

SAFETY DATA SHEET

According to REACH Regulation (EC) No 1907/2006, as amended
by UK REACH Regulations SI 2019/758

schülke 

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

Version
05.15

Revision Date:
13.11.2023

Date of last issue: 26.08.2022

	EC-No. Index-No. Registration number		(% 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 (Central nervous system)	>= 30 - < 50
ethanol	64-17-5 200-578-6 603-002-00-5 01-2119457610-43-XXXX	Flam. Liq. 2; H225 Eye Irrit. 2; H319	>= 20 - < 30

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 : Rinse thoroughly with plenty of water, also under the eyelids.
Obtain medical attention.
- If swallowed : If accidentally swallowed obtain immediate medical attention.

4.2 Most important symptoms and effects, both acute and delayed

- Symptoms : Treat symptomatically.
- Risks : Causes serious eye irritation.
May cause drowsiness or dizziness.

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 water jet.

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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.
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

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SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational Exposure Limits

Components	CAS-No.	Value type (Form of exposure)	Control parameters	Basis
propan-1-ol	71-23-8	STEL	250 ppm 625 mg/m ³	GB EH40
	Further information: Can be absorbed through the skin. The assigned substances are those for which there are concerns that dermal absorption will lead to systemic toxicity.			
		TWA	200 ppm 500 mg/m ³	GB EH40
	Further information: Can be absorbed through the skin. The assigned substances are those for which there are concerns that dermal absorption will lead to systemic toxicity.			
ethanol	64-17-5	TWA	1,000 ppm 1,920 mg/m ³	GB EH40

Derived No Effect Level (DNEL):

Substance name	End Use	Exposure routes	Potential health effects	Value
propan-1-ol	Workers	Skin contact	Long-term systemic effects	136 mg/kg
	Workers	Inhalation	Long-term systemic effects	268 mg/m ³
	Workers	Inhalation	Acute systemic effects	1723 mg/m ³
ethanol	Workers	Inhalation	Acute local effects	1900 mg/m ³
	Workers	Skin contact	Long-term systemic effects	343 mg/kg
	Workers	Inhalation	Long-term systemic effects	950 mg/m ³

Predicted No Effect Concentration (PNEC):

Substance name	Environmental Compartment	Value
propan-1-ol	Fresh water	6.83 mg/l
	Soil	1.49 mg/kg
	Marine sediment	2.75 mg/kg
	Fresh water sediment	27.5 mg/kg
	Marine water	0.983 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
	Marine sediment	2.9 mg/kg
	Sewage treatment plant	580 mg/l

8.2 Exposure controls

Personal protective equipment

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Hand protection

Remarks : 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.

Respiratory protection : No personal respiratory protective equipment normally required.

Protective measures : Avoid contact with skin and eyes.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance : Aqueous, alcohol containing solution on non-woven

Colour : colourless

Odour : alcohol-like

Odour Threshold : not determined

pH : Not applicable

Melting point/freezing point : < -5 °C
of the active solution

Decomposition temperature : No data available

Boiling point/boiling range : ca. 80 °C of the active solution

Flash point : 27 °C
Method: DIN 51755 Part 1
of the active solution

Evaporation rate : No data available

Upper explosion limit / Upper flammability limit : 17.5 %(V)
Raw material

Lower explosion limit / Lower flammability limit : 2.1 %(V)
Raw material

Vapour pressure : ca. 50 hPa (20 °C)
of the active solution

Relative vapour density : No data available

Density : ca. 0.89 g/cm³ (20 °C)
of the active solution

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Solubility(ies)		
Water solubility	:	completely soluble (20 °C)
Partition coefficient: n-octanol/water	:	Not applicable
Auto-ignition temperature	:	425 °C Raw material
Viscosity		
Viscosity, dynamic	:	No data available
Viscosity, kinematic	:	not determined
Flow time	:	< 15 s at 20 °C Method: DIN 53211 of the active solution
Explosive properties	:	No data available
Oxidizing properties	:	The substance or mixture is not classified as oxidizing.

9.2 Other information

Flammability (liquids)	:	Flammable liquid and vapour. Remarks: of the active solution
Metal corrosion rate	:	None reasonably foreseeable.
Self-ignition	:	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

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.

