According to REACH Regulation (EC) No 1907/2006, as amended by UK REACH Regulations SI 2019/758



mikrozid® alcohol free wipes

Version	Revision Date:	Date of last issue: 26.08.2022
06.07	07.11.2023	

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

No Change Service!

1.1 Product identifier Trade name mikrozid® alcohol free wipes 1 Unique Formula Identifier 58J1-M0QP-U00Y-KEAC 2 (UFI) 1.2 Relevant identified uses of the substance or mixture and uses advised against Use of the Sub-: Disinfectants stance/Mixture **Recommended restrictions** For professional users only. : on use 1.3 Details of the supplier of the safety data sheet Producer • 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 Supplier Schülke & Mayr UK Ltd. : Cygnet House 1, Jenkin Road Sheffield S9 1AT United Kingdom Telephone: +44 114 254 35 00 Telefax: +44 114 254 35 01 mail.uk@schulke.com E-mail address of person : Application Specialists +49 (0)40/ 521 00 666 responsible for the SDS/Contact person AD@schuelke.com **1.4 Emergency telephone number** Emergency telephone num-: Carechem 24 International:+44 1235 239670 ber

According to REACH Regulation (EC) No 1907/2006, as amended by UK REACH Regulations SI 2019/758



mikrozid® alcohol free wipes

Version	Revision Date:	Date of last issue: 26.08.2022
06.07	07.11.2023	

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008) as amended by GB-CLP Regulation, UK SI 2019/720, and UK SI 2020/1567)

No Change Service!

Long-term (chronic) aquatic hazard, Category 3 H412: Harmful to aquatic life with long lasting effects.

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008) as amended by GB-CLP Regulation, UK SI 2019/720, and UK SI 2020/1567)

Hazard statements : H412 Harmful to aquatic life with long lasting effects.

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

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.

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)
Quaternary ammonium compounds, C12-14- alkyl[(ethylphenyl)methyl]dimethyl, chlorides	85409-23-0 287-090-7 01-2120771812-51- XXXX	Acute Tox. 4; H302 Skin Corr. 1B; H314 Eye Dam. 1; H318 Aquatic Acute 1; H400 Aquatic Chronic 1; H410 M-Factor (Acute aquatic toxicity): 10	>= 0.1 - < 0.25

According to REACH Regulation (EC) No 1907/2006, as amended by UK REACH Regulations SI 2019/758



mikrozid® alcohol free wipes

Version 06.07 Revision Date: 07.11.2023

No Change Service!

Date of last issue: 26.08.2022

		M-Factor (Chronic aquatic toxicity): 1	
didecyldimethylammonium chloride	7173-51-5 230-525-2 612-131-00-6 01-2119945987-15- XXXX	Acute Tox. 3; H301 Skin Corr. 1B; H314 Eye Dam. 1; H318 Aquatic Acute 1; H400 Aquatic Chronic 2; H411 M-Factor (Acute aquatic toxicity): 10 M-Factor (Chronic	>= 0.1 - < 0.25
Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlo- rides	68424-85-1 270-325-2 01-2119965180-41- XXXX	aquatic toxicity): 1 Acute Tox. 4; H302 Acute Tox. 4; H312 Skin Corr. 1B; H314 Eye Dam. 1; H318 Aquatic Acute 1; H400 Aquatic Chronic 1; H410 M-Factor (Acute aquatic toxicity): 10 M-Factor (Chronic aquatic toxicity): 1	>= 0.1 - < 0.25

For explanation of abbreviations see section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General advice	: Take off contaminated clothing and shoes imm	ediately.
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	: Flush eyes with water as a precaution. If eye irritation persists, consult a specialist.	
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.
----------	--------------------------

According to REACH Regulation (EC) No 1907/2006, as amended by UK REACH Regulations SI 2019/758



mikrozid® *alcohol* free wipes

Version	Revision Date:	
06.07	07.11.2023	

No Change Service!

Date of last issue: 26.08.2022

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 (CO2) Water spray jet Foam
Unsuitable extinguishing media	:	Do NOT use water jet.

5.2 Special hazards arising from the substance or mixture

Hazardous combustion prod-	:	No hazardous combustion products are known
ucts		

5.3 Advice for firefighters

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

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	:	No special protective measures against fire required.
fire and explosion		

According to REACH Regulation (EC) No 1907/2006, as amended by UK REACH Regulations SI 2019/758



mikrozid® alcohol free wipes

Version	Revision Date:	Date of last issue: 26.08.2022
06.07	07.11.2023	

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 stor- age conditions	:	Keep container tightly closed. Protect from frost, heat and sunlight. Recommended storage temperature: 15 - 25°C
	Advice on common storage	:	Keep away from food and drink.
7 3 Specific end use(s)			

No Change Service!

