

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

**schülke** 

## **mikrozid® PAA wipes**

**No Change Service!**

Version  
03.02

Revision Date:  
18.02.2016

Date of last issue: 04.01.2016  
Date of first issue: 15.02.2012

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

### **1.1 Product identifier**

Trade name : mikrozid® PAA 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 : Restricted to professional users.

### **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 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)**

Skin irritation, Category 2  
Eye irritation, Category 2

H315: Causes skin irritation.  
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

: H315  
H319

Causes skin irritation.  
Causes serious eye irritation.

Precautionary statements

: P280

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

P302+P352

IF ON SKIN: Wash with plenty of soap and  
water.

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).  
No special risks known.

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

### 3.2 Mixtures

Chemical nature

: Solution of the following substances with harmless additives.

#### Hazardous components

Chemical name	Index-Number CAS-No. EC-No. Registration number	Classification	Concentration (% w/w)
Hydrogen peroxide	008-003-00-9 7722-84-1 231-765-0 01-2119485845-22- XXXX	Ox. Liq. 1; H271 Acute Tox. 4; H302 Acute Tox. 4; H332 Skin Corr. 1A; H314 Aquatic Chronic 3; H412	5 - 10
Acetic acid	607-002-00-6 64-19-7 200-580-7 01-2119475328-30- XXXX	Flam. Liq. 3; H226 Skin Corr. 1A; H314	1 - 5

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Peracetic acid	607-094-00-8 79-21-0 201-186-8 01-2119531330-56-0006	Flam. Liq. 3; H226 Org. Perox. D; H242 Acute Tox. 3; H301 Acute Tox. 4; H312 Acute Tox. 4; H332 Skin Corr. 1A; H314 STOT SE 3; H335 Aquatic Acute 1; H400	0,06
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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 symptoms persist, 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 : Clean mouth with water and drink afterwards plenty of water. If symptoms persist, call a physician.

**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, Foam, Water spray jet, Carbon dioxide (CO<sub>2</sub>)
- Unsuitable extinguishing media : High volume water jet

**5.2 Special hazards arising from the substance or mixture**

- Specific hazards during fire-fighting : The product itself does not burn, but it is oxidising.
- Specific risk from the substance or the product itself, its combustion products or evolved gases : Fire may cause evolution of:., Oxygen

**5.3 Advice for firefighters**

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

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Personal precautions : Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin and 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.  
Flush with water.

**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 : Provide sufficient air exchange and/or exhaust in work rooms.  
Advice on protection against fire and explosion : Normal measures for preventive fire protection.  
Hygiene measures : When using do not eat or 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: 5 - 30°C  
|| Advice on common storage : No materials to be especially mentioned.

**7.3 Specific end use(s)**

Specific use(s) : The product falls under the regulation on biocide products (EU) 528/2012.  
Product type: 2  
Product type: 4

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

Components	CAS-No.	Value type (Form of exposure)	Control parameters	Basis
Hydrogen peroxide	7722-84-1	WEL	1 ppm 1,4 mg/m <sup>3</sup>	HSE
		WEL	2 ppm 2,8 mg/m <sup>3</sup>	HSE
Acetic acid	64-19-7	Permissible exposure limit	10 ppm 25 mg/m <sup>3</sup>	EC/2000/39
		Permissible exposure limit	10 ppm 25 mg/m <sup>3</sup>	OSHA

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

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Substance name	End Use	Exposure routes	Potential health effects	Value
Hydrogen peroxide	Workers	Inhalation	Local effects, Short-term exposure	3 mg/m <sup>3</sup>
	Workers	Inhalation	Local effects, Long-term exposure	1,4 mg/m <sup>3</sup>
	Consumers	Inhalation	Local effects, Short-term exposure	1,93 mg/m <sup>3</sup>
	Consumers	Inhalation	Local effects, Long-term exposure	0,21 mg/m <sup>3</sup>
Acetic acid	Workers	Inhalation	Local effects, Acute effects, Short-term exposure	25 mg/m <sup>3</sup>
	Workers	Inhalation	Local effects, Chronic effects, Long-term exposure	25 mg/m <sup>3</sup>
	Consumers	Inhalation	Local effects, Acute effects, Short-term exposure	25 mg/m <sup>3</sup>
	Consumers	Inhalation	Local effects, Chronic effects, Long-term exposure	25 mg/m <sup>3</sup>

