

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



## **mikrozid® universal wipes**

**No Change Service!**

Version  
02.00

Revision Date:  
02.06.2017

Date of last issue: 24.02.2016  
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 against**

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

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

### **1.4 Emergency telephone number**

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

## **SECTION 2: Hazards identification**

### **2.1 Classification of the substance or mixture**

#### **Classification (REGULATION (EC) No 1272/2008)**

Flammable liquids, Category 3 H226: Flammable liquid and vapour.  
Eye irritation, Category 2 H319: Causes serious eye irritation.

### **2.2 Label elements**

#### **Labelling (REGULATION (EC) No 1272/2008)**

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Hazard pictograms	:		
Signal word	:	Warning	
Hazard statements	:	H226 H319	Flammable liquid and vapour. Causes serious eye irritation.
Precautionary statements	:	P102 P210  P305+P351+P338  P337+P313  P501	Keep out of reach of children. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. Dispose of contents/ container to an approved waste disposal plant.
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 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 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-2-ol	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

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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
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For explanation of abbreviations see section 16.

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

- || If inhaled : Move the victim to fresh air and keep him calm. 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 case of eye contact, remove contact lens and rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. 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 (CO<sub>2</sub>), 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.

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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. Ensure adequate ventilation.

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	WEL	1,000 ppm 1,920 mg/m <sup>3</sup>	HSE
Propan-2-ol	67-63-0	WEL	400 ppm 999 mg/m <sup>3</sup>	HSE
		WEL	500 ppm 1,250 mg/m <sup>3</sup>	HSE

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

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

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Ethanol	Workers	Inhalation	Acute effects, Local effects	1900 mg/m3
	Workers	Skin contact	Chronic effects	343 mg/kg
	Workers	Inhalation	Chronic effects	950 mg/m3

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

Substance name	Environmental Compartment	Value
Propan-2-ol	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
	Intermittent use/release	140.9 mg/l
	Effects on waste water treatment plants	2251 mg/l
Ethanol	Oral	160 mg/kg food
	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

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Evaporation rate	: No data available
Flammability (solid, gas)	: Not applicable
Upper explosion limit	: Propan-2-ol: 12 %(V)
Lower explosion limit	: Propan-2-ol: 2 %(V)
Vapour pressure	: ca. 40 hPa, 20 °C
Relative vapour density	: No data available
Density	: ca. 0.95 g/cm <sup>3</sup>
Solubility(ies)	
Water solubility	: in all proportions , 20 °C
Partition coefficient: n-octanol/water	: Not applicable
Auto-ignition temperature	: Propan-2-ol: 425 °C
Viscosity	
Viscosity, dynamic	: not determined
Explosive properties	: No data available
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: > 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**

##### **Product:**

Calculation method, No skin irritation

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

Causes serious eye irritation., Calculation method

**Respiratory or skin sensitisation****Components:****Propan-2-ol:**

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:****Propan-2-ol:**

Genotoxicity in vitro : Ames test, Mutagenicity (Escherichia coli - reverse mutation assay), not mutagenic

Genotoxicity in vivo : Mouse, Mutagenicity (micronucleus test), not mutagenic

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-2-ol:**

Carcinogenicity - Assessment : Based on available data, the classification criteria are not met.

**Ethanol:**

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

**Reproductive toxicity****Components:****Propan-2-ol:**

Reproductive toxicity - Assessment : Based on available data, the classification criteria are not met.

**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:****Propan-2-ol:**

May cause drowsiness or dizziness.

**Ethanol:**

No data available

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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:****Propan-2-ol:**

- |   |   |
|---|---|
| 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:****Propan-2-ol:**

- |                  |                          |
|------------------|--------------------------|
| Biodegradability | : Readily biodegradable. |
|------------------|--------------------------|

**Ethanol:**

- |                  |                          |
|------------------|--------------------------|
| Biodegradability | : Readily biodegradable. |
|------------------|--------------------------|

**12.3 Bioaccumulative potential****Components:****Propan-2-ol:**

- |  |  |
|--|--|
| 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- | : log Pow: -0.14, calculated   |



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octanol/water

### 12.4 Mobility in soil

#### **Components:**

##### **Propan-2-ol:**

Mobility : Mobile in soils

##### **Ethanol:**

Mobility : 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 : 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 OR MIXTURES OF SOLIDS CONTAINING FLAMMABLE LIQUID, N.O.S.  
(Propan-2-ol, Ethanol)

IMDG : SOLIDS CONTAINING FLAMMABLE LIQUID, N.O.S.  
(Propan-2-ol, Ethanol)

IATA : Solids containing flammable liquid, n.o.s.  
(Propan-2-ol, Ethanol)

### 14.3 Transport hazard class(es)

ADR : 4.1

IMDG : 4.1

IATA : 4.1

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### 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

### 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

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

	Quantity 1	Quantity 2
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 5,000 t	50,000 t

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 : The surfactant(s) contained in this mixture complies(comply)

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with the biodegradability criteria as laid down in Regulation (EC) No.648/2004 on detergents. Data to support this assertion are held at the disposal of the competent authorities of the Member States and will be made available to them, at their direct request or at the request of a detergent manufacturer. Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work. Take note of Directive 2000/39/EC establishing a first list of indicative occupational exposure limit values. 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 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

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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**

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 : 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.