

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

schülke ->

mikrozid® sensitive wipes

Version
04.00

Revision Date:
28.08.2017

Date of last issue: 13.09.2016
Date of first issue: 21.04.2007

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

1.1 Product identifier

Trade name : mikrozid® sensitive wipes

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

Use of the Sub-
stance/Mixture : Disinfectants and general biocidal products

Recommended restrictions
on use : Restricted to professional users.

1.3 Details of the supplier of the safety data sheet

Manufacturer/ Supplier : Schülke & Mayr GmbH
Robert-Koch-Str. 2

22851 Norderstedt
Germany
Telephone: +49 (0)40/ 52100-0
Telefax: +49 (0)40/ 52100318
mail@schuelke.com
www.schuelke.com

E-mail address of person
responsible for the
SDS/Contact person : Application Department
+49 (0)40/ 521 00 8800
ADHI@schuelke.com
(Schülke & Mayr UK Ltd.: +44-1142543500)

1.4 Emergency telephone number

Emergency telephone num-
ber : UK Poisons Emergency number: 0870 600 6266

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

Acute aquatic toxicity, Category 1
Chronic aquatic toxicity, Category 3

H400: Very toxic to aquatic life.
H412: Harmful to aquatic life with long lasting ef-
fects.

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

Hazard pictograms :



Signal word : Warning

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Hazard statements : H410 Very toxic to aquatic life with long lasting effects.

Precautionary statements : P273 Avoid release to the environment.
P501 Dispose of contents/ container to an approved waste disposal plant.

Further information : Use biocides safely. Always read the label and product information before use.

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.

No special risks known.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Chemical nature : Aqueous containing solution on non-woven

Hazardous components

Chemical name	CAS-No. EC-No. Index-No. Registration number	Classification	Concentration (% w/w)
Didecyldimethylammonium chloride	7173-51-5 230-525-2 612-131-00-6 ---	Acute Tox. 3; H301 Skin Corr. 1B; H314 Aquatic Acute 1; H400 Aquatic Chronic 2; H411	0,26
Alkyl (C12-16) dimethylbenzyl ammonium chloride	68424-85-1 270-325-2 --- 01-2119965180-41-XXXX	Acute Tox. 4; H302 Acute Tox. 4; H312 Skin Corr. 1B; H314 Aquatic Acute 1; H400 Aquatic Chronic 1; H410	0,26
Alkyl (C12-C14) ethylbenzylammonium chloride (ADEBAC (C12-C14))	85409-23-0 287-090-7 --- ---	Acute Tox. 4; H302 Skin Corr. 1B; H314 Aquatic Acute 1; H400 Aquatic Chronic 1; H410	0,26

For explanation of abbreviations see section 16.

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

- | | | |
|-------------------------|---|---|
| General advice | : | Take off contaminated clothing and shoes immediately. |
| If inhaled | : | If symptoms persist, call a physician. |
| In case of skin contact | : | Wash with water and soap as a precaution.
If symptoms persist, call a physician. |
| In case of eye contact | : | In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice. |
| If swallowed | : | Do NOT induce vomiting.
Drink water as a precaution.
Consult a physician if necessary. |

4.2 Most important symptoms and effects, both acute and delayed

- | | | |
|----------|---|------------------------|
| Symptoms | : | Treat symptomatically. |
|----------|---|------------------------|

4.3 Indication of any immediate medical attention and special treatment needed

- | | | |
|-----------|---|--|
| Treatment | : | For specialist advice physicians should contact the Poisons Information Service. |
|-----------|---|--|

SECTION 5: Firefighting measures**5.1 Extinguishing media**

- | | | |
|--------------------------------|---|--|
| Suitable extinguishing media | : | Dry powder
Carbon dioxide (CO ₂)
Water spray jet
Foam |
| Unsuitable extinguishing media | : | Do not use a solid water stream as it may scatter and spread fire. |

5.2 Special hazards arising from the substance or mixture

- | | | |
|---------------------------------------|---|--|
| Specific hazards during fire-fighting | : | none |
| Hazardous combustion products | : | No hazardous combustion products are known |

5.3 Advice for firefighters

- | | | |
|---|---|--|
| Special protective equipment for firefighters | : | In the event of fire, wear self-contained breathing apparatus. |
|---|---|--|

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SECTION 6: Accidental release measures**6.1 Personal precautions, protective equipment and emergency procedures**

Personal precautions : Use personal protective equipment.