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

Substance name	Environmental Compartment	Value
Hydrogen peroxide	Fresh water	0,0126 mg/l
	Marine water	0,0126 mg/l
	Water	0,0138 mg/l
	Effects on waste water treatment plants	4,66 mg/l
Acetic acid	Fresh water	3,058 mg/l
	Marine water	0,3058 mg/l
	Fresh water sediment	11,36 mg/kg
	Marine sediment	1,136 mg/kg
	Water	30,58 mg/l
Remarks:	Intermittent use/release	
	Soil	0,478 mg/kg
	Effects on waste water treatment plants	85 mg/l

## **8.2 Exposure controls**

### **Personal protective equipment**

Eye protection : If splashes are likely to occur, wear:  
Safety glasses with side-shields conforming to EN166

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- Hand protection : 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 protection.
- Respiratory protection : If the occupational exposure limits cannot be met, in exceptional cases suitable respiratory equipment should be worn only for a short period of time.  
Recommended Filter type:  
A2B2E2K2 Hg NO P3 P D/ CO 20 P3 R D
- 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 : pungent  
Odour Threshold : not determined  
pH : ca. 2,2, 20 °C, concentrate  
Melting point/freezing point : not determined  
Decomposition temperature : No data available  
Boiling point/boiling range : ca. 100 °C  
Flash point : Not applicable  
Other information: The product is not flammable.
- Evaporation rate : No data available  
Flammability (solid, gas) : Not applicable  
Upper explosion limit : No data available  
Lower explosion limit : No data available  
Vapour pressure : 20 hPa, ca. 20 °C  
vapour density : No data available  
Density : ca. 1,02 g/cm<sup>3</sup>, 20 °C  
Solubility(ies)  
Water solubility : completely soluble  
Partition coefficient: n-octanol/water : Not applicable  
Explosive properties : Not explosive  
Oxidizing properties : No data available

**9.2 Other information**

No data available

**SECTION 10: Stability and reactivity****10.1 Reactivity**

Stable under recommended storage conditions.

**10.2 Chemical stability**

The product is chemically stable.

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None reasonably foreseeable.

**10.4 Conditions to avoid**

Extremes of temperature and direct sunlight.

**10.5 Incompatible materials**

Strong acids and strong bases,

**10.6 Hazardous decomposition products**

Oxygen

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

Acute oral toxicity : Acute toxicity estimate: > 10000 mg/kg  
Acute inhalation toxicity : Acute toxicity estimate: 24,3 mg/l  
Acute dermal toxicity : Acute toxicity estimate: > 15000 mg/kg

**Skin corrosion/irritation****Product:**

EPISKIN Human Skin Model Test, Causes skin irritation.

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

Causes serious eye irritation., Calculation method

**Respiratory or skin sensitisation****Components:****Hydrogen peroxide:**

Did not cause sensitisation on laboratory animals. Guinea pig

**Acetic acid:**

No data available

**Peracetic acid:**

Did not cause sensitisation on laboratory animals. Guinea pig

**Germ cell mutagenicity****Components:****Hydrogen peroxide:**

Genotoxicity in vitro : Ames test, negative  
Genotoxicity in vivo : in vivo assay, not mutagenic  
Germ cell mutagenicity- Assessment : Not mutagenic in Ames Test

**Acetic acid:**

Genotoxicity in vitro : Ames test, negative  
Germ cell mutagenicity- Assessment : Not mutagenic in Ames Test

**Peracetic acid:**

Genotoxicity in vitro : Ames test, negative

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

### **Carcinogenicity**

#### **Components:**

##### **Hydrogen peroxide:**

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

##### **Acetic acid:**

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

##### **Peracetic acid:**

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

### **Reproductive toxicity**

#### **Components:**

##### **Hydrogen peroxide:**

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

##### **Acetic acid:**

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

##### **Peracetic acid:**

Effects on fertility : Rat, Oral, NOAEL: 200 mg/l, F1: 200 mg/l

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

### **STOT - single exposure**

No data available

### **STOT - repeated exposure**

No data available

### **Repeated dose toxicity**

#### **Components:**

##### **Hydrogen peroxide:**

Rat, NOAEL: 26 mg/kg, Oral, 3 months, No adverse effect has been observed in chronic toxicity tests.

