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

1.1 - Product identifier

Trade name/designationElix® Clean Desinfizierende ReinigungstücherChemical nameProduct-typeMixtureProduct code483.070

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

Relevant identified uses

- Biocidal product
- Disinfectant

1.3 - Details of the supplier of the safety data sheet ECS Cleaning Solutions GmbH Wolfener Str. 32-34 D-12681 Berlin Germany Telephone : +49 (0)30 / 36 46 40 36 gunnar.kleinmann@ecsag.com

Distributor ECS AG Talstrasse 35-37 8808 Pfaeffikon Switzerland gunnar.kleinmann@ecsag.com +41 (0)44 / 787 53 53

1.4 - Emergency telephone number

Verwenden Sie Ihrenationale oder lokale Notrufnummer (Deutschland) Tel. No.: +49(0)30-19240. Schweizerisches Toxikologisches Informationszentrum (Schweiz)/ Centro svizzero di informazione tossicologica (Svizzera)/ Centre Suisse d'Information Toxicologique (Suisse) Tel. No.: +41 44 251 51 51 Tox Info Suisse Notrufnummer: 145 (24 Stunden)/ Numero di emergenza Tox Info Suisse: 145 (24 ore)/ Tox Info Suisse Numéro d'urgence: 145 (24h/24) Giftnotrufzentrale (Österreich) Tel. No.: +43 1 406 4343

SECTION 2: Hazards identification

2.1 - Classification of the substance or mixture

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

Aquatic Chronic 3 Hazardous to the aquatic environment - Aquatic Chronic 3

2.2 - Label elements

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

Contains: didecyldimethylammonium chloride | Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides | Quaternary ammonium compounds, C12-14-alkyl[(ethylphenyl)methyl]dimethyl, chlorides

| Signal word | : | None |
|-------------------|---|------|
| Pictograms | : | None |
| Hazard statements | | |

| H412 | Harmful to aquatic life with long lasting effects |
|-------------------------|---|
| Precautionary statement | nts |
| | |
| P102 | Keep out of reach of children. |
| P273 | Avoid release to the environment. |
| P501 | Dispose of contents/container to an appropriate recycling or disposal facility in accordance with local/regional/national/international regulation. |
| EUH-phrases | : None |
| | |
| Regulation (EC) No. 64 | 18/2004 (Detergents regulation) |

Contains:

- less than 5%: cationic surfactants

2.3 - Other hazards

PBT-substance.

- This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.

vPvB-substance.

- This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.

SECTION 3: Composition / information on ingredients

3.1 - Substances

Not applicable

3.2 - Mixtures

| Chemical name | No. | % | Class(es) | Specific concentration limit |
|--|---|------|---|------------------------------|
| didecyldimethylammonium chloride INCI: DIDECYLDIMONIUM CHLORIDE | CAS No. : 7173-51-5 Index No. : 612-131-00-6 EC No. : 230-525-2 | 0.24 | Acute Tox. 4 Oral - H302 Skin Corr. 1B - H314 | Not applicable |
| Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides INCI: BENZALKONIUM CHLORIDE | CAS No. : 68424-85-1 Index No. : EC No. : 270-325-2 | 0.24 | Acute Tox. 4 Oral - H302 Aquatic Acute 1 - H400 Aquatic Chronic 1 - H410 Eye Dam. 1 - H318 Skin Corr. 1B - H314 | M-factor: 10 / 1 |
| Quaternary ammonium compounds, C12-14-alkyl[(ethylphenyl)met hyl]dimethyl, chlorides | CAS No. : 85409-23-0 Index No. : EC No. : 287-090-7 | 0.24 | Acute Tox. 4 Oral - H302 Aquatic Acute 1 - H400 Aquatic Chronic 1 - H410 Eye Dam. 1 - H318 Skin Corr. 1B - H314 | M-factor: 10 / 1 |