6.2 Environmental precautions

Environmental precautions : No special environmental precautions required.

6.3 Methods and material for containment and cleaning up

Methods for cleaning up : Use mechanical handling equipment.

6.4 Reference to other sections

see Section 8 + 13

SECTION 7: Handling and storage**7.1 Precautions for safe handling**

Advice on safe handling : No special precautions required.

Advice on protection against fire and explosion : No special protective measures against fire required.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers : Store at room temperature in the original container.

Further information on storage conditions : Keep container tightly closed. Keep away from heat. Keep away from direct sunlight. Recommended storage temperature: 15 - 25°C

Advice on common storage : Keep away from food and drink.

7.3 Specific end use(s)

Specific use(s) : none

SECTION 8: Exposure controls/personal protection**8.1 Control parameters**

none

Derived No Effect Level (DNEL) according to Regulation (EC) No. 1907/2006:

Substance name	End Use	Exposure routes	Potential health effects	Value
Alkyl (C12-16) dimethylbenzyl ammonium chloride	Workers	Skin contact	Long-term systemic effects	5,7 mg/kg
	Workers	Inhalation	Long-term systemic effects	3,96 mg/m3

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Predicted No Effect Concentration (PNEC) according to Regulation (EC) No. 1907/2006:

Substance name	Environmental Compartment	Value
Alkyl (C12-16) dimethylbenzyl ammonium chloride	Fresh water	0,0009 mg/l
	Marine water	0,00009 mg/l
	Fresh water sediment	12,27 mg/kg
	Marine sediment	13,09 mg/kg
	Soil	7 mg/kg
	Effects on waste water treatment plants	0,4 mg/l

8.2 Exposure controls**Personal protective equipment****Hand protection**

Directive : The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

Remarks : Prolonged contact: Nitrile rubber gloves e.g. Camatril (>480 Min., layer thickness: 0,40 mm) or butyl rubber gloves e.g. Butoject (>480 Min., layer thickness: 0,70 mm) made by KCL or gloves from other manufacturers offering the same protection.

Protective measures : Avoid contact with eyes.

SECTION 9: Physical and chemical properties**9.1 Information on basic physical and chemical properties**

Appearance : liquid

Colour : colourless

Odour : characteristic

Odour Threshold : not determined

pH : 6 - 8 (20 °C)

Melting point/freezing point : ca. 0 °C

Decomposition temperature : Not applicable

Boiling point/boiling range : ca. 100 °C

Flash point : Not applicable

Evaporation rate : not determined

Flammability (solid, gas) : Not applicable

Upper explosion limit : Not applicable

Lower explosion limit : Not applicable

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Vapour pressure	:	No data available
Vapour density	:	Not applicable
Relative density	:	ca. 1,00 g/cm ³ (20 °C)
Solubility(ies)		
Water solubility	:	in all proportions (20 °C)
Partition coefficient: n-octanol/water	:	Not applicable
Auto-ignition temperature	:	Not applicable
Viscosity		
Viscosity, dynamic	:	not determined
Explosive properties	:	No data available
Oxidizing properties	:	Not applicable

9.2 Other informationNo data available

SECTION 10: Stability and reactivity**10.1 Reactivity**

No dangerous reaction known under conditions of normal use.

10.2 Chemical stability

The product is chemically stable.

10.3 Possibility of hazardous reactions

Hazardous reactions : None reasonably foreseeable.

10.4 Conditions to avoid

Conditions to avoid : Protect from frost, heat and sunlight.

10.5 Incompatible materials

Materials to avoid : None reasonably foreseeable.

10.6 Hazardous decomposition products

None reasonably foreseeable.

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SECTION 11: Toxicological information**11.1 Information on toxicological effects****Acute toxicity****Product:**

Acute oral toxicity : Acute toxicity estimate: > 10.000 mg/kg

Acute inhalation toxicity : Acute toxicity estimate: > 50 mg/l

Acute dermal toxicity : Acute toxicity estimate: > 15.000 mg/kg

Skin corrosion/irritation**Components:****Didecyldimethylammonium chloride:**

Rabbit, 4 h, OECD Test Guideline 404, Corrosive

Alkyl (C12-16) dimethylbenzyl ammonium chloride:

Corrosive

Serious eye damage/eye irritation**Components:****Didecyldimethylammonium chloride:**

Corrosive

Alkyl (C12-16) dimethylbenzyl ammonium chloride:

