

SECTION 1: Identification of the substance/mixture and of the company/undertaking**1.1. Product identifier**

Trade name : Lotio 2 in 1
UFI : PFG0-900U-J001-WRRF
Type of product : Biocide

1.2. Relevant identified uses of the substance or mixture and uses advised against**1.2.1. Relevant identified uses**

Use of the substance/mixture : Disinfectant

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet**Supplier**

Laboratorium Dr. Deppe GmbH
Hooghe Weg 35
D-47906 Kempen
T +49 21 52 55 65 0 - F +49 21 52 50 84 9
sdb@dr-deppe.de - www.dr-deppe.de

Email competent person

sdb@dr-deppe.de

1.4. Emergency telephone number

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

SECTION 2: Hazards identification**2.1. Classification of the substance or mixture****Classification according to Regulation (EC) No. 1272/2008 [CLP]**

Not classified

Adverse physicochemical, human health and environmental effects

To our knowledge, this product does not present any particular risk, provided it is handled in accordance with good occupational hygiene and safety practice.

2.2. Label elements**Labelling according to Regulation (EC) No. 1272/2008 [CLP]**

Extra phrases : The additional label requirements of directive EU 528/2012 about the available on the market and use of biocidal products have to be observed.

2.3. Other hazards

PBT: not relevant – no registration required
vPvB: not relevant – no registration required

Component

didecyldimethylammonium chloride (7173-51-5)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII
2-phenoxyethanol (122-99-6)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

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SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
didecyldimethylammonium chloride (Active substance (Biocide))	(CAS-No.) 7173-51-5 (EC-No.) 230-525-2 (EC Index-No.) 612-131-00-6 (REACH-no) 01-2119945987-15-xxxx	≥ 0.25 – < 1	Acute Tox. 3 (Oral), H301 (ATE=264 mg/kg bodyweight) Skin Corr. 1B, H314 Aquatic Acute 1, H400 (M=10) Aquatic Chronic 2, H411
2-phenoxyethanol (Active substance (Biocide))	(CAS-No.) 122-99-6 (EC-No.) 204-589-7 (EC Index-No.) 603-098-00-9 (REACH-no) 01-2119488943-21-xxxx	≥ 0.25 – < 1	Acute Tox. 4 (Oral), H302 (ATE=1850 mg/kg) Eye Irrit. 2, H319

Full text of H- and EUH-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general	: In all cases of doubt, or when symptoms persist, seek medical attention.
First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing.
First-aid measures after skin contact	: Wash skin with plenty of water.
First-aid measures after eye contact	: Rinse eyes with water as a precaution.
First-aid measures after ingestion	: Call a poison center or a doctor if you feel unwell. Rinse mouth out with water. Do not induce vomiting.

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

No additional information available

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	: Use extinguishing media appropriate for surrounding fire. Water spray. Dry powder. Foam. Carbon dioxide.
Unsuitable extinguishing media	: Strong water jet.

5.2. Special hazards arising from the substance or mixture

Hazardous decomposition products in case of fire	: Toxic fumes may be released. Carbon dioxide. Carbon monoxide. Nitrogen oxides.
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5.3. Advice for firefighters

Protection during firefighting	: Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.
Other information	: Do not allow run-off from fire fighting to enter drains or water courses. Disposal must be done according to official regulations.

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SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures : Ventilate spillage area.

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

6.2. Environmental precautions

Avoid sub-soil penetration. Prevent entry to sewers and public waters. Notify authorities if product enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Take up liquid spill into absorbent material. Take up mechanically (sweeping, shovelling) and collect in suitable container for disposal.

Other information : Disposal must be done according to official regulations.

6.4. Reference to other sections

Information for safe handling. See section 7. Concerning personal protective equipment to use, see section 8. For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Ensure good ventilation of the work station. Wear personal protective equipment.

Hygiene measures : Do not eat, drink or smoke when using this product. Always wash hands after handling the product. Contaminated work clothing should not be allowed out of the workplace.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store in a well-ventilated place. Keep cool. Protect against frost.

