

antifect® N liquid **No Change Service!**Version
06.02Revision Date:
15.05.2019Date of last issue: 08.11.2018
Date of first issue: 03.12.2001**SECTION 1: Identification of the substance/mixture and of the company/undertaking****1.1 Product identifier**

Trade name : antifect® N liquid

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 : 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.comE-mail address of person
responsible for the
SDS/Contact person : Application Department
+49 (0)40/ 521 00 666
AD@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.

Specific target organ toxicity - single ex-
posure, Category 3 H336: May cause drowsiness or dizziness.**2.2 Label elements****Labelling (REGULATION (EC) No 1272/2008)**

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Hazard pictograms

:



Signal word

: Warning

Hazard statements

: H226 Flammable liquid and vapour.
H319 Causes serious eye irritation.
H336 May cause drowsiness or dizziness.

Precautionary statements

: P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P261 Avoid breathing vapours/ spray.
P271 Use only outdoors or in a well-ventilated area.
P280 Wear protective gloves (e.g. Nitrile rubber) /eye protection.
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.
P501 Dispose of contents/ container to an approved waste disposal plant.

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.

Vapours may form explosive mixtures with air.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Chemical nature : Solution of the following substances with harmless additives.

Components

Chemical name	CAS-No. EC-No. Index-No. Registration number	Classification	Concentration (% w/w)
Ethanol	64-17-5 200-578-6 603-002-00-5 01-2119457610-43-XXXX	Flam. Liq. 2; H225 Eye Irrit. 2; H319	25
Propan-1-ol	71-23-8 200-746-9 603-003-00-0	Flam. Liq. 2; H225 Eye Dam. 1; H318 STOT SE 3; H336	35

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For explanation of abbreviations see section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

- General advice : Take off all contaminated clothing immediately.
- If inhaled : Move to fresh air.
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 : Do NOT induce vomiting.
Clean mouth with water and drink afterwards plenty of water.
Obtain 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 (CO₂)
Water spray jet
- Unsuitable extinguishing media : Do not use a solid water stream as it may scatter and spread fire.

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 prod- : Vapours may form explosive mixtures with air.

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5.3 Advice for firefighters

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

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

Personal precautions : Ensure adequate ventilation. Remove all sources of ignition.

6.2 Environmental precautions

Environmental precautions : Avoid subsoil penetration.

6.3 Methods and material 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 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. Use only in well-ventilated areas.

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

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. Do not store at temperatures above 30°C.

Further information on storage conditions : Keep away from direct sunlight. Keep container tightly closed. Recommended storage temperature: 5 - 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****Derived No Effect Level (DNEL) according to Regulation (EC) No. 1907/2006:**

Substance name	End Use	Exposure routes	Potential health effects	Value
Ethanol	Workers	Inhalation	Acute effects, Local effects	1900 mg/m ³
	Workers	Skin contact	Chronic effects	343 mg/kg
	Workers	Inhalation	Chronic effects	950 mg/m ³
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	Short-term exposure, Systemic effects	1723 mg/m ³

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

Substance name	Environmental Compartment	Value
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
Propan-1-ol	Fresh water	10 mg/l
	Marine water	1 mg/l
	Fresh water sediment	22,8 mg/kg
	Marine sediment	2,28 mg/kg
	Effects on waste water treatment plants	96 mg/l
	Soil	2,2 mg/kg
	Intermittent use/release	10 mg/l

8.2 Exposure controls**Personal protective equipment**

Eye protection : Safety glasses with side-shields conforming to EN166

Hand protection
Directive : The selected protective gloves have to satisfy the specifications of Regulation (EU) 2016/425 and the standard EN 374 derived from it.

Remarks : Splash protection: disposable nitrile rubber gloves e.g. Dermatril (layer thickness: 0.11 mm) made by KCL or gloves from other manufacturers offering the same 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.

Respiratory protection : No personal respiratory protective equipment normally re-

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quired.

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 143.

Protective measures : Avoid contact with eyes.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance	: liquid
Colour	: colourless
Odour	: alcohol-like
Odour Threshold	: not determined
pH	: approx. 7 (20 °C)
Melting point/freezing point	: < -5 °C
Decomposition temperature	No data available
Boiling point/boiling range	: approx. 80 °C
Flash point	: 27 °C Method: DIN 51755 Part 1
Evaporation rate	: No data available
Flammability (solid, gas)	: Not applicable
Upper explosion limit / Upper flammability limit	: 17,5 %(V) Raw material
Lower explosion limit / Lower flammability limit	: 2,1 %(V) Raw material
Vapour pressure	: approx. 50 hPa (20 °C)
Vapour density	: No data available
Relative density	: 0,890 g/cm ³ (20 °C)
Solubility(ies) Water solubility	: in all proportions (20 °C)
Partition coefficient: n-octanol/water	: Not applicable

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Components:

Ethanol:

Acute oral toxicity : LD50 (Mouse): 8.300 mg/kg
Acute inhalation toxicity : LC50 (Mouse): 39 mg/l
Exposure time: 4 h
Acute dermal toxicity : LD50 (Rabbit): 20.000 mg/kg

Propan-1-ol:

Acute oral toxicity : LD50 (Rat): > 2.000 mg/kg
Acute inhalation toxicity : LC50 (Rat, male and female): > 33,8 mg/l
Exposure time: 4 h
Method: OECD Test Guideline 403
Acute dermal toxicity : LD50 (Rabbit): > 5.000 mg/kg

Skin corrosion/irritation

Components:

Ethanol:

Species : Rabbit
Result : No skin irritation

Propan-1-ol:

Result : No skin irritation

Serious eye damage/eye irritation

Product:

Assessment : Causes serious eye irritation.
Remarks : Expert judgement
The toxicological data has been taken from products of similar composition.

Components:

Ethanol:

Species : Rabbit
Assessment : Causes serious eye irritation.
Method : OECD Test Guideline 405

Propan-1-ol:

Result : Causes serious eye damage.

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

Propan-1-ol:

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

Germ cell mutagenicity**Components:****Ethanol:**

Genotoxicity in vitro : Method: OECD Test Guideline 471
Result: Not mutagenic in Ames Test

Genotoxicity in vivo : Remarks: Non mutagenic

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

Propan-1-ol:

Germ cell mutagenicity- Assessment : Not mutagenic in Ames Test

Carcinogenicity**Components:****Ethanol:**

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

Propan-1-ol:

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

Reproductive toxicity**Components:****Ethanol:**

Effects on foetal development : Species: Rat
Application Route: Oral
General Toxicity Maternal: NOAEL: 2.000 mg/kg body weight

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Reproductive toxicity - Assessment : In animal testing, risk of impaired fertility was shown only after administration of very high doses of this substance.

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.

STOT - single exposure

Product:

Assessment : May cause drowsiness or dizziness.
Remarks : Calculation method

Components:

Ethanol:

Remarks : No data available

Propan-1-ol:

Assessment : May cause drowsiness or dizziness.

STOT - repeated exposure

Components:

Ethanol:

Remarks : No data available

Propan-1-ol:

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

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

No data available

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Further information**Product:**

Remarks : No data is available on the product itself.
Inhalation of high vapour concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting.

SECTION 12: Ecological information**12.1 Toxicity****Components:****Ethanol:**

Toxicity to fish : LC50 (Leuciscus idus (Golden orfe)): 8.140 mg/l
Exposure time: 48 h

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): > 5.000 mg/l
Exposure time: 48 h

Toxicity to algae : IC50 (Scenedesmus quadricauda (Green algae)): > 100 mg/l
Exposure time: 72 h

Propan-1-ol:

Toxicity to fish : LC50 (Fish): 3.200 mg/l
Exposure time: 96 h

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 3.642 mg/l
Exposure time: 48 h

Toxicity to algae : NOEC (Chlorella pyrenoidosa (aglae)): 1.150 mg/l
Exposure time: 48 h

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC: > 100 mg/l
Exposure time: 21 d
Species: Daphnia magna (Water flea)
Method: OECD Test Guideline 211

12.2 Persistence and degradability**Product:**

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

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

Components:**Ethanol:**

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Biodegradability : Result: Readily biodegradable.

Propan-1-ol:Biodegradability : Result: Readily biodegradable.
Biodegradation: 75 %
Exposure time: 20 d**12.3 Bioaccumulative potential****Components:****Ethanol:**

Bioaccumulation : Remarks: Bioaccumulation is unlikely.

Partition coefficient: n-
octanol/water : log Pow: -0,14
Method: Calculated value**Propan-1-ol:**Bioaccumulation : Bioconcentration factor (BCF): 0,88
Remarks: Bioaccumulation is unlikely.Partition coefficient: n-
octanol/water : log Pow: 0,43**12.4 Mobility in soil****Components:****Ethanol:**

Mobility : Remarks: No data available

Propan-1-ol:

Mobility : Remarks: Mobile in soils

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 : No data is available on the product itself.

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SECTION 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.

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

IMDG : UN 1987

IATA (Cargo) : UN 1987

14.2 UN proper shipping nameIMDG : ALCOHOLS, N.O.S.
(Ethanol, Propan-1-ol)IATA (Cargo) : ALCOHOLS, N.O.S.
(Ethanol, Propan-1-ol)**14.3 Transport hazard class(es)**

IMDG : 3

IATA (Cargo) : 3

14.4 Packing groupIMDG
Packing group : III
Labels : 3
EmS Code : F-E, S-DIATA (Cargo)
Packing instruction (cargo aircraft) : 366
Packing group : III
Labels : Flammable liquid**14.5 Environmental hazards**IMDG
Marine pollutant : no

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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 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; 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
STOT SE 3, H336	: 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.

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