SECTION 4: First aid measures

4.1 - Description of first aid measures

| Following inhalation | Provide fresh air. When in doubt or if symptoms are observed, get medical advice. |
|------------------------|---|
| Following skin contact | Wash immediately with: Water When in doubt or if symptoms are observed, get medical advice. |
| After eye contact | Rinse immediately carefully and thoroughly with eye-bath or water. Remove contact lenses, if present and easy to do. Continue rinsing. |

Elix® Clean Desinfizierende Reinigungstücher - In case of eye irritation consult an ophthalmologist. After ingestion - Rinse mouth thoroughly with water. - Do NOT induce vomiting. - When in doubt or if symptoms are observed, get medical advice. 4.2 - Most important symptoms and effects, both acute and delayed Symptoms and effects -- No information available. Following inhalation - No information available. Symptoms and effects -Following skin contact Symptoms and effects - After - No information available. eye contact Symptoms and effects - After - No information available. ingestion

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

- Treat symptomatically.

- In case an intoxication is suspected, National Poisons Information Centre should be addressed immediately, number of Emergency telephone see in section 1.4.

SECTION 5: Firefighting measures

5.1 - Extinguishing media

| Suitable extinguishing media | - ABC-powder - Carbon dioxide (CO2) - Foam - Extinguishing powder |
|--------------------------------|--|
| Unsuitable extinguishing media | - Full water jet |
| | e |

5.2 - Special hazards arising from the substance or mixture

| Special hazards arising from the substance or mixture | - No information available. |
|---|-----------------------------|
| Hazardous decomposition products | - Carbon dioxide (CO2) |
| | - Carbon monoxide |
| | - Nitrogen oxides (NOx) |
| | - Hydrogen chloride (HCI) |

5.3 - Advice for firefighters

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

- In case of fire and/or explosion do not breathe fumes.

SECTION 6: Accidental release measures

6.1 - Personal precautions, protective equipment and emergency procedures

<u>For non-emergency personnel</u> - Use personal protection equipment.

- Provide adequate ventilation.
- Avoid contact with skin, eyes and clothes.
- For emergency responders No information available.
- 6.2 Environmental precautions
- Do not allow to enter into surface water or drains.
- 6.3 Methods and material for containment and cleaning up

| Methods and material for containment | - No information available. |
|---|--|
| Methods and material for cleaning up | Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents). Wash with plenty of water. |
| Inappropriate techniques | - No information available. |

- 6.4 Reference to other sections
- Personal protection equipment: see section 8
- Disposal: see section 13

SECTION 7: Handling and storage

| 7.1 - Precautions for safe handling |
|-------------------------------------|
|-------------------------------------|

| Recommendation | Avoid exposure - obtain special instructions before use. Avoid:Eye contact |
|--|--|
| Advices on general occupational hygiene | - Avoid contact with skin, eyes and clothes. |
| | Wash hands and face before breaks and after work and take a shower if necessary. Wash hands before breaks and after work. |
| | |

7.2 - Conditions for safe storage, including any incompatibilities

- Store in a dry place. Store in a closed container.
- Keep/Store only in original container.

7.3 - Specific end use(s)

- Biocidal product
- Follow the instructions for use on the label.

SECTION 8: Exposure controls/personal protection

8.1 - Control parameters

DNEL / PNEC

| didecyldimethylammonium chloride (7173-51-5) | | | |
|--|------------------------|-----------|----------|
| Туре | Value | User | Effect |
| DNEL acute inhalative | 5.39 mg/m ³ | Consumers | Systemic |
| DNEL long-term inhalative | 5.39 mg/m³ | Consumers | Systemic |

