

mikrozid® universal wipes**No Change Service!**Version
01.01Revision Date:
24.02.2016Date of last issue: 19.10.2015
Date of first issue: 19.10.2015**SECTION 1: Identification of the substance/mixture and of the company/undertaking****1.1 Product identifier**

Trade name : mikrozid® universal wipes

1.2 Relevant identified uses of the substance or mixture and uses advised againstUse of the Sub-
stance/Mixture : Disinfectants and general biocidal productsRecommended restrictions
on use : Reserved for industrial and professional use.**1.3 Details of the supplier of the safety data sheet**Manufacturer/ Supplier : Schülke & Mayr GmbH
Robert-Koch-Str. 222851 Norderstedt
Germany
Telephone: +49 (0)40/ 52100-0
Telefax: +49 (0)40/ 52100318
mail@schuelke.com
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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**SECTION 2: Hazards identification****2.1 Classification of the substance or mixture****Classification (REGULATION (EC) No 1272/2008)**Flammable liquids, Category 3
Eye irritation, Category 2H226: Flammable liquid and vapour.
H319: Causes serious eye irritation.**2.2 Label elements****Labelling (REGULATION (EC) No 1272/2008)**

Hazard pictograms :



Signal word : Warning

Hazard statements : H226 Flammable liquid and vapour.
H319 Causes serious eye irritation.

Precautionary statements : P102 Keep out of reach of children.

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according to Regulation (EC) No. 1907/2006

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P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
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: (< 5% anionic surfactants)

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

2.3 Other hazards

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

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)
2- Propanol	603-117-00-0 67-63-0 200-661-7 01-2119457558-25-XXXX	Flam. Liq. 2; H225 Eye Irrit. 2; H319 STOT SE 3; H336	17,4
Ethanol	603-002-00-5 64-17-5 200-578-6 01-2119457610-43-XXXX	Flam. Liq. 2; H225 Eye Irrit. 2; H319	12,6

For explanation of abbreviations see section 16.

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 : In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice. If eye irritation persists, consult a specialist.
If swallowed : If accidentally swallowed obtain immediate medical attention.

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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, 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.

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.

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- 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) : The product falls under the regulation on biocide products (EU) 528/2012.
Product type: 2

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

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

Substance name	End Use	Exposure routes	Potential health effects	Value
2- Propanol	Workers	Skin contact	Long-term exposure, Systemic effects	888 mg/kg
	Workers	Inhalation	Long-term exposure, Systemic effects	500 mg/m ³
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:

Substance name	Environmental Compartment	Value
2- Propanol	Fresh water	140,9 mg/l
	Marine water	140,9 mg/l
	Fresh water sediment	552 mg/kg
	Marine sediment	552 mg/kg
	Soil	28 mg/kg

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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

Eye protection : If splashes are likely to occur, wear:
Goggles

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 : 3 - 3,6
Melting point/freezing point : < -5 °C
Decomposition temperature : No data available
Boiling point/boiling range : ca. 80 °C
Flash point : 26 °C, DIN 51755 Part 1
Other information: Sustains combustion
Evaporation rate : No data available
Flammability (solid, gas) : Not applicable
Upper explosion limit : 2- Propanol: 12 %(V)
Lower explosion limit : 2- Propanol: 2 %(V)
Vapour pressure : ca. 40 hPa, 20 °C
vapour density : No data available
Density : ca. 0,95 g/cm³
Solubility(ies)
Water solubility : in all proportions , 20 °C
Partition coefficient: n-octanol/water : Not applicable
Auto-ignition temperature : 2- Propanol: 425 °C
Viscosity
Viscosity, dynamic : not determined
Explosive properties : Not explosive
Oxidizing properties : Not applicable

9.2 Other information

No data available

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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
Acute inhalation toxicity : Acute toxicity estimate: > 50 mg/l
Acute dermal toxicity : Acute toxicity estimate: > 10000 mg/kg

Skin corrosion/irritation**Product:**

Calculation method, No skin irritation

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

Causes serious eye damage., Calculation method

Respiratory or skin sensitisation**Components:****2- Propanol:**

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

Ethanol:

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

Germ cell mutagenicity**Components:****2- Propanol:**

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

Ethanol:

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

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

Carcinogenicity

Components:

2- Propanol:

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

Ethanol:

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

Reproductive toxicity

Components:

2- Propanol:

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

Ethanol:

Effects on foetal development : 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

Components:

2- Propanol:

May cause drowsiness or dizziness.

Ethanol:

No data available

STOT - repeated exposure

Components:

2- Propanol:

Based on available data, the classification criteria are not met.

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:

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2- Propanol:

- Toxicity to fish : LC50 (Leuciscus idus): > 100 mg/l, 48 h, static test, Raw material, literature value
- Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna): > 100 mg/l, 48 h, static test, Raw material, literature value
- Toxicity to algae : EC50 (Desmodesmus subspicatus (green algae)): > 100 mg/l, 72 h, static test, Raw material, literature value

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

Components:

2- Propanol:

- Biodegradability : Readily biodegradable

Ethanol:

- Biodegradability : Readily biodegradable

12.3 Bioaccumulative potential

Components:

2- Propanol:

- Bioaccumulation : No bioaccumulation is to be expected (log Pow <= 4).
- Partition coefficient: n-octanol/water : log Pow: 0,05 (20 °C), OECD Test Guideline 107

Ethanol:

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

12.4 Mobility in soil

Components:

2- Propanol:

- 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

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Contaminated packaging : in compliance with the regulations, and after consultation with the waste disposal services.
: 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.
(2- Propanol, Ethanol)
IMDG : SOLIDS CONTAINING FLAMMABLE LIQUID, N.O.S.
(2- Propanol, Ethanol)
IATA : Solids containing flammable liquid, n.o.s.
(2- Propanol, Ethanol)

14.3 Transport hazard class(es)

ADR : 4.1
IMDG : 4.1
IATA : 4.1

14.4 Packing group

ADR
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

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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: 30 %, 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.
H319 : Causes serious eye irritation.
H336 : May cause drowsiness or dizziness.

Full text of other abbreviations

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 concentra-

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

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.