7.3 Specific end use(s)

Specific use(s) : none

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Contains no substances with occupational exposure limit values.

Derived No Effect Level (DNEL):

Substance name	End Use	Exposure routes	Potential health ef- fects	Value
Quaternary ammoni- um compounds, C12- 14- al- kyl[(ethylphenyl)meth yl]dimethyl, chlorides	Workers	Inhalation	Long-term systemic effects	1 mg/m3
didecyldime- thylammonium chlo- ride	Workers	Inhalation	Acute systemic ef- fects, Long-term systemic effects	5.39 mg/m3
	Workers	Dermal	Acute systemic ef- fects, Long-term systemic effects	1.55 mg/kg
Quaternary ammoni- um compounds, ben- zyl-C12-16- alkyldimethyl, chlo- rides	Workers	Skin contact	Long-term systemic effects	5.7 mg/kg
	Workers	Inhalation	Long-term systemic effects	3.96 mg/m3

Predicted No Effect Concentration (PNEC):

Substance name	Environmental Compartment	Value
Quaternary ammonium com- pounds, C12-14- al- kyl[(ethylphenyl)methyl]dimethyl, chlorides	Fresh water	0.000415 mg/l
	Marine water	0.000042 mg/l
	Sewage treatment plant	0.21 mg/l
	Fresh water sediment	6.81 mg/kg
	Marine sediment	0.681 mg/kg
	Soil	1.36 mg/kg

According to REACH Regulation (EC) No 1907/2006, as amended by UK REACH Regulations SI 2019/758



mikrozid® *alcohol* free wipes

Version 06.07

Revision Date: 07.11.2023

No Change Service!

Date of last issue: 26.08.2022

didecyldimethylammonium chlo- ride	Fresh water	0.002 mg/l
	Marine water	0.0002 mg/l
	Fresh water sediment	2.82 mg/kg
	Marine sediment	0.28 mg/kg
	Sewage treatment plant	0.595 mg/l
	Soil	1.4 mg/kg
Quaternary ammonium com- pounds, benzyl-C12-16- alkyldimethyl, chlorides	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
	Intermittent use/release	0.00016 mg/l

8.2 Exposure controls

Personal protective equipment	t
Hand protection	
Directive :	The selected protective gloves have to satisfy the specifica- tions of Regulation (EU) 2016/425 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 protec- tion.
Respiratory protection :	No personal respiratory protective equipment normally re- quired.
Protective measures :	Avoid contact with eyes.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

	Appearance	:	Aqueous containing solution on non-woven
	Colour	:	colourless
	Odour	:	characteristic
	Odour Threshold	:	not determined
	рН	:	5 - 8 (20 °C) Concentration: 100 % of the active solution
	Melting point/freezing point	:	ca. 0 °C of the active solution
10	000250 01 ZSDB P GB EN		Page 6/10

According to REACH Regulation (EC) No 1907/2006, as amended by UK REACH Regulations SI 2019/758



mikrozid® alcohol free wipes No Change Service!

Version	Revision Date:	Date of last issue: 26.08.2022
06.07	07.11.2023	

	Decomposition temperature		Not applicable
	Boiling point/boiling range	:	ca. 100 °Cof the active solution
	Flash point	:	Not applicable
	Evaporation rate	:	not determined
	Flammability (solid, gas)	:	Not applicable
	Upper explosion limit / Upper flammability limit	:	Not applicable
	Lower explosion limit / Lower flammability limit	:	Not applicable
	Vapour pressure	:	No data available
	Relative vapour density	:	Not applicable
	Density	:	ca. 1.00 g/cm3 (20 °C) of the active solution
	Solubility(ies) Water solubility	:	completely soluble (20 °C)
	Partition coefficient: n- octanol/water	:	Not applicable
	Auto-ignition temperature	:	Not applicable
	Viscosity Viscosity, dynamic	:	No data available
	Viscosity, kinematic	:	not determined
	Explosive properties	:	No data available
	Oxidizing properties	:	The substance or mixture is not classified as oxidizing.
9.2	Other information Metal corrosion rate	:	None reasonably foreseeable.

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.

