 10.2 Chemical stability

Stable under normal conditions.

### 10.3 Possibility of hazardous reactions

Hazardous reactions : No decomposition if stored and applied as directed.

### 10.4 Conditions to avoid

Conditions to avoid : Heat, flames and sparks.

### 10.5 Incompatible materials

Materials to avoid : Strong acids and oxidizing agents

### 10.6 Hazardous decomposition products

No hazardous decomposition products are known.

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## SECTION 11: Toxicological information

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

#### Acute toxicity

Harmful if swallowed.

#### Product:

Acute oral toxicity : Acute toxicity estimate: 824,71 mg/kg  
Method: Calculation method

Acute inhalation toxicity : Acute toxicity estimate: > 20 mg/l  
Exposure time: 4 h

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Test atmosphere: vapour  
Method: Calculation method

Acute dermal toxicity : Acute toxicity estimate: > 2.000 mg/kg  
Method: Calculation method

### Components:

#### **2-aminoethanol:**

Acute oral toxicity : LD50 (Rat): 1.089 mg/kg

Acute dermal toxicity : LD50 (Rabbit): 2.504 mg/kg

#### **Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides:**

Acute oral toxicity : Acute toxicity estimate: 1.000 mg/kg

#### **didecyldimethylammonium chloride:**

Acute oral toxicity : LD50 (Rat, male and female): 329 mg/kg

Acute dermal toxicity : LD50 (Rat, male and female): 1.000 mg/kg

#### **dodecylamine:**

Acute oral toxicity : LD50 (Rat): 2.000 mg/kg

Acute dermal toxicity : LD50 (Rat): 2.000 mg/kg

### **Skin corrosion/irritation**

Causes severe skin burns and eye damage.

### Product:

Remarks : Extremely corrosive and destructive to tissue.

### **Serious eye damage/eye irritation**

Causes serious eye damage.

### Product:

Remarks : May cause irreversible eye damage.

### **Respiratory or skin sensitisation**

#### **Skin sensitisation**

Not classified based on available information.

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### Respiratory sensitisation

Not classified based on available information.

### Germ cell mutagenicity

Not classified based on available information.

### Carcinogenicity

Not classified based on available information.

### Reproductive toxicity

Not classified based on available information.

### STOT - single exposure

May cause respiratory irritation.

### STOT - repeated exposure

Not classified based on available information.

### Aspiration hazard

Not classified based on available information.

## 11.2 Information on other hazards

### Endocrine disrupting properties

#### Product:

Assessment : The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

### Further information

#### Product:

Remarks : No data available

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## SECTION 12: Ecological information

### 12.1 Toxicity

#### Components:

##### **didecyldimethylammonium chloride:**

Toxicity to fish : LC50 (Danio rerio (zebra fish)): 0,49 mg/l  
Exposure time: 96 h

Toxicity to algae/aquatic : ErC50 (Pseudokirchneriella subcapitata (green algae)): 0,062

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plants mg/l  
Exposure time: 96 h

M-Factor (Acute aquatic toxicity) : 10

M-Factor (Chronic aquatic toxicity) : 10

### **dodecylamine:**

Toxicity to fish : LC50 (Fish): 0,098 mg/l  
Exposure time: 96 h

M-Factor (Acute aquatic toxicity) : 10

M-Factor (Chronic aquatic toxicity) : 10

## **12.2 Persistence and degradability**

No data available

## **12.3 Bioaccumulative potential**

### **Components:**

#### **N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine:**

Partition coefficient: n-octanol/water : Remarks: No data available

#### **2-aminoethanol:**

Partition coefficient: n-octanol/water : log Pow: -2,3 (25,00 °C)

#### **Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides:**

Partition coefficient: n-octanol/water : Remarks: No data available

#### **didecyldimethylammonium chloride:**

Partition coefficient: n-octanol/water : log Pow: -0,41 (20,00 °C)

#### **N-dodecylpropane-1,3-diamine:**

Partition coefficient: n-octanol/water : Remarks: No data available

#### **dodecylamine:**

Partition coefficient: n-octanol/water : log Pow: 4,76

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### 12.4 Mobility in soil

No data available

### 12.5 Results of PBT and vPvB assessment

#### Product:

Assessment : This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

### 12.6 Endocrine disrupting properties

#### Product:

Assessment : The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

### 12.7 Other adverse effects

#### Product:

Additional ecological information : An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.  
Toxic to aquatic life with long lasting effects.