Information about storage in one common storage facility : Keep away from food, drink and animal feeding stuffs.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1 National occupational exposure and biological limit values

No additional information available

8.1.2. Recommended monitoring procedures

No additional information available

8.1.3. Air contaminants formed

No additional information available

8.1.4. DNEL and PNEC

2-phenoxyethanol (122-99-6)

DNEL/DMEL (Workers)

Long-term - systemic effects, dermal	20.83 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	5.7 mg/m ³

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Long-term - local effects, inhalation	5.7 mg/m ³
DNEL/DMEL (General population)	
Acute - systemic effects, oral	9.23 mg/kg bodyweight
Long-term - systemic effects, oral	9.23 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	2.41 mg/m ³
Long-term - systemic effects, dermal	10.42 mg/kg bodyweight/day
Long-term - local effects, inhalation	2.41 mg/m ³
PNEC (Water)	
PNEC aqua (freshwater)	0.943 mg/l
PNEC aqua (marine water)	0.094 mg/l
PNEC aqua (intermittent, freshwater)	3.44 mg/l
PNEC (Sediment)	
PNEC sediment (freshwater)	7.237 mg/kg dwt
PNEC sediment (marine water)	0.724 mg/kg dwt
PNEC (Soil)	
PNEC soil	1.31 mg/kg dwt
PNEC (STP)	
PNEC sewage treatment plant	36 mg/l

didecyldimethylammonium chloride (7173-51-5)

PNEC (Water)

PNEC aqua (freshwater)	1.1 µg/L
PNEC aqua (marine water)	0.11 µg/L

PNEC (Sediment)

PNEC sediment (freshwater)	61.86 mg/kg dwt
PNEC sediment (marine water)	6.186 mg/kg dwt

PNEC (Soil)

PNEC soil	1.4 mg/kg dwt
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PNEC (STP)

PNEC sewage treatment plant	0.14 mg/l
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8.1.5. Control banding

No additional information available

8.2. Exposure controls

8.2.1. Appropriate engineering controls

Appropriate engineering controls:

Ensure good ventilation of the work station.

8.2.2. Personal protection equipment

8.2.2.1. Eye and face protection

Eye protection:

Wear closed safety glasses. EN 166

8.2.2.2. Skin protection

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Skin and body protection:

Wear suitable protective clothing. EN 340. EN 13034

Hand protection:

Not required. when using for hand disinfection. Handling large quantities of product: In case of repeated or prolonged contact wear gloves. Nitrile rubber. 6 (> 480 minutes). EN 374. Choosing the proper glove is a decision that depends not only on the type of material, but also on other quality features, which differ for each manufacturer. Please follow the instructions related to the permeability and the penetration time provided by the manufacturer. Gloves must be replaced after each use and whenever signs of wear or perforation appear

8.2.2.3. Respiratory protection

Respiratory protection:

Not required for normal conditions of use

8.2.2.4. Thermal hazards

No additional information available

8.2.3. Environmental exposure controls

Environmental exposure controls:

Avoid release to the environment.

Other information:

Do not eat, drink or smoke when using this product.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Colour	: colourless.
Appearance	: soaked wipes.
Odour	: characteristic.
Odour threshold	: Not available
Melting point	: Not applicable
Freezing point	: Not available
Boiling point	: > 100 °C (Liquid)
Flammability	: The product is not easily ignited
Explosive properties	: Product is not explosive.
Oxidising properties	: Non oxidizing.
Explosive limits	: Not available
Lower explosive limit (LEL)	: Not available
Upper explosive limit (UEL)	: Not available
Flash point	: > 60 °C (Liquid)
Auto-ignition temperature	: 380 °C (Liquid)
Decomposition temperature	: Not available
pH	: Not available
pH solution	: 5 – 6.5 (Liquid)
Viscosity, kinematic	: Not available
Solubility	: Not available
Partition coefficient n-octanol/water (Log Kow)	: Not available
Vapour pressure	: 2.8 Pa (25 °C; Liquid)
Vapour pressure at 50 °C	: Not available
Density	: 0.9 – 1.1 g/cm ³ (Liquid)
Relative density	: Not available
Relative vapour density at 20 °C	: Not available
Particle size	: Not applicable
Particle size distribution	: Not applicable
Particle shape	: Not applicable
Particle aspect ratio	: Not applicable

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Particle aggregation state	: Not applicable
Particle agglomeration state	: Not applicable
Particle specific surface area	: Not applicable
Particle dustiness	: Not applicable

9.2. Other information

9.2.1. Information with regard to physical hazard classes

No additional information available

9.2.2. Other safety characteristics

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

No additional information available

10.5. Incompatible materials

Strong oxidizing agent.