According to REACH Regulation (EC) No 1907/2006, as amended by UK REACH Regulations SI 2019/758



<i>mikrozid</i> ® Version 06.07	Revision Date: 07.11.2023	wij	Des No Change Service! Date of last issue: 26.08.2022
10 3 Possibility	y of hazardous rea	ctio	ne
-		CIIO	115
Hazardous	s reactions	:	None reasonably foreseeable.
10.4 Condition	s to avoid		
O an alltion a			Desta et frans franct ik and an el anvellakt
Conditions	to avoid	•	Protect from frost, heat and sunlight.
10.5 Incompati	ible materials		
Materials to	o avoid	:	None reasonably foreseeable.
10.6 Hazardou	s decomposition p	orod	ucts
None reas	onably foreseeable.		
SECTION 11: Toxicological information			
11.1 Information	on on toxicological	l eff	ects

Acute toxicity Not classified based on available information.

Product:

Acute oral toxicity	:	Acute toxicity estimate: > 2,000 mg/kg Method: Calculation method
---------------------	---	--

Components:

Quaternary ammonium compounds, C12-14-alkyl[(ethylphenyl)methyl]dimethyl, chlorides:

Acute oral toxicity	: LD50 (Rat): 344 mg/kg Method: OECD Test Guideline 401 Remarks: Based on data from similar materials
Acute inhalation toxicity	: Remarks: No data available
Acute dermal toxicity	: LD50 (Rabbit): 2,300 mg/kg Method: OECD Test Guideline 402 Remarks: Based on data from similar materials

didecyldimethylammonium chloride:

Acute oral toxicity	:	LD50 (Rat): 238 mg/kg Method: OECD Test Guideline 401 Assessment: Toxic if swallowed.
Acute inhalation toxicity	:	Remarks: No data available
Acute dermal toxicity	:	LD50 (Rabbit): 3,342 mg/kg

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

Acute oral toxicity	:	LD50 (Rat): > 300 - 2,000 mg/kg Method: OECD Test Guideline 401
		Assessment: Harmful if swallowed.

According to REACH Regulation (EC) No 1907/2006, as amended by UK REACH Regulations SI 2019/758



ersion 6.07	Revision Date: 07.11.2023		Date of last issue: 26.08.2022
Acute inh	alation toxicity	:	LC50 (Rat): > 2 mg/l Test atmosphere: dust/mist
Acute der	mal toxicity	:	LD50 (Rat): 1,100 mg/kg Assessment: Harmful in contact with skin.
	osion/irritation		
Not classi Compone	fied based on availa	able	Information.
			unds, C12-14-alkyl[(ethylphenyl)methyl]dimethyl, chlorid
Species	iry animonium con		Rabbit
Result		:	Corrosive after 3 minutes to 1 hour of exposure
didecyldi	methylammonium	chlo	pride:
Species		:	Rabbit
Exposure	time	:	4 h
Method Result		:	OECD Test Guideline 404 Corrosive after 3 minutes to 1 hour of exposure
I VeSuit		•	Consider after 5 minutes to 1 hour of exposure
	ry ammonium con	n <mark>po</mark> ι	Inds, benzyl-C12-16-alkyldimethyl, chlorides:
Species		:	Rabbit
Result GLP		:	Corrosive after 3 minutes to 1 hour of exposure no
••			
	eye damage/eye irr		
Not classi	fied based on availa	able	information.
Compone	ents:		
didecyldi	methylammonium	chlo	oride:
Result		:	Irreversible effects on the eye
Quaterna	ry ammonium con	n po ι	Inds, benzyl-C12-16-alkyldimethyl, chlorides:
Result		:	Irreversible effects on the eye
Respirate	ory or skin sensitis	satio	n
Skin sen			
Not classi	fied based on availa	able	information.
-	ory sensitisation fied based on availa	able	information
Compone		1010	
	methylammonium	chlo	oride:
Test Type	-	:	Buehler Test
Species		:	Guinea pig
Method		:	OECD Test Guideline 406
Result		:	Did not cause sensitisation on laboratory animals.

According to REACH Regulation (EC) No 1907/2006, as amended by UK REACH Regulations SI 2019/758



mikrozid® alcohol free wipes

Version	Revision Date:	Date of last issue: 26.08.2022
06.07	07.11.2023	

No Change Service!



: yes

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

Test Type:Buehler TestSpecies:Guinea pigMethod:OECD Test GuidelineResult:Did not cause sensitisGLP:yes	406 sation on laboratory animals.
--	--------------------------------------

Germ cell mutagenicity

Not classified based on available information.