---

## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods

|                        |                                                                                                                                                                                                                    |
|------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Product                | : The product should not be allowed to enter drains, water courses or the soil.<br>Do not contaminate ponds, waterways or ditches with chemical or used container.<br>Send to a licensed waste management company. |
| Contaminated packaging | : Empty remaining contents.<br>Dispose of as unused product.<br>Do not re-use empty containers.<br>Do not burn, or use a cutting torch on, the empty drum.                                                         |
| Waste Code             | : used product<br>070699<br>WASTES FROM ORGANIC CHEMICAL PROCESSES;                                                                                                                                                |

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wastes from MFSU of greases, lubricants, soaps, detergents, disinfectants and personal care products; wastes not otherwise specified.

### SECTION 14: Transport information

#### 14.1 UN number or ID number

|      |   |         |
|------|---|---------|
| ADN  | : | UN 1903 |
| ADR  | : | UN 1903 |
| RID  | : | UN 1903 |
| IMDG | : | UN 1903 |
| IATA | : | UN 1903 |

#### 14.2 UN proper shipping name

|      |   |                                                                                           |
|------|---|-------------------------------------------------------------------------------------------|
| ADN  | : | DISINFECTANT, LIQUID, CORROSIVE, N.O.S.<br>(N-dodecylpropane-1,3-diamine, 2-aminoethanol) |
| ADR  | : | DISINFECTANT, LIQUID, CORROSIVE, N.O.S.<br>(N-dodecylpropane-1,3-diamine, 2-aminoethanol) |
| RID  | : | DISINFECTANT, LIQUID, CORROSIVE, N.O.S.<br>(N-dodecylpropane-1,3-diamine, 2-aminoethanol) |
| IMDG | : | DISINFECTANT, LIQUID, CORROSIVE, N.O.S.<br>(N-dodecylpropane-1,3-diamine, 2-aminoethanol) |
| IATA | : | Disinfectant, liquid, corrosive, n.o.s.<br>(N-dodecylpropane-1,3-diamine, 2-aminoethanol) |

#### 14.3 Transport hazard class(es)

|      | Class | Subsidiary risks |
|------|-------|------------------|
| ADN  | :     | 8                |
| ADR  | :     | 8                |
| RID  | :     | 8                |
| IMDG | :     | 8                |
| IATA | :     | 8                |

#### 14.4 Packing group

ADN

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Packing group : III  
Classification Code : C9  
Hazard Identification Number : 80  
Labels : 8  
Limited quantity : 5,00L / 30,00KG  
Special Provisions : 274  
Remarks :

### ADR

Packing group : III  
Classification Code : C9  
Hazard Identification Number : 80  
Labels : 8  
Tunnel restriction code : (E)  
Limited quantity : 5,00L / 30,00KG  
Special Provisions : 274  
Remarks :

### RID

Packing group : III  
Classification Code : C9  
Hazard Identification Number : 80  
Labels : 8  
Limited quantity : 5,00L / 30,00KG  
Special Provisions : 274  
Remarks :

### IMDG

Packing group : III  
Labels : 8  
Limited quantity : 5,00L / 30,00KG  
EmS Code : F-A, S-B  
Special Provisions : 223, 274  
Remarks :

### IATA (Cargo)

Packing instruction (cargo aircraft) : 856  
Packing instruction (LQ) : Y841  
Packing group : III  
Labels : Corrosives  
Special Provisions : A3, A803  
Remarks :

### IATA (Passenger)

Packing instruction (passenger aircraft) : 852  
Packing instruction (LQ) : Y841  
Packing group : III  
Labels : Corrosives  
Special Provisions : A3, A803

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Remarks :

### 14.5 Environmental hazards

#### ADN

Environmentally hazardous : yes

#### ADR

Environmentally hazardous : yes

#### RID

Environmentally hazardous : yes

#### IMDG

Marine pollutant : yes

### 14.6 Special precautions for user

The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

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

Not applicable for product as supplied.

## SECTION 15: Regulatory information

### 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles (Annex XVII) : Conditions of restriction for the following entries should be considered:  
Number on list 3

Number on list 75  
If you intend to use this product as tattoo ink, please contact your vendor.