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

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

Acute toxicity (oral)	: Not classified (Based on available data, the classification criteria are not met)
Acute toxicity (dermal)	: Not classified (Based on available data, the classification criteria are not met)
Acute toxicity (inhalation)	: Not classified (Based on available data, the classification criteria are not met)

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ATE CLP (oral)	> 2000 mg/kg bodyweight
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2-phenoxyethanol (122-99-6)

LD50 oral rat	1850 mg/kg bodyweight
LD50 dermal rat	14391 mg/kg bodyweight
LC50 Inhalation - Rat	> 1000 mg/m ³

didecyldimethylammonium chloride (7173-51-5)

LD50 oral rat	264 mg/kg bodyweight (female; (OECD 401 method))
LD50 dermal rat	> 1000 mg/kg bodyweight (Mortality has been observed at the given dose level;(OECD 402 method))

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Skin corrosion/irritation	: Not classified (Based on available data, the classification criteria are not met)
Serious eye damage/irritation	: Not classified (Based on available data, the classification criteria are not met)
Respiratory or skin sensitisation	: Not classified (Based on available data, the classification criteria are not met)
Germ cell mutagenicity	: Not classified (Based on available data, the classification criteria are not met)
Carcinogenicity	: Not classified (Based on available data, the classification criteria are not met)
Reproductive toxicity	: Not classified (Based on available data, the classification criteria are not met)
STOT-single exposure	: Not classified (Based on available data, the classification criteria are not met)

didecyldimethylammonium chloride (7173-51-5)

NOAEL (oral, rat)	≈ 46 mg/kg bodyweight/day (93d;male;(OECD 408 method))
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STOT-repeated exposure	: Not classified (Based on available data, the classification criteria are not met)
Aspiration hazard	: Not classified (Based on available data, the classification criteria are not met)

11.2. Information on other hazards

No additional information available

SECTION 12: Ecological information

12.1. Toxicity

Hazardous to the aquatic environment, short-term (acute)	: Not classified (Based on available data, the classification criteria are not met)
Hazardous to the aquatic environment, long-term (chronic)	: Not classified (Based on available data, the classification criteria are not met)

didecyldimethylammonium chloride (7173-51-5)

LC50 - Fish [1]	0.49 mg/l (96 h; Brachydanio rerio (zebra-fish); (OECD 203 method))
EC50 - Crustacea [1]	0.057 mg/l (48 h; Daphnia magna; (OECD 202 method))
EC50 72h algae	≈ 0.062 mg/l (72h; Pseudokirchneriella subcapitata; (OECD 201 method))
ErC50 algae	0.062 mg/l (72 h; Pseudokirchnerella subcapitata (OECD 201 method))
NOEC chronic crustacea	0.021 mg/l (21 d; Daphnia magna; (OECD 211 method))
NOEC chronic algae	0.013 mg/l (OECD 201 method)

12.2. Persistence and degradability

2-phenoxyethanol (122-99-6)

Persistence and degradability	Readily biodegradable.
Biodegradation	99 % (15 d; (OECD 301A method))

didecyldimethylammonium chloride (7173-51-5)

Persistence and degradability	Readily biodegradable.
Biodegradation	69 % (28d)

12.3. Bioaccumulative potential

2-phenoxyethanol (122-99-6)

Partition coefficient n-octanol/water (Log Pow)	1.2 (23°C; pH 7)
Partition coefficient n-octanol/water (Log Kow)	1.16

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didecyldimethylammonium chloride (7173-51-5)

Partition coefficient n-octanol/water (Log Pow)	2.59 (20 °C; (OECD 105 method))
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12.4. Mobility in soil

didecyldimethylammonium chloride (7173-51-5)

Surface tension	25.82 mN/m (OECD 115 method)
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12.5. Results of PBT and vPvB assessment

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PBT: not relevant – no registration required

vPvB: not relevant – no registration required

Component

didecyldimethylammonium chloride (7173-51-5)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII
2-phenoxyethanol (122-99-6)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

12.6. Endocrine disrupting properties

No additional information available

12.7. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste treatment methods : Disposal must be done according to official regulations. European waste catalogue. Do not discharge into drains or the environment. Do not dispose of with domestic waste.