| DNEL acute dermal, short-term | 1.55 mg/kg | Consumers | Systemic |
|-----------------------------------|----------------------------------|------------------------------|----------|
| DNEL long-term dermal | 1.55 mg/kg bw/day | Consumers | Systemic |
| PNEC aquatic, freshwater | 0.002 mg/l | | |
| PNEC aquatic, marine water | 0.0002 mg/l | | |
| PNEC sediment, freshwater | 2.82 mg/kg | | |
| PNEC sediment, marine water | 0.28 mg/kg | | |
| PNEC soil | 1.4 mg/kg | | |
| PNEC sewage treatment plant (STP) | 0.595 mg/l | | |
| Quaternary ammonium compounds, be | nzyl-C12-16-alkyldimethyl, chlor | ides (68424-85-1) | |
| Туре | Value | User | Effect |
| DNEL acute inhalative | 3.96 mg/m ³ | Workers | Systemic |
| DNEL acute inhalative | 1.64 mg/m³ | Consumers | Systemic |
| DNEL long-term dermal | 3.4 mg/kg bw/day | Consumers | Systemic |
| DNEL long-term dermal | 5.7 mg/kg bw/day | Workers | Systemic |
| PNEC aquatic, freshwater | 0.001 mg/l | | |
| PNEC aquatic, marine water | 0.001 mg/l | | |
| PNEC sediment, freshwater | 12.27 mg/kg | | |
| PNEC sediment, marine water | 13.09 mg/kg | | |
| PNEC soil | 7 mg/kg | | |
| PNEC sewage treatment plant (STP) | 0.4 mg/l | | |
| Quaternary ammonium compounds, C1 | 2-14-alkyl[(ethylphenyl)methyl]d | imethyl, chlorides (85409-23 | -0) |
| Туре | Value | User | Effect |
| DNEL long-term inhalative | 1 mg/m ³ | Consumers | Local |
| DNEL long-term inhalative | 1 mg/m ³ | Workers | Local |
| PNEC aquatic, freshwater | 0.000415 mg/l | | |
| PNEC aquatic, marine water | 4.2E-05 mg/l | | |
| PNEC sediment, freshwater | 6.81 mg/kg | | |
| PNEC sediment, marine water | 0.681 mg/kg | | |
| PNEC soil | 1.36 mg/kg | | |
| PNEC sewage treatment plant (STP) | 0.21 mg/l | | |

8.2 - Exposure controls

| Appropriate engineering controls | - Provide adequate ventilation. |
|---|---|
| | Technical measures and the application of suitable work processes have priority over personal protection equipment. |
| Individual protection measures, such as personal protective equipment | - Eye protection: not required. |
| | Hand protection is not required. In case of prolonged or frequently repeated skin contact: Protective gloves according to EN374 |

- Suitable material: FKM (fluoro rubber)

- Suitable material: NBR (Nitrile rubber)

- Suitable material: NR (natural rubber, natural latex)

- Suitable material: PVC (Polyvinyl chloride)
- Suitable material: CR (polychloroprene, chloroprene
- rubber)
- Breakthrough time: > 480 min.

- No information available.

Environmental exposure controls

SECTION 9: Physical and chemical properties

9.1 - Information on basic physical and chemical properties

| Physical state | Liquid | Appearance | Liquid | |
|---------------------------|--------------|-----------------------|-----------------------------|--|
| <u>Colour</u> | light yellow | <u>Odour</u> | characteristic | |
| Odour threshold | | No data available | No data available | |
| pН | | 6 < V < 8 | | |
| Melting point | | No data available | | |
| Freezing point | | -10 °C | -10 °C | |
| Boiling point | | 100 °C | 100 °C | |
| Flash point | | No data available | | |
| Evaporation rate | | No data available | | |
| flammability | | No data available | | |
| Lower explosion limit | | No data available | No data available | |
| Upper explosion limit | | No data available | No data available | |
| Vapour pressure | | No data available | No data available | |
| Vapour density | | No data available | No data available | |
| Relative density | | No data available | No data available | |
| Density | | 0.993 kg/l < V < 1.00 | 0.993 kg/l < V < 1.005 kg/l | |
| Solubility (Water) | | very soluble | very soluble | |
| Solubility (Ethanol) | | No data available | No data available | |
| Solubility (Acetone) | | No data available | No data available | |
| Solubility (Organic solv | vents) | No data available | No data available | |
| Log KOC | | No data available | No data available | |
| Auto-ignition temperature | | No data available | No data available | |
| Decomposition temperature | | No data available | No data available | |
| Kinematic viscosity | | No data available | No data available | |
| Dynamic viscosity | | 9 mPa.s | 9 mPa.s | |
| Particle characteristics | 3 | | | |
| Particle size | | No data available | No data available | |