Components:

Quaternary ammonium compounds, C12-14-alkyl[(ethylphenyl)methyl]dimethyl, chlorides:

Genotoxicity in vitro	: Test Type: Microbial mutagenesis assay (Ames test) Test system: Salmonella typhimurium Metabolic activation: with and without metabolic activation Result: negative GLP: yes
	Test Type: Chromosome aberration test in vitro Metabolic activation: with and without metabolic activation Method: OECD Test Guideline 473 Result: negative GLP: yes Remarks: Based on data from similar materials

didecyldimethylammonium chloride:

Genotoxicity in vitro	:	Test system: Salmonella typhimurium Metabolic activation: Metabolic activation Method: OECD Test Guideline 471 Result: Not mutagenic in Ames Test
Genotoxicity in vivo	:	Test Type: Mutagenicity (in vivo mammalian bone-marrow cytogenetic test, chromosomal analysis) Species: Rat Application Route: Oral Method: OECD Test Guideline 475 Result: negative
Germ cell mutagenicity- As- sessment	:	Animal testing did not show any mutagenic effects.

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

Genotoxicity in vitro	 Test Type: Microbial mutagenesis assay (Ames test) Test system: Salmonella typhimurium Metabolic activation: with and without metabolic activation Method: OECD Test Guideline 471 Result: Not mutagenic in Ames Test
11	Result: Not mutagenic in Ames Test

According to REACH Regulation (EC) No 1907/2006, as amended by UK REACH Regulations SI 2019/758



/ersion)6.07	Revision Date: 07.11.2023	wipes	No Change Service! Date of last issue: 26.08.2022
Genotoxi	city in vivo	Specie: Applica	pe: In vivo micronucleus test s: Mouse (male and female) tion Route: Oral : OECD Test Guideline 474 es
Germ cel sessment	l mutagenicity- As- t		n bacterial or mammalian cell cultures did not show nic effects.
Carcinog Not class	jenicity ified based on availal	ole informat	ion.
Compone	ents:		
Quaterna Remarks	ary ammonium com		2-14-alkyl[(ethylphenyl)methyl]dimethyl, chlorides a available
المام مراجاته		h la ni da .	
	imethylammonium o enicity - Assess-		testing did not show any carcinogenic effects.
	enicity - Assess-		nzyl-C12-16-alkyldimethyl, chlorides: testing did not show any carcinogenic effects.
Carcinogo ment Reprodu	-	: Animal	testing did not show any carcinogenic effects.
Carcinogo ment Reprodu	enicity - Assess- ctive toxicity ified based on availal	: Animal	testing did not show any carcinogenic effects.
Carcinogo ment Reprodu Not class <u>Compon</u>	enicity - Assess- ctive toxicity ified based on availal ents:	: Animal	testing did not show any carcinogenic effects.
Carcinogo ment Reprodu Not class <u>Compon</u>	enicity - Assess- ctive toxicity ified based on availal <u>ents:</u> ary ammonium com	: Animal ble informat bounds, C1 : Test Ty Species Applica Genera weight	testing did not show any carcinogenic effects. ion. 2-14-alkyl[(ethylphenyl)methyl]dimethyl, chlorides pe: Two-generation study s: Rat, male and female tion Route: Oral I Toxicity - Parent: NOAEL: 51 - 102 mg/kg body I Toxicity F1: NOAEL: 51 - 102 mg/kg body weight
Carcinogo ment Reprodu Not class Compone Quaterna Effects or didecyldi	enicity - Assess- ctive toxicity ified based on availal <u>ents:</u> ary ammonium com n fertility	: Animal ble informat bounds, C1 : Test Ty Species Applica Genera weight Genera GLP: ye	testing did not show any carcinogenic effects. ion. 2-14-alkyl[(ethylphenyl)methyl]dimethyl, chlorides pe: Two-generation study s: Rat, male and female tion Route: Oral I Toxicity - Parent: NOAEL: 51 - 102 mg/kg body I Toxicity F1: NOAEL: 51 - 102 mg/kg body weight
Carcinogo ment Reprodu Not class Compone Quaterna Effects or didecyldi	enicity - Assess- ctive toxicity ified based on availal ents: ary ammonium com n fertility imethylammonium c ctive toxicity - As-	: Animal ble informat bounds, C1 : Test Ty Species Applica Genera weight Genera GLP: ye	testing did not show any carcinogenic effects. ion. 2-14-alkyl[(ethylphenyl)methyl]dimethyl, chlorides pe: Two-generation study s: Rat, male and female tion Route: Oral I Toxicity - Parent: NOAEL: 51 - 102 mg/kg body I Toxicity F1: NOAEL: 51 - 102 mg/kg body weight es
Carcinoge ment Reprodu Not class <u>Compone</u> Quaterna Effects or didecyldi Reproduc sessment	enicity - Assess- ctive toxicity ified based on availab ents: ary ammonium composite for fertility imethylammonium o ctive toxicity - As-	 Animal Animal ble informat bounds, C1 Test Ty Species Applica Genera Weight Genera GLP: yes chloride: No data 	testing did not show any carcinogenic effects. ion. 2-14-alkyl[(ethylphenyl)methyl]dimethyl, chlorides pe: Two-generation study s: Rat, male and female tion Route: Oral I Toxicity - Parent: NOAEL: 51 - 102 mg/kg body I Toxicity F1: NOAEL: 51 - 102 mg/kg body weight es
Carcinoge ment Reprodu Not class Compone Quaterna Effects or didecyldi Reproduc sessment	enicity - Assess- ctive toxicity ified based on availab ents: ary ammonium comp in fertility imethylammonium comp ctive toxicity - As-	 Animal Animal Animal animal animal bounds, C1 Test Ty Species Applica Genera GLP: yes chloride: No data bounds, bes Test Ty Species Applica Genera weight 	testing did not show any carcinogenic effects. ion. 2-14-alkyl[(ethylphenyl)methyl]dimethyl, chlorides pe: Two-generation study s: Rat, male and female tion Route: Oral I Toxicity - Parent: NOAEL: 51 - 102 mg/kg body I Toxicity F1: NOAEL: 51 - 102 mg/kg body weight a available