Rat, NOAEL: 0,0029 mg/l, inhalation (vapour), OECD Test Guideline 407

##### **Acetic acid:**

Rat, NOAEL: 1.800 mg/kg, Oral

### **Aspiration toxicity**

No data available

### **Further information**

#### **Product:**

The product has not been tested.

## **SECTION 12: Ecological information of the active solution**



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- Toxicity to fish : LC50 (Fish): 16,4 - 37,4 mg/l, 96 h  
 Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna): 2,4 mg/l, 48 h  
 Toxicity to algae : ErC50 (Skeletonema costatum (marine diatom)): 1,38 mg/l, 72 h  
 NOEC (Skeletonema costatum (marine diatom)): 0,63 mg/l, 72 h

**Acetic acid:**

- Toxicity to fish : LC50 (Gambusia affinis (Mosquito fish)): 251 mg/l, 96 h, static test  
 Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna): 95 mg/l, 24 h  
 Toxicity to algae : EC100 (Euglena gracilis): 720 mg/l, 0,25 h

**Peracetic acid:**

- Toxicity to fish : LC50 : 13 mg/l, 96 h, semi-static test, OECD Test Guideline 203  
 Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna): 3,3 mg/l, 48 h, OECD Test Guideline 202  
 Toxicity to algae : No data available

**12.2 Persistence and degradability****Components:****Hydrogen peroxide:**

- Biodegradability : Totally biodegradable, OECD Test Guideline 301

**Acetic acid:**

- Biodegradability : Totally biodegradable, OECD 301D / EEC 84/449 C6

**Peracetic acid:**

- Biodegradability : Totally biodegradable, OECD Test Guideline 301

**12.3 Bioaccumulative potential****Product:**

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

**Components:****Hydrogen peroxide:**

- Bioaccumulation : Does not bioaccumulate.

**Acetic acid:**

- Bioaccumulation : Bioaccumulation is unlikely.

**Peracetic acid:**

- Bioaccumulation : Does not bioaccumulate.

**12.4 Mobility in soil****Components:****Hydrogen peroxide:**

- Mobility : Water Hydrolyses readily.

**Acetic acid:**

- Mobility : No data available

**Peracetic acid:**

- Mobility : Water Hydrolyses readily.

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

**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.

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

Not regulated as a dangerous good

**14.2 UN proper shipping name**

Not regulated as a dangerous good

**14.3 Transport hazard class(es)**

Not regulated as a dangerous good

**14.4 Packing group**

Not regulated as a dangerous good

**14.5 Environmental hazards**

Not regulated as a dangerous good

**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

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

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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**

H226	: Flammable liquid and vapour.
H242	: Heating may cause a fire.
H271	: May cause fire or explosion; strong oxidizer.
H301	: Toxic if swallowed.
H302	: Harmful if swallowed.
H312	: Harmful in contact with skin.
H314	: Causes severe skin burns and eye damage.
H332	: Harmful if inhaled.
H335	: May cause respiratory irritation.
H400	: Very toxic to aquatic life.
H412	: Harmful to aquatic life with long lasting effects.

**Full text of other abbreviations**

Acute Tox.	: Acute toxicity
Aquatic Acute	: Acute aquatic toxicity
Aquatic Chronic	: Chronic aquatic toxicity
Flam. Liq.	: Flammable liquids
Org. Perox.	: Organic peroxides
Ox. Liq.	: Oxidizing liquids
Skin Corr.	: Skin corrosion
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

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es; (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.