

mikrozid® AF wipes**No Change Service!**Version
05.00Revision Date:
19.10.2015Date of last issue: 12.08.2015
Date of first issue: 27.09.2007**SECTION 1: Identification of the substance/mixture and of the company/undertaking****1.1 Product identifier**

Trade name : mikrozid® AF wipes

1.2 Relevant identified uses of the substance or mixture and uses advised againstUse of the Sub-
stance/Mixture : Disinfectants and general biocidal products**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.comSupplier : Schülke & Mayr UK Ltd.
Cygnat House
1, Jenkin Road, Meadowhall

Sheffield S9 1AT
United Kingdom
Telephone: +44 114 254 35 00
Telefax: +44 114 254 35 01
mail.uk@schulke.comE-mail address of person
responsible for the
SDS/Contact person : Application Department HI
+49 (0)40/ 521 00 544
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
Emergency telephone num-
ber : +49 (0)40 / 52 100 -0**SECTION 2: Hazards identification****2.1 Classification of the substance or mixture****Classification (REGULATION (EC) No 1272/2008)**

Flammable liquids, Category 3	H226: Flammable liquid and vapour.
Eye irritation, Category 2	H319: Causes serious eye irritation.
Specific target organ toxicity - single ex- posure, Category 3	H336: May cause drowsiness or dizziness.

2.2 Label elements**Labelling (REGULATION (EC) No 1272/2008)**

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

schülke 

mikroZid® AF wipes

No Change Service!

Version
05.00

Revision Date:
19.10.2015

Date of last issue: 12.08.2015
Date of first issue: 27.09.2007

Hazard pictograms

:



Signal word

: Warning

Hazard statements

: H226
H319
H336

Flammable liquid and vapour.
Causes serious eye irritation.
May cause drowsiness or dizziness.

Precautionary statements

: P102
P210

Keep out of reach of children.
Keep away from heat, hot surfaces, sparks,
open flames and other ignition sources. No
smoking.

P280

Wear protective gloves (e.g. Nitrile rubber)
/eye protection.

P305+P351+P338

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

P337+P313

If eye irritation persists: Get medical advice/
attention.

Further information

: Use biocides safely. Always read the label and product infor-
mation before use.

2.3 Other hazards

This mixture contains no substance considered to be persistent, bioaccumulating and toxic (PBT).
Has a degreasing effect on the skin.

SECTION 3: Composition/information on ingredients of the active solution

3.2 Mixtures

Chemical nature : Aqueous, alcohol containing solution on non-woven

Hazardous components

Chemical Name	Index-Number CAS-No. EC-No. Registration number	Classification	Concentration (% w/w)
Propan-1-ol	603-003-00-0 71-23-8 200-746-9 01-2119486761-29-XXXX	Flam. Liq. 2; H225 Eye Dam. 1; H318 STOT SE 3; H336	35
Ethanol	603-002-00-5 64-17-5 200-578-6 01-2119457610-43-XXXX	Flam. Liq. 2; H225 Eye Irrit. 2; H319	25

For explanation of abbreviations see section 16.

mikrozid® AF wipes **No Change Service!**Version
05.00Revision Date:
19.10.2015Date of last issue: 12.08.2015
Date of first issue: 27.09.2007

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

- | | | |
|-------------------------|---|------------------------------------------------------------------------------------------------------------------|
| If inhaled | : | If symptoms persist, call a physician. |
| In case of skin contact | : | Wash with water and soap as a precaution. If skin irritation persists, call a physician. |
| In case of eye contact | : | Rinse thoroughly with plenty of water, also under the eyelids. If eye irritation persists, consult a specialist. |

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, Alcohol-resistant foam, Carbon dioxide (CO ₂), Water spray jet |
| Unsuitable extinguishing media | : | Foam, High volume water jet |

5.2 Special hazards arising from the substance or mixture

- | | | |
|--------------------------------------------------------------------------------------------------|---|----------------------------------------------------------|
| Specific hazards during fire-fighting | : | Cool closed containers exposed to fire with water spray. |
| Specific risk from the substance or the product itself, its combustion products or evolved gases | : | No special risks known. |