According to REACH Regulation (EC) No 1907/2006, as amended by UK REACH Regulations SI 2019/758



ersion 6.07	Revision Date 07.11.2023		IPES No Change Service! Date of last issue: 26.08.2022
			Fertility: NOAEL: 139 - 198 mg/kg body weight Method: OECD Test Guideline 416 Result: Animal testing did not show any effects on fertility. GLP: yes
Effects of ment	n foetal develop-	:	Species: Rat Application Route: Oral General Toxicity Maternal: NOAEL: 8.1 mg/kg body weight Developmental Toxicity: NOAEL: 81 mg/kg body weight Method: OECD Test Guideline 414 GLP: yes Remarks: Animal testing did not show any effects on foetal development.
STOT -	single exposure		
Not class	sified based on ava	ilable	information.
<u>Compor</u>	nents:		
Quatern	ary ammonium co	ompo	unds, C12-14-alkyl[(ethylphenyl)methyl]dimethyl, chloride
Remarks	3	:	No data available
didecvlo	limethylammoniu	n chl	loride:
didecylo Remarks	limethylammoniu	n chl :	
-	-		
Remarks Quatern	ary ammonium co	: ompo	No data available unds, benzyl-C12-16-alkyldimethyl, chlorides:
Remarks	ary ammonium co	:	No data available
Quatern	ary ammonium co	i ompo i	No data available unds, benzyl-C12-16-alkyldimethyl, chlorides: No data available
Quatern	ary ammonium co s repeated exposure sified based on ava	i ompo i	No data available unds, benzyl-C12-16-alkyldimethyl, chlorides: No data available
Quatern Quatern Remarks STOT - I Not class <u>Compor</u>	ary ammonium co s repeated exposure sified based on ava nents:	: mpo : ilable	No data available unds, benzyl-C12-16-alkyldimethyl, chlorides: No data available information.
Quatern Quatern Remarks STOT - I Not class <u>Compor</u>	ary ammonium co repeated exposure sified based on ava nents: ary ammonium co	: mpo : ilable	No data available unds, benzyl-C12-16-alkyldimethyl, chlorides: No data available information.
Quatern Quatern Remarks STOT - I Not class <u>Compor</u> Quatern	ary ammonium co repeated exposure sified based on ava nents: ary ammonium co	empo : ilable empo :	No data available unds, benzyl-C12-16-alkyldimethyl, chlorides: No data available information. unds, C12-14-alkyl[(ethylphenyl)methyl]dimethyl, chloride No data available
Remarks Quatern Remarks STOT - I Not class <u>Compor</u> Quatern Remarks didecylo	ary ammonium co repeated exposure sified based on ava <u>nents:</u> ary ammonium co s	empo : ilable empo :	No data available unds, benzyl-C12-16-alkyldimethyl, chlorides: No data available information. unds, C12-14-alkyl[(ethylphenyl)methyl]dimethyl, chloride No data available loride:
Quatern Quatern Remarks STOT - I Not class <u>Compor</u> Quatern	ary ammonium co repeated exposure sified based on ava <u>nents:</u> ary ammonium co s	empo : ilable empo :	No data available unds, benzyl-C12-16-alkyldimethyl, chlorides: No data available information. unds, C12-14-alkyl[(ethylphenyl)methyl]dimethyl, chloride: No data available
Remarks Quatern Remarks STOT - I Not class <u>Compor</u> Quatern Remarks didecylo	ary ammonium co repeated exposure sified based on ava <u>nents:</u> ary ammonium co s dimethylammonium	ompo ilable ompo : m chl	No data available unds, benzyl-C12-16-alkyldimethyl, chlorides: No data available information. unds, C12-14-alkyl[(ethylphenyl)methyl]dimethyl, chloride No data available loride:
Remarks Quatern Remarks STOT - I Not class <u>Compor</u> Quatern Remarks didecylo	ary ammonium co repeated exposure sified based on ava <u>nents:</u> ary ammonium co simethylammonium	ompo ilable ompo : m chl	No data available unds, benzyl-C12-16-alkyldimethyl, chlorides: No data available information. unds, C12-14-alkyl[(ethylphenyl)methyl]dimethyl, chloride No data available loride: No data available
Remarks Quatern Remarks STOT - I Not class <u>Compor</u> Quatern Remarks didecylo Remarks Quatern	ary ammonium co repeated exposure sified based on ava <u>nents:</u> ary ammonium co simethylammonium	ompo ilable ompo : m chl	No data available unds, benzyl-C12-16-alkyldimethyl, chlorides: No data available information. unds, C12-14-alkyl[(ethylphenyl)methyl]dimethyl, chloride No data available loride: No data available unds, benzyl-C12-16-alkyldimethyl, chlorides:
Remarks Quatern Remarks STOT - I Not class <u>Compor</u> Quatern Remarks didecylo Remarks Quatern	ary ammonium co sepeated exposure sified based on ava nents: ary ammonium co s dimethylammonium ary ammonium co s ary ammonium co	ompo ilable ompo : m chl	No data available unds, benzyl-C12-16-alkyldimethyl, chlorides: No data available information. unds, C12-14-alkyl[(ethylphenyl)methyl]dimethyl, chloride No data available loride: No data available unds, benzyl-C12-16-alkyldimethyl, chlorides:
Remarks Quatern Remarks STOT - I Not class <u>Compor</u> Quatern Remarks Quatern Remarks Repeate <u>Compor</u>	ary ammonium co sepeated exposure sified based on ava <u>nents:</u> ary ammonium co simethylammonium ary ammonium co simethylammonium co simethylammonium co	mpo ilable mpo : mchl :	No data available unds, benzyl-C12-16-alkyldimethyl, chlorides: No data available information. unds, C12-14-alkyl[(ethylphenyl)methyl]dimethyl, chloride: No data available loride: No data available unds, benzyl-C12-16-alkyldimethyl, chlorides:

Remarks

According to REACH Regulation (EC) No 1907/2006, as amended by UK REACH Regulations SI 2019/758



mikrozid	® alcohol free wipes	No Change Service!
Version	Revision Date:	Date of last issue: 26.08.2022
06.07	07.11.2023	

Quaternarv ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides:

: No data available

compor	inus, benzyi-c iz-io-aikyiun
:	Rat, male
:	31 mg/kg
:	Oral
:	90-day
:	OECD Test Guideline 408
:	yes
:	Rat
:	214 mg/kg
:	Oral
:	14-days
:	OECD Test Guideline 407

Aspiration toxicity

Not classified based on available information.

Further information

Product:

Remarks

: No data is available on the product itself.

SECTION 12: Ecological information

12.1 Toxicity

Components:

Quaternary ammonium compounds, C12-14-alkyl[(ethylphenyl)methyl]dimethyl, chlorides:

Toxicity to fish	:	LC50 (Fish): 1.06 mg/l Exposure time: 96 h
		EC50 (Daphnia magna (Water flea)): 0.015 mg/l Exposure time: 48 h
M-Factor (Acute aquatic tox- icity)	:	10
Toxicity to fish (Chronic tox- icity)	:	NOEC: 0.032 mg/l Exposure time: 28 d Species: Oncorhynchus mykiss (rainbow trout)
Toxicity to daphnia and other aquatic invertebrates (Chron- ic toxicity)	:	NOEC: 0.00415 mg/l Exposure time: 21 d Species: Daphnia magna (Water flea) GLP: yes
M-Factor (Chronic aquatic toxicity)	:	1

According to REACH Regulation (EC) No 1907/2006, as amended by UK REACH Regulations SI 2019/758



mikrozid® alcohol free wipes

Version	Revision Date:	Date of last issue: 26.08.2022
06.07	07.11.2023	

No Change Service!