Corrosive

Respiratory or skin sensitisation**Components:****Didecyldimethylammonium chloride:**

Did not cause sensitisation on laboratory animals. Buehler Test, Guinea pig

Alkyl (C12-16) dimethylbenzyl ammonium chloride:

Did not cause sensitisation on laboratory animals. Guinea pig

Germ cell mutagenicity**Components:****Didecyldimethylammonium chloride:**

Genotoxicity in vitro : OECD Test Guideline 471, Not mutagenic in Ames Test

Genotoxicity in vivo : Mutagenicity (in vivo mammalian bone-marrow cytogenetic test, chromosomal analysis), Rat, Oral, OECD Test Guideline 475, negative

Germ cell mutagenicity- Assessment : Animal testing did not show any mutagenic effects.

Alkyl (C12-16) dimethylbenzyl ammonium chloride:

Genotoxicity in vitro : Not mutagenic in Ames Test

Germ cell mutagenicity- Assessment : Tests on bacterial or mammalian cell cultures did not show mutagenic effects.

Carcinogenicity**Components:****Didecyldimethylammonium chloride:**

Carcinogenicity - Assessment : Animal testing did not show any carcinogenic effects.

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Carcinogenicity - Assessment : Animal testing did not show any carcinogenic effects.

Reproductive toxicity**Components:****Didecyldimethylammonium chloride:**

Reproductive toxicity - Assessment : No data available

Alkyl (C12-16) dimethylbenzyl ammonium chloride:

Reproductive toxicity - Assessment : Animal testing did not show any effects on fertility.

STOT - single exposure**Components:****Didecyldimethylammonium chloride:**

No data available

Alkyl (C12-16) dimethylbenzyl ammonium chloride:

No data available

STOT - repeated exposure**Components:****Didecyldimethylammonium chloride:**

No data available

Alkyl (C12-16) dimethylbenzyl ammonium chloride:

No data available

Aspiration toxicity

No data available

Further information**Product:**

No data is available on the product itself.

SECTION 12: Ecological information**12.1 Toxicity****Product:****Ecotoxicology Assessment**

Acute aquatic toxicity : Very toxic to aquatic life with long lasting effects.

Components:**Didecyldimethylammonium chloride:**Toxicity to fish : LC50 (Pimephales promelas (fathead minnow)): 0,19 mg/l
Exposure time: 96 hToxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 0,062 mg/l
Exposure time: 48 h

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Toxicity to algae	:	ErC50 (Pseudokirchneriella subcapitata (green algae)): 0,026 mg/l Exposure time: 96 h
M-Factor (Acute aquatic toxicity)	:	10
Toxicity to fish (Chronic toxicity)	:	NOEC: 0,032 mg/l Exposure time: 34 d Species: Pimephales promelas (fathead minnow) Method: OECD Test Guideline 210
Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)	:	NOEC: 0,014 mg/l Exposure time: 21 d Species: Daphnia magna (Water flea) Method: Expert judgement and weight of evidence determination.
M-Factor (Chronic aquatic toxicity)	:	1

Alkyl (C12-16) dimethylbenzyl ammonium chloride:

Toxicity to fish	:	LC50 : 0,85 mg/l Exposure time: 96 h
Toxicity to daphnia and other aquatic invertebrates	:	EC50 (Daphnia magna): 0,015 mg/l Exposure time: 48 h
Toxicity to algae	:	IC50 : 0,03 mg/l Exposure time: 72 h
M-Factor (Acute aquatic toxicity)	:	10
Toxicity to fish (Chronic toxicity)	:	NOEC: 0,032 mg/l Exposure time: 34 d Species: Pimephales promelas (fathead minnow)
Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)	:	NOEC: 0,0042 mg/l Exposure time: 21 d Species: Daphnia magna (Water flea)
M-Factor (Chronic aquatic toxicity)	:	1

Alkyl (C12-C14) ethylbenzylammonium chloride (ADEBAC (C12-C14)):

Toxicity to fish	:	LC50 (Fish): 0,28 mg/l Exposure time: 96 h
Toxicity to daphnia and other aquatic invertebrates	:	EC50 (Daphnia magna): 0,0059 mg/l Exposure time: 48 h
M-Factor (Acute aquatic toxicity)	:	100

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icity)