REACH - Candidate List of Substances of Very High Concern for Authorisation (Article 59) : Not applicable

Regulation (EU) No 2024/590 on substances that deplete the ozone layer : Not applicable

Regulation (EU) 2019/1021 on persistent organic pollutants (recast) : Not applicable

Regulation (EU) No 649/2012 of the European Parliament and the Council concerning the export and import of dangerous chemicals : didecyldimethylammonium chloride

REACH - List of substances subject to authorisation (Annex XIV) : Not applicable

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Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances. E1 ENVIRONMENTAL HAZARDS

Water hazard class (Germany) : WGK 2 obviously hazardous to water  
Classification according to AwSV, Annex 1 (5.2)

TA Luft List (Germany) : 5.2.5: Organic Substances:  
Class 1: 6,8 % 141-43-5

Volatile organic compounds : Directive 2010/75/EU of 24 November 2010 on industrial and livestock rearing emissions (integrated pollution prevention and control)  
Volatile organic compounds (VOC) content: 16,68 %

### Other regulations:

Take note of Directive 94/33/EC on the protection of young people at work or stricter national regulations, where applicable.

Contains a substance which is subject to the TRGS 907 : 2-aminoethanol  
list of sensitizing substances.

### 15.2 Chemical safety assessment

No Chemical Safety Assessment has been carried out for this mixture.

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## SECTION 16: Other information

### Full text of H-Statements

|      |                                                                      |
|------|----------------------------------------------------------------------|
| H301 | : Toxic if swallowed.                                                |
| H302 | : Harmful if swallowed.                                              |
| H312 | : Harmful in contact with skin.                                      |
| H314 | : Causes severe skin burns and eye damage.                           |
| H317 | : May cause an allergic skin reaction.                               |
| H318 | : Causes serious eye damage.                                         |
| H332 | : Harmful if inhaled.                                                |
| H335 | : May cause respiratory irritation.                                  |
| H373 | : May cause damage to organs through prolonged or repeated exposure. |
| H400 | : Very toxic to aquatic life.                                        |
| H410 | : Very toxic to aquatic life with long lasting effects.              |
| H411 | : Toxic to aquatic life with long lasting effects.                   |
| H412 | : Harmful to aquatic life with long lasting effects.                 |

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### Full text of other abbreviations

|                   |                                                           |
|-------------------|-----------------------------------------------------------|
| Acute Tox.        | : Acute toxicity                                          |
| Aquatic Acute     | : Short-term (acute) aquatic hazard                       |
| Aquatic Chronic   | : Long-term (chronic) aquatic hazard                      |
| Eye Dam.          | : Serious eye damage                                      |
| Skin Corr.        | : Skin corrosion                                          |
| Skin Sens.        | : Skin sensitisation                                      |
| STOT RE           | : Specific target organ toxicity - repeated exposure      |
| STOT SE           | : Specific target organ toxicity - single exposure        |
| STOT SE           | : Specific target organ toxicity - single exposure        |
| 2006/15/EC        | : Europe. Indicative occupational exposure limit values   |
| DE DFG MAK        | : Germany. MAK BAT Annex IIa                              |
| DE TRGS 900       | : Germany. TRGS 900 - Occupational exposure limit values. |
| 2006/15/EC / TWA  | : Limit Value - eight hours                               |
| 2006/15/EC / STEL | : Short term exposure limit                               |
| DE DFG MAK / MAK  | : MAK value                                               |
| DE TRGS 900 / AGW | : Time Weighted Average                                   |

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - Agreement concerning the International Carriage of Dangerous Goods by Road; AIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECHA - European Chemicals Agency; EC-Number - European Community number; ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; GHS - Globally Harmonised System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organisation; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardisation; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NZIoC - New Zealand Inventory of Chemicals; OECD - Organisation for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; SVHC - Substance of Very High Concern; TCSI - Taiwan Chemical Substance Inventory; TECI -

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Thailand Existing Chemicals Inventory; TRGS - Technical Rule for Hazardous Substances; TSCA - Toxic Substances Control Act (United States); UN - United Nations; vPvB - Very Persistent and Very Bioaccumulative

### Further information

#### Classification of the mixture:

|                   |      |
|-------------------|------|
| Acute Tox. 4      | H302 |
| Skin Corr. 1B     | H314 |
| Eye Dam. 1        | H318 |
| STOT SE 3         | H335 |
| Aquatic Acute 1   | H400 |
| Aquatic Chronic 2 | H411 |

#### Classification procedure:

|                    |
|--------------------|
| Calculation method |
| Calculation method |
| Calculation method |
| Calculation method |
| Calculation method |
| Calculation method |

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