

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

schülke -†**Mikrozid AF aroma**

Version 02.04

Revision Date 24.05.2013

Print Date 10.07.2013

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

Trade name : Mikrozid AF aroma

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

Use of the Sub- : Disinfectants
stance/Mixture
Recommended restrictions : Restricted to professional users.
on use

1.3 Details of the supplier of the safety data sheet

Producer/Supplier : Schülke & Mayr UK Ltd.
Cygnet House
1, Jenkin road, Meadowhall
S9 1AT Sheffield
United Kingdom
Telephone: +441142543500
Telefax: +441142543501
mail.uk@schulke.com
www.schulke.com

Contact person : Application Department HI
+49 (0)40/ 521 00 544 (Schülke UK +44 114 254 3500)
pab@schuelke.com

1.4 Emergency telephone number

Emergency telephone num- : UK Poisons Emergency number: 0870 600 6266
ber
Emergency telephone num- : +441142543500
ber : +49 (0)40 / 52 100 -0

2. Hazards identification**2.1 Classification of the substance or mixture****Classification (67/548/EEC, 1999/45/EC)**

Irritant

R10: Flammable.
R41: Risk of serious damage to eyes.
R67: Vapours may cause drowsiness and dizziness.

2.2 Label elements**Labelling according to EC Directives (1999/45/EC)**

Hazard pictograms :



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Irritant

R-phrases(s)	: R10 R41 R67	Flammable. Risk of serious damage to eyes. Vapours may cause drowsiness and dizziness.
S-phrases(s)	: S23 S26 S39 S51	Do not breathe spray. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear eye/face protection. Use only in well-ventilated areas.

In the EU, this product falls under the Directive medical devices 93/42/EEC. The product is classified and labelled in accordance with EC directives or respective national laws.

2.3 Other hazards

II Vapours are heavier than air and may spread along floors.

3. Composition/information on ingredients**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 (67/548/EEC)	Classification (REGULATION (EC) No 1272/2008)	Concentration [%]
Ethanol	603-002-00-5 64-17-5 200-578-6 01- 2119457610- 43-XXXX	F; R11	Flam. Liq. 2; H225 Eye Irrit. 2; H319	25 %
Propan-1-ol	603-003-00-0 71-23-8 200-746-9 01- 2119486761- 29-XXXX	F; R11 Xi; R41 R67	Flam. Liq. 2; H225 Eye Dam. 1; H318 STOT SE 3; H336	35 %

For the full text of the R-phrases mentioned in this Section, see Section 16.

For the full text of the H-Statements mentioned in this Section, see Section 16.

4. First aid measures**4.1 Description of first aid measures**

If inhaled : Move to fresh air.

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If symptoms persist, call a physician.

In case of skin contact

: Wash off with plenty of water.
If symptoms persist, 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.
Protect unharmed eye.
If eye irritation persists, consult a specialist.

If swallowed

: Do NOT induce vomiting.
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.

5. Firefighting measures**5.1 Extinguishing media**

Suitable extinguishing media

: Dry powder
Alcohol-resistant foam
Water spray jet
Carbon dioxide (CO₂)

Unsuitable extinguishing media

: 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.

5.3 Advice for firefighters

Special protective equipment for firefighters

: In the event of fire, wear self-contained breathing apparatus.

Specific risk from the substance or the product itself, its combustion products or evolved gases

: Vapours may form explosive mixtures with air.

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

Personal precautions

: Ensure adequate ventilation.
Remove all sources of ignition.

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6.2 Environmental precautions

Environmental precautions : No special environmental precautions required.

6.3 Methods and materials for containment and cleaning up

Methods for cleaning up : Wipe up with absorbent material (e.g. cloth, fleece).
 Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).

6.4 Reference to other sections

See chapter 8 + 13

7. Handling and storage**7.1 Precautions for safe handling**

Advice on safe handling : Use only in well-ventilated areas.
 Do not breathe vapours or spray mist.

Advice on protection against fire and explosion : Keep away from sources of ignition - No smoking.
 The hot product gives off combustible vapours.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers : Store at room temperature in the original container.
 Do not store at temperatures above 30°C.

Further information on storage conditions : Keep container tightly closed.
 Keep away from direct sunlight.

Advice on common storage : Keep away from food and drink.
 Do not store together with oxidising agents.