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SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Not classified based on available information.

Components:

propan-1-ol:

Acute oral toxicity	:	LD50 (Rat): ca. 8,000 mg/kg
Acute inhalation toxicity	:	LC50 (Rat, male and female): > 33.8 mg/l Exposure time: 4 h Test atmosphere: vapour Method: OECD Test Guideline 403
Acute dermal toxicity	:	LD50 (Rabbit): 4,032 mg/kg Method: literature value

ethanol:

Acute oral toxicity	:	LD50 (Mouse): 8,300 mg/kg
Acute inhalation toxicity	:	LC50 (Mouse): 39 mg/l Exposure time: 4 h Test atmosphere: vapour
Acute dermal toxicity	:	LD50 (Rabbit): 20,000 mg/kg

Skin corrosion/irritation

Not classified based on available information.

Components:

propan-1-ol:

Species	:	Rabbit
Result	:	No skin irritation

ethanol:

Species	:	Rabbit
Method	:	OECD Test Guideline 404
Result	:	No skin irritation

Serious eye damage/eye irritation

Causes serious eye irritation.

Product:

Method	:	Expert judgement
Result	:	irritating
Remarks	:	The toxicological data has been taken from products of similar composition.

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Components:

propan-1-ol:

Species	:	Rabbit
Result	:	Irreversible effects on the eye

ethanol:

Method	:	OECD Test Guideline 405
Result	:	Eye irritation

Respiratory or skin sensitisation

Skin sensitisation

Not classified based on available information.

Respiratory sensitisation

Not classified based on available information.

Components:

propan-1-ol:

Test Type	:	Maximisation Test
Species	:	Guinea pig
Method	:	OECD Test Guideline 406
Result	:	Does not cause skin sensitisation.

ethanol:

Test Type	:	Maximisation Test
Species	:	Guinea pig
Method	:	OECD Test Guideline 406
Result	:	Did not cause sensitisation on laboratory animals.

Germ cell mutagenicity

Not classified based on available information.

Components:

propan-1-ol:

Germ cell mutagenicity- Assessment	:	Not mutagenic in Ames Test
------------------------------------	---	----------------------------

ethanol:

Genotoxicity in vitro	:	Test Type: Microbial mutagenesis assay (Ames test) Test system: Salmonella typhimurium Metabolic activation: with and without metabolic activation Method: OECD Test Guideline 471 Result: Not mutagenic in Ames Test
Genotoxicity in vivo	:	Result: Non mutagenic
Germ cell mutagenicity- Assessment	:	Tests on bacterial or mammalian cell cultures did not show mutagenic effects.

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Carcinogenicity

Not classified based on available information.

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

Not classified based on available information.

Components:

propan-1-ol:

|| Effects on foetal development : Species: Rat
Application Route: inhalation (vapour)
General Toxicity Maternal: NOAEL: 8.6 mg/l

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

ethanol:

|| Effects on foetal development : Species: Rat
Application Route: Oral
General Toxicity Maternal: NOAEL: 2,000 mg/kg body weight

|| Reproductive toxicity - Assessment : Animal experiments showed mutagenic and teratogenic effects.

STOT - single exposure

May cause drowsiness or dizziness.

Components:

propan-1-ol:

|| Assessment : May cause drowsiness or dizziness.

ethanol:

|| Remarks : No data available

STOT - repeated exposure

Not classified based on available information.

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Components:

propan-1-ol:

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

ethanol:

|| Remarks : No data available

Repeated dose toxicity

Components:

ethanol:

|| Species : Rat
|| NOAEL : 1,730 mg/kg
|| LOAEL : 3,160 mg/kg
|| Application Route : Oral
|| Exposure time : 90 d

Aspiration toxicity

Not classified based on available information.

Further information

Product:

Remarks : No data is available on the product itself.