| Dustiness | No data available |
|-----------------------|-------------------|
| Specific surface area | No data available |
| Shape | No data available |

9.2 - Other information

| VOC content | 0.105 % |
|--------------------------|-------------------|
| Minimum ignition energy | No data available |
| Conductivity | No data available |
| Refractive index | No data available |
| Solids content | No data available |
| Surface tension | No data available |
| Saturation concentration | No data available |

SECTION 10: Stability and reactivity

10.1 - Reactivity

- This material is considered to be non-reactive under normal use conditions.

10.2 - Chemical stability

- The product is chemically stable under recommended conditions of storage, use and temperature.

- 10.3 Possibility of hazardous reactions
- No hazardous reaction when handled and stored according to provisions.
- 10.4 Conditions to avoid
- No information available.
- 10.5 Incompatible materials
- No information available.
- 10.6 Hazardous decomposition products
- Does not decompose when used for intended uses.

SECTION 11: Toxicological information

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

<u>Acute toxicity</u> - Based on available data, the classification criteria are not met.

Toxicity : Mixture

| LD50 oral (rat) | No data available |
|---------------------------------------|-------------------|
| LD50 dermal (rat) | No data available |
| LD50 dermal (rabbit) | No data available |
| LC50 inhalation (rat) | No data available |
| LC50 inhalation dusts and mists (rat) | No data available |
| LC50 inhalation vapours (rat) | No data available |

Toxicity : Substances

| | didecyldimethylammonium chloride (7173-51-5) | | |
|---|---|--------------|--|
| | LD50 oral (rat) | 238 mg/kg | |
| | LD50 dermal (rabbit) | 3342 mg/kg | |
| | Quaternary ammonium compounds, C12-14-alkyl[(ethylphenyl)methyl]dimethyl, chlorides (85409-23-0)LD50 oral (rat)344 mg/kg | | |
| | | | |
| | LD50 dermal (rabbit) | 2300 mg/kg | |
| Skin corrosion/irritation | - Based on available data, the classification criteria | are not met. | |
| <u>Serious eye damage/eye</u> irritation | - Based on available data, the classification criteria | are not met. | |
| Respiratory or skin sensitisation | - Based on available data, the classification criteria | are not met. | |
| Germ cell mutagenicity | - Based on available data, the classification criteria | are not met. | |
| Carcinogenicity | - Based on available data, the classification criteria | are not met. | |
| Reproductive toxicity | - Based on available data, the classification criteria | are not met. | |
| STOT-single exposure | - Based on available data, the classification criteria | are not met. | |
| STOT-repeated exposure | - Based on available data, the classification criteria | are not met. | |
| Aspiration hazard | - Based on available data, the classification criteria | are not met. | |
| 11.2 Information on other | hazarda | | |

11.2 - Information on other hazards

- This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.

SECTION 12: Ecological information

12.1 - Toxicity

Toxicity : Mixture

| EC50 48 hr crustacea | No data available |
|-----------------------------------|-------------------|
| LC50 96 hr fish | No data available |
| ErC50 algae | No data available |
| ErC50 other aquatic plants | No data available |
| NOEC chronic fish | No data available |
| NOEC chronic crustacea | No data available |
| NOEC chronic algae | No data available |
| NOEC chronic other aquatic plants | No data available |

- Harmful to aquatic life with long lasting effects.