5.3 Advice for firefighters

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

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

- | | | |
|----------------------|---|----------------------------------------------------------|
| Personal precautions | : | Remove all sources of ignition. Avoid contact with eyes. |
|----------------------|---|----------------------------------------------------------|

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. |
|-------------------------|---|------------------------------------|

mikrozid® AF wipes **No Change Service!**Version
05.00Revision Date:
19.10.2015Date of last issue: 12.08.2015
Date of first issue: 27.09.2007**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 : Wear personal protective equipment.
 Advice on protection against fire and explosion : Keep away from sources of ignition - No smoking.
 Hygiene measures : Keep away from food and drink.

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 direct sunlight.
 Recommended storage temperature: 15 - 25°C
 || Advice on common storage : Strong oxidizing agents

7.3 Specific end use(s)

Specific use(s) : none

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

Components	CAS-No.	Value type (Form of exposure)	Control parameters	Basis
Ethanol	64-17-5	WEL	1.000 ppm 1.920 mg/m ³	HSE
Propan-1-ol	71-23-8	WEL	200 ppm 500 mg/m ³	HSE
		WEL	250 ppm 625 mg/m ³	HSE

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

Substance name	End Use	Exposure routes	Potential health effects	Value
Propan-1-ol	Workers	Skin contact	Long-term exposure, Systemic effects	136 mg/kg
	Workers	Inhalation	Long-term exposure, Systemic effects	268 mg/kg
	Workers	Inhalation	Short-term exposure, Systemic effects	1723 mg/kg
Ethanol	Workers	Inhalation	Acute effects, Local effects	1900 mg/m ³
	Workers	Skin contact	Chronic effects	343 mg/m ³
	Workers	Inhalation	Chronic effects	950 mg/m ³

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

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

schülke 

mikrozid® AF wipes

No Change Service!

Version
05.00

Revision Date:
19.10.2015

Date of last issue: 12.08.2015
Date of first issue: 27.09.2007

Substance name	Environmental Compartment	Value
Propan-1-ol	Fresh water	10 mg/l
	Marine water	1 mg/l
	Soil	2,2 mg/l
	Marine sediment	2,28 mg/kg
	Fresh water sediment	22,8 mg/kg
	Effects on waste water treatment plants	96 mg/l
	Intermittent use/release	10 mg/l
Ethanol	Fresh water	0,96 mg/l
	Marine water	0,79 mg/l
	Fresh water sediment	3,6 mg/kg
	Soil	0,63 mg/kg

8.2 Exposure controls

Personal protective equipment

Hand protection : Prolonged contact: Nitrile rubber gloves e.g. Camatril (>120 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 skin and eyes.

SECTION 9: Physical and chemical properties of the active solution

9.1 Information on basic physical and chemical properties

Appearance : liquid
Colour : colourless
Odour : alcohol-like
Odour Threshold : not determined
pH : Not applicable
Melting point/freezing point : < -5 °C
Decomposition temperature : No data available
Boiling point/boiling range : ca. 80 °C
Flash point : 27 °C, DIN 51755 Part 1
Evaporation rate : No data available
Flammability (solid, gas) : Sustains combustion
Vapour pressure : ca. 50 hPa, 20 °C
Relative vapour density : No data available
Density : ca. 0,89 g/cm³, 20 °C
Solubility(ies)
Water solubility : in all proportions , 20 °C
Partition coefficient: n-octanol/water : Not applicable
Auto-ignition temperature : Propan-1-ol: 412 °C
Viscosity
Viscosity, dynamic : not determined

mikrozid® AF wipes**No Change Service!**Version
05.00Revision Date:
19.10.2015Date of last issue: 12.08.2015
Date of first issue: 27.09.2007

Flow time : < 15 s at 20 °C, DIN 53211
Explosive properties : Not explosive
Oxidizing properties : Not applicable

9.2 Other information

No 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

None reasonably foreseeable.

10.4 Conditions to avoid

Heat, flames and sparks.

10.5 Incompatible materials

Strong acids and oxidizing agents,

10.6 Hazardous decomposition products

None reasonably foreseeable.