Product/Packaging disposal recommendations : Recycle or dispose of in compliance with current legislation.

SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / ADN / RID

ADR	IMDG	IATA	ADN	RID
14.1. UN number or ID number				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
14.2. UN proper shipping name				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
14.3. Transport hazard class(es)				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
14.4. Packing group				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
14.5. Environmental hazards				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
No supplementary information available				

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according to Regulation (EC) No. 1907/2006 (REACH)

14.6. Special precautions for user

Overland transport

Not regulated

Transport by sea

Not regulated

Air transport

Not regulated

Inland waterway transport

Not regulated

Rail transport

Not regulated

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

15.1.1. EU-Regulations

The following restrictions are applicable according to Annex XVII of the REACH Regulation (EC) No 1907/2006:

Reference code	Applicable on
3(b)	2-phenoxyethanol

Contains no substance on the REACH candidate list

Contains no REACH Annex XIV substances

Substances subject to Regulation (EU) No 649/2012 of the European Parliament and of the Council of 4 July 2012 concerning the export and import of hazardous chemicals: Didecyldimethylammonium chloride (7173-51-5)

Contains no substance subject to Regulation (EU) No 2019/1021 of the European Parliament and of the Council of 20 June 2019 on persistent organic pollutants

Other information, restriction and prohibition regulations : A safety data sheet is not required for this product under Article 31 of REACH. This Product Safety Information Sheet has been created on a voluntary basis. Regulation (EU) No 528/2012 concerning the making available on the market and use of biocidal products. The additional label requirements of directive EU 528/2012 about the available on the market and use of biocidal products have to be observed. Every advertisement for biocides has to be accompanied by following sentence: Use biocides safely. Always read the label and product information before use.

Type of product (Biocide) : 1 - Human hygiene
2 - Disinfectants and algacides not intended for direct application to humans or animals
4 - Food and feed area

15.1.2. National regulations

United Kingdom

National regulations : This safety data sheet is for informational purposes only and does not comply with national legal requirements without reference to a national distributor. The national distributor is responsible for a legally compliant safety data sheet.

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

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SECTION 16: Other information

Indication of changes:			
Section	Changed item	Change	Comments
	General revision		SDS EU format according to COMMISSION REGULATION (EU) 2020/878
1.4	Emergency number	Modified	

Abbreviations and acronyms:	
ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE	Acute Toxicity Estimate
BCF	Bioconcentration factor
CLP	Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008
DMEL	Derived Minimal Effect level
DNEL	Derived-No Effect Level
EC50	Median effective concentration
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
LC50	Median lethal concentration
LD50	Median lethal dose
LOAEL	Lowest Observed Adverse Effect Level
NOAEC	No-Observed Adverse Effect Concentration
NOAEL	No-Observed Adverse Effect Level
NOEC	No-Observed Effect Concentration
OECD	Organisation for Economic Co-operation and Development
PBT	Persistent Bioaccumulative Toxic
PNEC	Predicted No-Effect Concentration
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
SDS	Safety Data Sheet
STP	Sewage treatment plant
TLM	Median Tolerance Limit
vPvB	Very Persistent and Very Bioaccumulative

Data sources : MSDSs of the suppliers. ECHA (European Chemicals Agency). Information provided by the manufacturer.
Department issuing data : KFT Chemieservice GmbH
specification sheet: Im Leuschnerpark 3
D-64347 Griesheim

Phone: +49 6155-8981-400
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Contact person : Barbara Stark

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Other information : Version/s 1.00 is/are not available in this language.

Full text of H- and EUH-statements:	
Acute Tox. 3 (Oral)	Acute toxicity (oral), Category 3
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Aquatic Acute 1	Hazardous to the aquatic environment — Acute Hazard, Category 1
Aquatic Chronic 2	Hazardous to the aquatic environment — Chronic Hazard, Category 2
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Skin Corr. 1B	Skin corrosion/irritation, Category 1, Sub-Category 1B
H301	Toxic if swallowed.
H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H319	Causes serious eye irritation.
H400	Very toxic to aquatic life.
H411	Toxic to aquatic life with long lasting effects.

KFT SDS EU 01

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.