12.2 Persistence and degradability**Product:**Chemical Oxygen Demand : 200 mg/l
(COD) Test substance: 1 % solution**Components:****Didecyldimethylammonium chloride:**Biodegradability : Result: Readily biodegradable.
Method: OECD 301B/ ISO 9439/ EEC 84/449 C5**Alkyl (C12-16) dimethylbenzyl ammonium chloride:**Biodegradability : Result: Readily biodegradable.
Method: OECD 301D / EEC 84/449 C6**Alkyl (C12-C14) ethylbenzylammonium chloride (ADEBAC (C12-C14)):**

Biodegradability : Result: Totally biodegradable

12.3 Bioaccumulative potential**Components:****Didecyldimethylammonium chloride:**Bioaccumulation : Species: Lepomis macrochirus (Bluegill sunfish)
Exposure time: 46 d
Bioconcentration factor (BCF): 81**Alkyl (C12-16) dimethylbenzyl ammonium chloride:**

Bioaccumulation : Remarks: Does not bioaccumulate.

Alkyl (C12-C14) ethylbenzylammonium chloride (ADEBAC (C12-C14)):

Bioaccumulation : Remarks: Bioaccumulation is unlikely.

12.4 Mobility in soil**Components:****Didecyldimethylammonium chloride:**

Mobility : Remarks: Mobile in soils

Alkyl (C12-16) dimethylbenzyl ammonium chloride:

Mobility : Remarks: No data available

Alkyl (C12-C14) ethylbenzylammonium chloride (ADEBAC (C12-C14)):

Mobility : Medium: Soil

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Remarks: immobile

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 Other adverse effects**Product:**

Additional ecological information : No data is available on the product itself.

SECTION 13: Disposal considerations**13.1 Waste treatment methods**

Product : Can be incinerated or landfilled together with household waste in compliance with the regulations, and after consultation with the waste disposal services.

Contaminated packaging : Take empty packaging to the recycling plant.

SECTION 14: Transport information**14.1 UN number**

IMDG : UN 3077

IATA (Cargo) : UN 3077

14.2 UN proper shipping name

IMDG : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.
(Alkyl (C12-C14) ethylbenzylammonium chloride (ADEBAC (C12-C14)))

IATA (Cargo) : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.
(Alkyl (C12-C14) ethylbenzylammonium chloride (ADEBAC (C12-C14)))

14.3 Transport hazard class(es)

IMDG : 9

IATA (Cargo) : 9

14.4 Packing group

IMDG

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Packing group : III
Labels : 9
EmS Code : F-A, S-F

IATA (Cargo)

Packing instruction (cargo aircraft) : 956
Packing group : III
Labels : Miscellaneous

14.5 Environmental hazards

IMDG

Marine pollutant : no

IATA (Cargo)

Marine pollutant : yes

14.6 Special precautions for user

Not applicable
For personal protection see section 8.

14.7 Transport in bulk according to Annex II of Marpol and the IBC Code

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

Regulation (EC) No 850/2004 on persistent organic pollutants : Not applicable

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

		Quantity 1	Quantity 2
E1	ENVIRONMENTAL HAZARDS	100 t	200 t

Volatile organic compounds : Remarks: none, Directive 2010/75/EC on the limitation of emissions of volatile organic compounds

Other regulations:

The surfactant(s) contained in this mixture complies(comply) with the biodegradability criteria as laid down in Regulation (EC) No.648/2004 on detergents. Data to support this assertion are held at the disposal of the competent authorities of the Member States and will be made available to them, at their direct request or at the request of a detergent manufacturer.

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work.

Take note of Directive 2000/39/EC establishing a first list of indicative occupational exposure limit values.

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Regulation (EU) No 528/2012 of the European Parliament and of the Council of 22 May 2012 concerning the making available on the market and use of biocidal products

15.2 Chemical safety assessment

Exempt

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.
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.

Full text of other abbreviations

Acute Tox.	: Acute toxicity
Aquatic Acute	: Acute aquatic toxicity
Aquatic Chronic	: Chronic aquatic toxicity
Skin Corr.	: Skin corrosion

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; AICS - Australian Inventory of Chemical Substances; 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 Harmonized 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 Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; 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 - Organization 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; TCSI - Taiwan Chemical Substance Inventory; TRGS - Technical Rule

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for Hazardous Substances; TSCA - Toxic Substances Control Act (United States); UN - United Nations; vPvB - Very Persistent and Very Bioaccumulative

Further information

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) No. 1272/2008

Aquatic Acute 1, H400 : Calculation method
Aquatic Chronic 3, H412 : Calculation method

Changes compared with the previous edition!!!

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

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