SECTION 12: Ecological information

12.1 Toxicity

Components:

propan-1-ol:

|| Toxicity to fish : LC50 (Fish): 3,200 mg/l
 Exposure time: 96 h

|| Toxicity to daphnia and other : EC50 (Daphnia magna (Water flea)): 3,642 mg/l
|| aquatic invertebrates : Exposure time: 48 h
 Method: DIN 38412

|| Toxicity to algae/aquatic : NOEC (Chlorella pyrenoidosa (algae)): 1,150 mg/l
|| plants : Exposure time: 48 h

|| Toxicity to daphnia and other : NOEC: 68.3 mg/l
|| aquatic invertebrates (Chron- : Exposure time: 21 d
|| ic toxicity) : Species: Daphnia magna (Water flea)
 Remarks: Based on data from similar materials

ethanol:

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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:

Endocrine disrupting potential : The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

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 : Empty containers should be taken to an approved waste handling site for recycling or disposal.

SECTION 14: Transport information

14.1 UN number

ADR : UN 3175

IMDG : UN 3175

IATA : UN 3175

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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)

	Class	Subsidiary risks
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 (Cargo)	
Packing instruction (cargo aircraft)	: 448
Packing instruction (LQ)	: Y441
Packing group	: II
Labels	: Flammable solid
IATA (Passenger)	
Packing instruction (passenger aircraft)	: 445
Packing instruction (LQ)	: Y441
Packing group	: II
Labels	: Flammable solid

14.5 Environmental hazards

ADR	
Environmentally hazardous	: no
IMDG	
Marine pollutant	: no

14.6 Special precautions for user

The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

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14.7 Transport in bulk according to Annex II of Marpol and the IBC Code

Remarks : Transport in accordance to special provision 216

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

Relevant EU provisions transposed through retained EU law

UK REACH List of restrictions (Annex 17) : Conditions of restriction for the following entries should be considered:
Number on list 3

UK REACH Candidate list of substances of very high concern (SVHC) for Authorisation : Not applicable

The Persistent Organic Pollutants Regulations (retained Regulation (EU) 2019/1021 as amended for Great Britain) : Not applicable

Regulation (EC) No 1005/2009 on substances that deplete the ozone layer : Not applicable

UK REACH List of substances subject to authorisation (Annex XIV) : Not applicable

Volatile organic compounds : Directive 2010/75/EU of 24 November 2010 on industrial emissions (integrated pollution prevention and control)
Volatile organic compounds (VOC) content: 46.70 %

according to Detergents Regulation EC 648/2004 : Other constituents: Perfumes

Other regulations:

Take note of The Management of Health and Safety at Work Regulations 1999 (requirements relating to new and expectant mothers at work contained in Regulation 16 to 18) and of the Pregnant Workers Directive 92/85/EEC.

Take note of The Management of Health and Safety at Work Regulations 1999 (requirements relating to protection of young people at work contained in Regulation 19) and of Directive 94/33/EC on the protection of young people at work.

The components of this product are reported in the following inventories:

TCSI : On the inventory, or in compliance with the inventory

TSCA : All substances listed as active on the TSCA inventory

AIIC : All components are listed on the inventory, regulatory obligations/restrictions apply

DSL : All components of this product are on the Canadian DSL

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ENCS	:	On the inventory, or in compliance with the inventory
ISHL	:	On the inventory, or in compliance with the inventory
KECI	:	On the inventory, or in compliance with the inventory
PICCS	:	On the inventory, or in compliance with the inventory
IECSC	:	On the inventory, or in compliance with the inventory
NZIoC	:	Not in compliance with the inventory
TECI	:	Not in compliance with the inventory

15.2 Chemical safety assessment

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
GB EH40	:	UK. EH40 WEL - Workplace Exposure Limits
GB EH40 / TWA	:	Long-term exposure limit (8-hour TWA reference period)
GB EH40 / STEL	:	Short-term exposure limit (15-minute reference period)

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - Agreement concerning the International Carriage of Dangerous Goods by Road; AIIC - Australian Inventory of Industrial Chemicals; 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 sub-

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stance; 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; TECL - Thailand Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative

Further information

Classification of the mixture:

Flam. Liq. 3	H226
Eye Irrit. 2	H319
STOT SE 3	H336

Classification procedure:

Based on product data or assessment
Based on product data or assessment
Calculation method

Changes since the last version are highlighted in the margin. This version replaces all previous versions.

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.