SECTION 11: Toxicological information of the active solution**11.1 Information on toxicological effects****Acute toxicity****Product:**

Acute oral toxicity : Acute toxicity estimate: > 15000 mg/kg, Estimation of acute oral toxicity, in accordance with the calculation methode presented in the GHS (Globally Harmonized System), Part 3, Chapter 3.1)

Acute inhalation toxicity : Acute toxicity estimate: > 50 mg/l, in accordance with the calculation methode presented in the GHS (Globally Harmonized System), Part 3, Chapter 3.1)

Acute dermal toxicity : Acute toxicity estimate: > 10000 mg/kg, in accordance with the calculation methode presented in the GHS (Globally Harmonized System), Part 3, Chapter 3.1)

Skin corrosion/irritation**Components:****Propan-1-ol:**

No skin irritation

Ethanol:

Rabbit, No skin irritation

Serious eye damage/eye irritation**Product:**

mikrozid® AF wipes**No Change Service!**Version
05.00Revision Date:
19.10.2015Date of last issue: 12.08.2015
Date of first issue: 27.09.2007

Causes serious eye irritation. The toxicological data has been taken from products of similar composition., Expert judgement

Respiratory or skin sensitisation**Components:****Propan-1-ol:**

Does not cause skin sensitisation. Guinea pig, Maximisation Test (GPMT)

Ethanol:

Did not cause sensitisation on laboratory animals. Maximisation Test (GPMT), Guinea pig

Germ cell mutagenicity**Components:****Propan-1-ol:**

Germ cell mutagenicity- Assessment : Not mutagenic in Ames Test

Ethanol:

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

Genotoxicity in vivo : not mutagenic

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

Carcinogenicity**Components:****Propan-1-ol:**

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

Ethanol:

Carcinogenicity - Assessment : Did not show carcinogenic effects in animal experiments.

Reproductive toxicity**Components:****Propan-1-ol:**

Effects on fertility : Rat, Inhalation, NOAEL: 8,6 mg/l

Effects on foetal development : Rat, Inhalation, NOAEL: 8,6 mg/l

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

Ethanol:

Rat, Oral, NOAEL: 2.000 mg/kg

Reproductive toxicity - Assessment : In animal testing, risk of impaired fertility was shown only after administration of very high doses of this substance.

STOT - single exposure**Product:**

May cause drowsiness or dizziness.

STOT - repeated exposure**Components:****Propan-1-ol:**

The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

mikrozid® AF wipes**No Change Service!**Version
05.00Revision Date:
19.10.2015Date of last issue: 12.08.2015
Date of first issue: 27.09.2007**Repeated dose toxicity****Components:****Ethanol:**

Rat, NOAEL: 1.730 mg/kg, LOAEL: 3.160 mg/kg, Oral90 d

Aspiration toxicity

No data available

Further information**Product:**

The product has not been tested.

SECTION 12: Ecological information of the active solution**12.1 Toxicity****Components:****Propan-1-ol:**

Toxicity to fish : LC50 (Fish): 3.200 mg/l, 96 h
Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 3.642 mg/l, 48 h
Toxicity to algae : NOEC (Chlorella pyrenoidosa (aglae)): 1.150 mg/l, 48 h
Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC: > 100 mg/l, 21 d, Daphnia magna (Water flea), OECD Test Guideline 211

Ethanol:

Toxicity to fish : LC50 (Leuciscus idus (Golden orfe)): 8.140 mg/l, 48 h
Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): > 5.000 mg/l, 48 h
Toxicity to algae : IC50 (Scenedesmus quadricauda (Green algae)): > 100 mg/l, 72 h

12.2 Persistence and degradability**Product:**

Biodegradability : Readily biodegradable, OECD 301D / EEC 84/449 C6
Chemical Oxygen Demand (COD) : 13.000 mg/l, 1% solution

Components:**Propan-1-ol:**

Biodegradability : Readily biodegradable

Ethanol:

Biodegradability : Readily biodegradable

12.3 Bioaccumulative potential**Components:****Propan-1-ol:**

Bioaccumulation : Bioaccumulation is unlikely.
Partition coefficient: n-octanol/water : log Pow: 0,43

Ethanol:

Bioaccumulation : Bioaccumulation is unlikely.
Partition coefficient: n-octanol/water : log Pow: -0,14, calculated

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

schülke 

mikrozid® AF wipes

No Change Service!