7.3 Specific end use(s)

|| none

8. Exposure controls/personal protection**8.1 Control parameters**

Components	CAS-No.	Value	Control parameters	Basis
Ethanol	64-17-5	WEL	1.000 ppm 1.920 mg/m3	HSE

DNEL

Propan-1-ol : End Use: Workers
 Exposure routes: Skin contact
 Potential health effects: Long-term exposure, Systemic effects
 Value: 136 mg/kg

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End Use: Workers
 Exposure routes: Inhalation
 Potential health effects: Long-term exposure, Systemic effects
 Value: 268 mg/kg

End Use: Workers
 Exposure routes: Inhalation
 Potential health effects: Short-term exposure, Systemic effects
 Value: 1723 mg/kg

PNEC

Propan-1-ol

: Fresh water
 Value: 10 mg/l

Marine water
 Value: 1 mg/l

Soil
 Value: 2,2 mg/l

Marine sediment
 Value: 2,28 mg/kg

Fresh water sediment
 Value: 22,8 mg/kg

Effects on waste water treatment plants
 Value: 86 mg/l

Intermittent use/release
 Value: 10 mg/l

8.2 Exposure controls**Personal protective equipment**

Respiratory protection : No personal respiratory protective equipment normally required.
 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:
 A-P2 or ABEK-P2
 Respiratory protection complying with EN 141.

Hand protection : Splash protection: disposable nitrile rubber gloves e.g. Dermatrill (layer thickness: 0,11 mm) made by KCL or gloves from other manufacturers offering the same protection.
 Prolonged contact: Nitrile rubber gloves e.g. Camatrill (>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.

Eye protection : Tightly fitting safety goggles

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Hygiene measures : Keep away from food and drink.

Protective measures : Avoid contact with eyes.

Environmental exposure controls

General advice : No special environmental precautions required.

9. Physical and chemical properties**9.1 Information on basic physical and chemical properties**

Appearance	: liquid
Colour	: colourless
Odour	: alcohol-like
Flash point	: 27 °C, DIN 51755 Part 1
Ignition temperature	: Ethanol: > 360 °C Propan-1-ol: 412 °C
Lower explosion limit	: Ethanol: 3,1 %(V) Propan-1-ol: 2,1 %(V)
Upper explosion limit	: Ethanol: 15 %(V) Propan-1-ol: 17,5 %(V)
Explosive properties	: Not explosive
Oxidizing properties	: not applicable
Auto-ignition temperature	: not applicable
pH	: ca. 6, 20 °C, (undiluted)
Melting point/freezing point	: < -5 °C
Decomposition temperature	: no data available
Boiling point/boiling range	: ca. 80 °C
Vapour pressure	: ca. 50 hPa, 20 °C
Density	: ca. 0,89 g/cm ³ , 20 °C
Water solubility	: 20 °C, in all proportions
Partition coefficient: n-octanol/water	: not applicable
Flow time	: < 15 s, 20 °C, DIN 53211
Relative vapour density	: no data available
Evaporation rate	: no data available

9.2 Other information

None known.

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.

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10.3 Possibility of hazardous reactions

Vapours may form explosive mixture with air.

10.4 Conditions to avoid Heat, flames and sparks.**10.5 Incompatible materials** Strong acids and oxidizing agents**10.6 Hazardous decomposition products**

Decomposition products : None reasonably foreseeable.

11. Toxicological information**11.1 Information on toxicological effects**

Acute oral toxicity

 Ethanol : LD50: 8300 mg/kg, mouse
 Propan-1-ol : LD50: > 2000 mg/kg, rat

Acute inhalation toxicity

Ethanol : LC50: 39 mg/l, 4 h, mouse
Propan-1-ol : LC50: 33,8 mg/l, rat



Acute dermal toxicity

 Ethanol : LD50: 20000 mg/kg, rabbit
 Propan-1-ol : LD50: > 4000 mg/kg, rabbit



Skin irritation

 Ethanol : rabbit, Result: No skin irritation
 Propan-1-ol : Result: No skin irritation

Eye irritation

 Ethanol : rabbit, Result: Mild eye irritation
 Propan-1-ol : Result: Risk of serious damage to eyes.

Sensitisation

 Ethanol : Maximisation Test, guinea pig, Result: Did not cause sensitisation on laboratory animals.
 Propan-1-ol : guinea pig, Result: Does not cause skin sensitisation., Maximisation Test

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Germ cell mutagenicity

Ethanol : Result: Not mutagenic in Ames Test. , OECD Test Guideline 471

Genotoxicity in vivo

Ethanol : Result: not mutagenic

Mutagenicity

Ethanol : Tests on bacterial or mammalian cell cultures did not show mutagenic effects.
Propan-1-ol : Not mutagenic in Ames Test.