Toxicity : Substances

| didecyldimethylammonium chloride (7173-51-5) | | |
|--|------------|--|
| EC50 48 hr crustacea | 0.062 mg/l | |
| LC50 96 hr fish | 0.19 mg/l | |
| ErC50 algae | 0.026 mg/l | |
| ErC50 other aquatic plants | 11 mg/l | |

| NOEC chronic fish | 0.032 mg/l | |
|--|----------------------------------|--|
| NOEC chronic crustacea | 0.014 mg/l | |
| Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides (68424-85-1) | | |
| EC50 48 hr crustacea | 0.00415 mg/l < V < 0.016 mg/l | |
| LC50 96 hr fish | 0.0322 mg/l < V < 0.515 mg/l | |
| ErC50 algae | 0.049 mg/l | |
| Quaternary ammonium compounds, C12-14-alkyl[(ethylphenyl)methyl]dimethyl, chlorides (85409-23-0) | | |
| EC50 48 hr crustacea | > 0.0415 mg/l | |

12.2 - Persistence and degradability

<u>Mixture</u>

| Biochemical oxygen demand (BOD) | No data available |
|---------------------------------|-------------------|
| Chemical oxygen demand (COD) | No data available |
| % of biodegradation in 28 days | No data available |

- No information available.

Substances

| didecyldimethylammonium chloride (7173-51-5) | | |
|--|--------|--|
| % of biodegradation in 28 days | 72 % | |
| Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides (68424-85-1) | | |
| % of biodegradation in 28 days | 95.5 % | |
| Quaternary ammonium compounds, C12-14-alkyl[(ethylphenyl)methyl]dimethyl, chlorides (85409-23-0) | | |
| % of biodegradation in 28 days | 95.5 % | |

12.3 - Bioaccumulative potential

<u>Mixture</u>

| Bioconcentration factor (BCF) | No data available |
|-------------------------------|-------------------|
| Log KOC | No data available |

- No indication of bioaccumulation potential.

Substances

| didecyldimethylammonium chloride (7173-51-5) | | |
|--|----|--|
| Bioconcentration factor (BCF) 81 | | |
| Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides (68424-85-1) | | |
| Bioconcentration factor (BCF) | 79 | |

12.4 - Mobility in soil

- No information available.

12.5 - Results of PBT and vPvB assessment

- This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.

- This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.

12.6 - Endocrine disrupting properties

- This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.

12.7 - Other adverse effects

- No information available.

13.1 - Waste treatment methods

| Waste treatment methods | Dispose of waste according to applicable legislation. Plastic packaging Completely emptied packages can be recycled. Dispose of empty or partially emptied packaging/container/can after appropriate use of the product to municipal waste. |
|---|--|
| Sewage disposal | - No information available. |
| Special precautions for waste treatment | - No information available. |
| Community or national or regional provisions | - No information available. |
| <u>Waste codes / waste</u> designations according to Regulation 2014/955/UE | 15 02 02* - absorbents, filter materials (including oil filters not otherwise specified), wiping cloths, protective clothing contaminated by hazardous substances 07 06 99 - wastes not otherwise specified |

SECTION 14: Transport information

14.1 - UN number or ID number Not applicable

14.2 - UN proper shipping name Not applicable

14.3 - Transport hazard class(es) Not applicable

14.4 - Packing group Not applicable

14.5 - Environmental hazards Not applicable

14.6 - Special precautions for user Not applicable

14.7 - Maritime transport in bulk according to IMO instruments

Not applicable

SECTION 15: Regulatory information

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

| Substances REACH candidates | None |
|--------------------------------|---------|
| Substances Annex XIV | None |
| Substances Annex XVII | None |
| VOC content | 0.105 % |

- Regulation (EU) No 528/2012 (Biocidal products)

- Reg.-Nr. N-87539

- Council Directive 93/42/EEC on Medical Devices (MDD) (1993).

