

mikrozyd® AF wipes **No Change Service!**

Version Revision Date: Date of last issue: 23.10.2017
05.07 03.04.2018 Date of first issue: 12.07.2001

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

Trade name : mikrozyd® AF wipes

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

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

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

1.4 Emergency telephone number

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

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- H336: May cause drowsiness or dizziness.
posure, Category 3

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

Hazard pictograms :



Signal word : Warning

Hazard statements : H226 Flammable liquid and vapour.

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- H319 Causes serious eye irritation.
H336 May cause drowsiness or dizziness.
- Precautionary statements : P102 Keep out of reach of children.
P210 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.
- Special labelling of certain mixtures : Labelling according to Regulation (EC) No. 648/2004: (per-fumes)
- 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.
Has a degreasing effect on the skin.

SECTION 3: Composition/information on ingredients**3.2 Mixtures**

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

Hazardous components

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

For explanation of abbreviations see section 16.

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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.
- If swallowed : If accidentally swallowed obtain immediate medical attention.

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 (CO₂)
Water spray jet
- Unsuitable extinguishing media : Foam
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 : Cool closed containers exposed to fire with water spray.
- 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.

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

- Personal precautions : Remove all sources of ignition.

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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.

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 : Do not store together with oxidising 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	Permissible exposure limit	500 ppm 960 mg/m ³	TRGS 900
		Ceiling Limit Value	1.000 ppm 1.920 mg/m ³	TRGS 900
		Permissible exposure limit	1.000 ppm 1.900 mg/m ³	OSHA
Propan-1-ol	71-23-8	Permissible exposure limit	200 ppm 500 mg/m ³	OSHA

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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/m ³
	Workers	Inhalation	Short-term exposure, Systemic effects	1723 mg/m ³
Ethanol	Workers	Inhalation	Acute effects, Local effects	1900 mg/m ³
	Workers	Skin contact	Chronic effects	343 mg/kg
	Workers	Inhalation	Chronic effects	950 mg/m ³

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

Substance name	Environmental Compartment	Value
Propan-1-ol	Fresh water	10 mg/l
	Marine water	1 mg/l
	Fresh water sediment	22,8 mg/kg
	Marine sediment	2,28 mg/kg
	Effects on waste water treatment plants	96 mg/l
	Soil	2,2 mg/kg
Ethanol	Intermittent use/release	10 mg/l
	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**9.1 Information on basic physical and chemical properties**

Appearance : liquid

Colour : colourless

Odour : alcohol-like

Odour Threshold : not determined

pH : Not applicable

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according to Regulation (EC) No. 1907/2006

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Melting point/freezing point	:	< -5 °C
Decomposition temperature	:	No data available
Boiling point/boiling range	:	ca. 80 °C
Flash point	:	27 °C Method: DIN 51755 Part 1
Evaporation rate	:	No data available
Flammability (solid, gas)	:	Sustains combustion
Upper explosion limit	:	17,5 %(V) Raw material
Lower explosion limit	:	2,1 %(V) Raw material
Vapour pressure	:	ca. 50 hPa (20 °C)
Vapour density	:	No data available
Relative density	:	ca. 0,89 g/cm ³ (20 °C)
Solubility(ies) Water solubility	:	in all proportions (20 °C)
Partition coefficient: n- octanol/water	:	Not applicable
Auto-ignition temperature	:	No data available
Viscosity Viscosity, dynamic	:	not determined
Flow time	:	< 15 s at 20 °C Method: DIN 53211
Explosive properties	:	No data available
Oxidizing properties	:	No data available

9.2 Other information

No data available

SECTION 10: Stability and reactivity

10.1 Reactivity

No dangerous reaction known under conditions of normal use.

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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 : Heat, flames and sparks.

10.5 Incompatible materials

Materials to avoid : Strong acids and oxidizing agents

10.6 Hazardous decomposition products

None reasonably foreseeable.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Product:

Acute oral toxicity : Acute toxicity estimate: > 15.000 mg/kg
Acute inhalation toxicity : Acute toxicity estimate: > 50 mg/l
Acute dermal toxicity : Acute toxicity estimate: > 10.000 mg/kg

Skin corrosion/irritation

Components:

Propan-1-ol:

No skin irritation

Ethanol:

Rabbit, No skin irritation

Serious eye damage/eye irritation

Product:

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, OECD Test Guideline 406

Ethanol:

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

Germ cell mutagenicity

Components:

Propan-1-ol:

Germ cell mutagenicity- Assessment : Not mutagenic in Ames Test

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Ethanol:

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

Ethanol:

No data available

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:**

No data is available on the product itself.

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

Bioaccumulation : Remarks: Bioaccumulation is unlikely.

Partition coefficient: n-
octanol/water : log Pow: -0,14
Method: Calculated value**12.4 Mobility in soil****Components:****Propan-1-ol:**

Mobility : Remarks: Mobile in soils

Ethanol:

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:**

Additional ecological information : This product has no known ecotoxicological effects.

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.

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

IMDG : UN 3175
IATA (Cargo) : UN 3175

14.2 UN proper shipping name

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

14.3 Transport hazard class(es)

IMDG : 4.1
IATA (Cargo) : 4.1

14.4 Packing group

IMDG
Packing group : II
Labels : 4.1
EmS Code : F-A, S-I
IATA (Cargo)
Packing instruction (cargo aircraft) : 448
Packing group : II
Labels : Flammable Solid

14.5 Environmental hazards

IMDG
Marine pollutant : no

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

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

P5c	FLAMMABLE LIQUIDS	Quantity 1 5.000 t	Quantity 2 50.000 t
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Volatile organic compounds : Volatile organic compounds (VOC) content: 60 %
Remarks: of the active solution, Directive 2010/75/EC on the limitation of emissions of volatile organic compounds

Other regulations:

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.

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**

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

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

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 Organisa-

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tion 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; TRGS - Technical Rule 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

Flam. Liq. 3, H226	: On basis of test data.
Eye Irrit. 2, H319	: Bridging principle "Substantially similar mixtures".
STOT SE 3, H336	: 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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