didecyldimethylammonium chloride:

aldecylaimethylainmonium	0111	
Toxicity to fish	:	LC50 (Pimephales promelas (fathead minnow)): 0.19 mg/l Exposure time: 96 h GLP: yes
Toxicity to daphnia and other aquatic invertebrates	:	EC50 (Daphnia magna (Water flea)): 0.062 mg/l Exposure time: 48 h GLP: yes
Toxicity to algae/aquatic plants	:	ErC50 (Pseudokirchneriella subcapitata (green algae)): 0.026 mg/l Exposure time: 96 h Method: OECD Test Guideline 201 GLP: yes
M-Factor (Acute aquatic tox- icity)	:	10
Toxicity to fish (Chronic tox- icity)	:	NOEC: 0.032 mg/l Exposure time: 34 d Species: Danio rerio (zebra fish) Method: OECD Test Guideline 210
Toxicity to daphnia and other aquatic invertebrates (Chron- ic toxicity)	:	NOEC: 0.014 mg/l Exposure time: 21 d Species: Daphnia magna (Water flea) Method: Expert judgement and weight of evidence determina- tion.
M-Factor (Chronic aquatic toxicity)	:	1
		unde henryl C12 16 ellyddimethyl ehlerideo.
Toxicity to fish	:	unds, benzyl-C12-16-alkyldimethyl, chlorides: LC50 (Oncorhynchus mykiss (rainbow trout)): 0.85 mg/l Exposure time: 96 h Method: OECD Test Guideline 203
Toxicity to daphnia and other aquatic invertebrates	:	EC50 (Daphnia magna): 0.015 mg/l Exposure time: 48 h
Toxicity to algae/aquatic plants	:	IC50 : 0.03 mg/l Exposure time: 72 h
M-Factor (Acute aquatic tox- icity)	:	10
Toxicity to fish (Chronic tox- icity)	:	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)

According to REACH Regulation (EC) No 1907/2006, as amended by UK REACH Regulations SI 2019/758



mikrozid® alcohol free wipes No Change Service!

Version	Revision Date:
06.07	07.11.2023

Date of last issue: 26.08.2022

M-Factor (Chronic aquatic : 1 toxicity)

12.2 Persistence and degradability

Components:

...

Quaternary ammonium compounds, C12-14-alkyl[(ethylphenyl)methyl]dimethyl, chlorides:

Biodegradability	: Result: Readily biodegradable. Biodegradation: 95.5 % Exposure time: 28 d
Biodegradability	Method: OECD Test Guideline 301B Remarks: Based on data from similar materials

didecyldimethylammonium chloride:

Biodegradability	 Concentration: 10 mg/l Result: Readily biodegradable. Biodegradation: 72 % Exposure time: 28 d Method: OECD 301B/ ISO 9439/ EEC 84/449 C5 GLP: yes
------------------	--

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

Biodegradability	: Concentration: 5 mg/l Result: Readily biodegradable.
	Biodegradation: 95.5 % Exposure time: 28 d
	Method: OECD Test Guideline 301B

12.3 Bioaccumulative potential

Components:

Quaternary ammonium cor	npo	unds, C12-14-alkyl[(ethylphenyl)methyl]dimethyl, chlorides:
Bioaccumulation	:	Remarks: Bioaccumulation is unlikely.

didecyldimethylammonium chloride:

Bioconcentration factor (BCF): 81	Bioaccumulation	: Species: Lepomis macrochirus (Bluegill sunfish) Exposure time: 46 d Bioconcentration factor (BCF): 81
-----------------------------------	-----------------	---

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

Bioaccumulation	:	Exposure time: 35 d Concentration: 0.076 mg/l Bioconcentration factor (BCF): 79 GLP: yes Remarks: Does not bioaccumulate.
Partition coefficient: n- octanol/water	:	log Pow: 2.75 (20 °C)

According to REACH Regulation (EC) No 1907/2006, as amended by UK REACH Regulations SI 2019/758



mikrozid® alcohol free wipes	nikrozid® alcohol free wij	oes
------------------------------	----------------------------	-----

	26.08.2022
06.07 07.11.2023	

No Change Service!

12.4 Mobility in soil

Components:

Quaternary ammonium compounds, C12-14-alkyl[(ethylphenyl)methyl]dimethyl, chlorides:				
Mobility :	Medium: Soil Remarks: immobile			
didecyldimethylammonium chloride:				
Mobility :	Remarks: Mobile in soils			
Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides:				
Mobility :	Remarks: 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 Other adverse effects				
Product:				
Endocrine disrupting poten- : tial	The substance/mixture does not contain components consid- ered 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.			