- Directive 98/24/EC of 7 April 1998 on the protection of the health and safety of workers from the risks related to chemical agents at work

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

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

- – COMMISSION REGULATION (EU) 2020/878 of 18 June 2020 amending Regulation (EC) No. 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (OJ L 203, 26.6.2020, p. 28–58);

- - REGULATION (EC) No 648/2004 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 31 March 2004 on detergents (OJ L 104/1, 8.4.2004, p.001-0035);

| Community safety, health and | The identity of every active substance and its concentration in metric units: |
|------------------------------|---|
| environmental provisions, | Didecyldimethylammonium chloride |
| national laws | 0,24 g/100 g |
| | Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides |
| | 0,24 g/100 g |
| | Quaternary ammonium compounds, C12-14-alkyl[(ethylphenyl)methyl]dimethyl, |
| | chlorides |
| | 0,24 g/100 g |
| | Type of mixture: |
| | Ready for use towelettes. |
| | |

Regulation (EC) No. 648/2004 (Detergents regulation)

Contains:

- less than 5%: cationic surfactants

15.2 - Chemical Safety Assessment

<u>Chemical safety assessment carried</u> - No information available. <u>out for the product</u>

SECTION 16: Other information

SDS versions

| Version | Issue date | Author | Description of the amendments |
|---------|------------|--------|-------------------------------|
| 4 | 05/02/2025 | | |
| 3 | 01/07/2024 | | |
| 2 | 20/09/2023 | | |
| 1 | 02/08/2023 | | |

Indication of changes: Section: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 15, 16.

| Abbreviations and acronyms | ICAO: International Civil Aviation Organization EC50: Effective concentration of the substance that causes adverse effects in 50% of test animals. IATA: International Air Transport Association. DNEL: Derived no-effect level. LOEC: Lowest Observed Effect Concentration. LOEL: Lowest Observed Adverse Effect Level. EC No: European Community number IMDG: International Maritime Dangerous Goods. CAS No.: Chemical Abstracts Service number. NOEC: No Observed Effect level. OEL: Occupational exposure limit. LC50: Lethal Concentration to 50 % of a test animals. PBT: Persistent, Bioaccumulative and Toxic. ADR: The Agreement concerning the International Carriage of Dangerous Goods by Road PNEC: Predicted no-effect concentration. RID: International Carriage of Dangerous Goods by Rail. STEL: Short-term exposure limit ATE: Acute Toxicity Estimate. TWA: Time weighted average LD50: Lethal Dose to 50% of a test animals. vPvB: very Persistent and very Bioaccumulative. |
|----------------------------|---|
| <u>Data sources:</u> | European Chemicals Agency (ECHA) European Chemicals Bureau (ECB) International Laboratories Organization (ILO) |

Texts of the regulatory sentences

| Acute Tox. 4 Oral | Acute toxicity (oral) - Category 4 |
|-------------------|--|
| Aquatic Acute 1 | Hazardous to the aquatic environment - Aquatic Acute 1 |
| Aquatic Chronic 1 | Hazardous to the aquatic environment - Aquatic Chronic 1 |
| Aquatic Chronic 3 | Hazardous to the aquatic environment - Aquatic Chronic 3 |
| Eye Dam. 1 | Serious eye damage, Category 1 |
| Eye Irrit. 2 | Eye irritation - Category 2 |
| Flam. Liq. 2 | Flammable liquid and vapour Category 2 |
| H225 | Highly flammable liquid and vapour. |
| H302 | Harmful if swallowed. |
| H314 | Causes severe skin burns and eye damage. |
| H319 | Causes serious eye irritation. |
| H336 | May cause drowsiness or dizziness. |
| H412 | Harmful to aquatic life with long lasting effects |
| Skin Corr. 1B | Skin corrosion, Category 1B |
| STOT SE 3 | STOT-single exposure - Category 3 (H336) |

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.

*** *** ***