Version
05.00

Revision Date:
19.10.2015

Date of last issue: 12.08.2015
Date of first issue: 27.09.2007

octanol/water

12.4 Mobility in soil

Components:

Propan-1-ol:

Mobility : Mobile in soils

Ethanol:

Mobility : No data available

12.5 Results of PBT and vPvB assessment

Product:

Assessment : This mixture contains no substance considered to be persistent, bioaccumulating and toxic (PBT).

12.6 Other adverse effects

Product:

Additional ecological information : none

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

ADR : UN 3175

IMDG : UN 3175

IATA : UN 3175

14.2 UN proper shipping name

ADR : SOLIDS CONTAINING FLAMMABLE LIQUID, N.O.S.
(Propan-1-ol, Ethanol)

IMDG : SOLIDS CONTAINING FLAMMABLE LIQUID, N.O.S.
(Propan-1-ol, Ethanol)

IATA : Solids containing flammable liquid, n.o.s.
(Propan-1-ol, Ethanol)

14.3 Transport hazard class(es)

ADR : 4.1

IMDG : 4.1

IATA : 4.1

14.4 Packing group

ADR

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

schülke 

mikrozid® AF wipes

No Change Service!

Version
05.00

Revision Date:
19.10.2015

Date of last issue: 12.08.2015
Date of first issue: 27.09.2007

Packing group : II
Classification Code : F1
Hazard Identification Number : 40
Labels : 4.1
Tunnel restriction code : E

IMDG

Packing group : II
Labels : 4.1
EmS Code : F-A, S-I

IATA

Packing instruction (cargo aircraft) : 448
Packing group : II
Labels : Flammable Solid

14.5 Environmental hazards

ADR

Environmentally hazardous : no

IMDG

Marine pollutant : no

14.6 Special precautions for user

For personal protection see section 8.

14.7 Transport in bulk according to Annex II of MARPOL 73/78 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

Legislation on the control of major-accident hazards involving dangerous substances : Directive 96/82/EC does not apply

Volatile organic compounds : Volatile organic compounds (VOC) content: 60 %, of the active solution, Directive 2010/75/EC on the limitation of emissions of volatile organic compounds

15.2 Chemical Safety Assessment

Exempt

SECTION 16: Other information

Full text of H-Statements

H225 : Highly flammable liquid and vapour.
H318 : Causes serious eye damage.
H319 : Causes serious eye irritation.
H336 : May cause drowsiness or dizziness.

Full text of other abbreviations

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

schülke 

mikrozid® AF wipes

No Change Service!

Version
05.00

Revision Date:
19.10.2015

Date of last issue: 12.08.2015
Date of first issue: 27.09.2007

Eye Dam.	: Serious eye damage
Eye Irrit.	: Eye irritation
Flam. Liq.	: Flammable liquids
STOT SE	: Specific target organ toxicity - single exposure

(Q)SAR - (Quantitative) Structure Activity Relationship; 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; ASTM - American Society for the Testing of Materials; bw - Body weight; CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008; DIN - Standard of the German Institute for Standardisation; 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; ErCx - Concentration associated with x% growth rate response; GHS - Globally Harmonized System; 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; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISO - International Organisation for Standardization; 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; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; 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; TRGS - Technical Rule for Hazardous Substances; UN - United Nations; vPvB - Very Persistent and Very Bioaccumulative; DSL - Domestic Substances List (Canada); KECI - Korea Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States); AICS - Australian Inventory of Chemical Substances; IECSC - Inventory of Existing Chemical Substances in China; ENCS - Existing and New Chemical Substances (Japan); ISHL - Industrial Safety and Health Law (Japan); PICCS - Philippines Inventory of Chemicals and Chemical Substances; NZIoC - New Zealand Inventory of Chemicals; TCSI - Taiwan Chemical Substance Inventory; CMR - Carcinogen, Mutagen or Reproductive Toxicant; GLP - Good Laboratory Practice

Further information

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.