Carcinogenicity

Ethanol : Did not show carcinogenic effects in animal experiments.
Propan-1-ol : Animal testing did not show any carcinogenic effects.

Reproductive toxicity

Propan-1-ol : rat, Inhalation, NOAEL: 8,6 mg/l

Reproductive toxicity

Ethanol : In animal testing, risk of impaired fertility was shown only after administration of very high doses of this substance.
Propan-1-ol : Animal testing did not show any effects on fertility.

Teratogenicity

Ethanol : rat, Oral, NOAEL: 2.000 mg/kg
Propan-1-ol : rat, Inhalation, NOAEL: 8,6 mg/l

Teratogenicity

Ethanol : Animal experiments showed mutagenic and teratogenic effects.
Propan-1-ol : Experiments have shown reproductive toxicity effects on laboratory animals.

Repeated dose toxicity

Ethanol : rat, Oral, NOAEL: 2.400 mg/kg

Further information : The classification was made according to the calculation procedure of the Preparations Directive. Inhalation of high vapour concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting.

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12. Ecological information**12.1 Toxicity**

Toxicity to fish

Ethanol	: LC50: 8.140 mg/l, 48 h, Leuciscus idus (Golden orfe)
Propan-1-ol	: LC50: 3.200 mg/l, 96 h, Fish

Toxicity to daphnia and other aquatic invertebrates

Ethanol	: EC50: > 5.000 mg/l, 48 h, Daphnia magna (Water flea)
Propan-1-ol	: EC50: 3.642 mg/l, 48 h, Daphnia magna (Water flea)

Toxicity to algae

Ethanol	: IC50: > 100 mg/l, 72 h, Scenedesmus quadricauda (Green algae)
Propan-1-ol	: NOEC: 1.150 mg/l, 48 h, Chlorella pyrenoidosa

Toxicity to bacteria : EC50: 68.750 mg/l, OECD 209

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)

Propan-1-ol	: NOEC: > 100 mg/l, 21 d, Daphnia magna (Water flea), OECD Test Guideline 211
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12.2 Persistence and degradability

Biodegradability : Result: Readily biodegradable., OECD 301D / EEC 84/449 C6

Chemical Oxygen Demand (COD) : 13.000 mg/l, Test substance: 1% solution

12.3 Bioaccumulative potential

Bioaccumulation

Ethanol	: Bioaccumulation is unlikely.
Propan-1-ol	: Bioaccumulation is unlikely.

Partition coefficient: n-octanol/water	: not applicable
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12.4 Mobility in soil

Mobility

Ethanol	: no data available
Propan-1-ol	: Mobile in soils

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12.5 Results of PBT and vPvB assessment

Assessment : This mixture contains no substance considered to be persistent, bioaccumulating nor toxic (PBT).

12.6 Other adverse effects

Additional ecological information : The product has not been tested., This declaration has been derived from products of similar composition.

13. Disposal considerations**13.1 Waste treatment methods**

Product : Dispose of the product according to the defined EWC (European Waste Code) No.

Contaminated packaging : Take empty packaging to the recycling plant.

Waste key for the unused product : EWC 070604

Waste key for the unused product(Group) : Waste material of HZVA from fats, lubricants, soaps, detergents, disinfectants and personal protection products.

14. Transport information

ADR : UN number 1987

**Proper shipping name**

ALCOHOLS, N.O.S. (Propan-1-ol, Ethanol)

Transport hazard class 3

Packaging group III

Environmental hazards -

Classification Code F1

ADR/RID-Labels 3

ICAO-Labels 30

IMDG : UN number 1987

**Proper shipping name**

ALCOHOLS, N.O.S. (Propan-1-ol, Ethanol)

Transport hazard class 3

Packaging group III

Environmental hazards -

EmS F-E, S-D

IATA : UN number 1987

**Proper shipping name**

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ALCOHOLS, N.O.S. (Propan-1-ol, Ethanol)

Transport hazard class	3
Packaging group	III
Environmental hazards	-

Special precautions for user

ADR Tunnel restriction code: D/E

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Exempt

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	: The product belongs to at least one of the categories 1 through 11 mentioned in Annex 1 of the Directive 1996/82/EC concerning the control of major accident hazards.
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15.2 Chemical Safety Assessment

Exempt

16. Other information**Full text of R-phrases referred to under sections 2 and 3**

R10	Flammable.
R11	Highly flammable.
R41	Risk of serious damage to eyes.
R67	Vapours may cause drowsiness and dizziness.

Full text of H-Statements referred to under sections 2 and 3.

H225	Highly flammable liquid and vapour.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H336	May cause drowsiness or dizziness.

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.