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 : Empty containers should be taken to an approved waste handling site for recycling or disposal.

SECTION 14: Transport information

14.1	UN	number

ADR	: Not regulated as a dangerous goo	d
IMDG	: Not regulated as a dangerous goo	d

According to REACH Regulation (EC) No 1907/2006, as amended by UK REACH Regulations SI 2019/758



mikrozid® a		wi			
Version 06.07	Revision Date: 07.11.2023		Date of last issue: 26.08.2022		
ΙΑΤΑ		:	Not regulated as a dangerous good		
14.2 UN proper s	shipping name				
ADR		:	Not regulated as a dangerous good		
IMDG		: Not regulated as a dangerous good			
ΙΑΤΑ		:	: Not regulated as a dangerous good		
14.3 Transport h	azard class(es)				
ADR		:	Not regulated as a dangerous good		
IMDG		:	Not regulated as a dangerous good		
ΙΑΤΑ		:	Not regulated as a dangerous good		
14.4 Packing gro	oup				
ADR		:	Not regulated as a dangerous good		
IMDG		:	Not regulated as a dangerous good		
IATA (Cargo))	:	Not regulated as a dangerous good		
IATA (Passe	enger)	:	Not regulated as a dangerous good		
14.5 Environmer	ntal hazards				
Not regulated	d as a dangerous	goo	od		

14.6 Special precautions for user

Not applicable

14.7 Transport in bulk according to Annex II of Marpol and the IBC Code Not applicable for product as supplied.

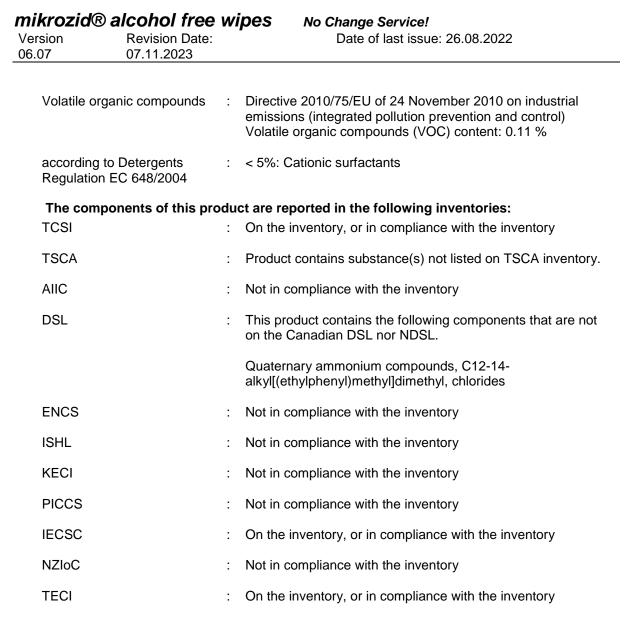
SECTION 15: Regulatory information

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

Relevant EU provisions transposed through retained EU law

UK REACH List of restrictions (Annex 17)	:	Conditions of restriction for the fol- lowing entries should be considered: Number on list 3
UK REACH Candidate list of substances of very high concern (SVHC) for Authorisation	:	Not applicable
The Persistent Organic Pollutants Regulations (retained Regulation (EU) 2019/1021 as amended for Great Britain)	:	Not applicable
Regulation (EC) No 1005/2009 on substances that deplete the ozone layer	:	Not applicable
UK REACH List of substances subject to authorisation (Annex XIV)	:	Not applicable

According to REACH Regulation (EC) No 1907/2006, as amended by UK REACH Regulations SI 2019/758



schülke ->

15.2 Chemical safety assessment

Exempt

SECTION 16: Other informationFul	l te	ext 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.
H318	:	Causes serious 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	:	Short-term (acute) aquatic hazard
Aquatic Chronic	:	Long-term (chronic) aquatic hazard
Eye Dam.	:	Serious eye damage
Skin Corr.	:	Skin corrosion

According to REACH Regulation (EC) No 1907/2006, as amended by UK REACH Regulations SI 2019/758



mikrozid® alcohol free wipes

No Change Service!

VersionRevision Date:Date of last issue: 26.08.202206.0707.11.2023

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 - Emergencv 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; SVHC - Substance of very high concern; TCSI - Taiwan Chemical Substance Inventory; TECI -Thailand Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative

Further information

Classification of the mixture:

Aquatic Chronic 3

H412

Classification procedure: Calculation method

Changes since the last version are highlighted in the margin. This version replaces all previous versions.

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.