

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

1.1. Product identifier

Name of product Micropur Forte MF Flüssig

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

Identified uses

Sector of uses [SU]

SU21 - Consumer uses: Private households (= general public = consumers)

Product categories [PC]

disinfectants

PC8 - Biocidal products (e.g. Disinfectants, pest control)

Recommended intended purpose(s)

Water disinfection

1.3. Details of the supplier of the safety data sheet

Manufacturer/distributor

Katadyn Produkte AG
Pfäffikerstrasse 37, CH-8310 Kempthal
Phone +41 44 839 21 11

Advice

This number is only available at office times.
Phone +41 44 839 21 11
E-mail (competent person):
info@katadyn.ch

1.4. Emergency telephone number

Emergency advice

Swiss toxicological Information Center
Phone 145 / +41 44 251 51 51

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to 67/548/EEC or 1999/45/EC

N; R51/53

R-phrases

51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Additional hints

The preparation is classified as hazardous according Directive 1999/45/EC.

The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

This mixture is classified as hazardous according to Regulation (EC) No 1272/2008 [GHS].

Classification according to Regulation (EC) No 1272/2008 [CLP/GHS]

| Hazard classes and Hazard categories | Hazard Statements | Classification procedure |
|--------------------------------------|-------------------|--------------------------|
| Aquatic Chronic 2 | H411 | |

Hazard statements for environmental hazards

H411 Toxic to aquatic life with long lasting effects.

Additional hints

The classification is according to the latest editions of the EU-lists, and extended by company and literature data. This mixture is classified as hazardous according to Regulation (EC) No 1272/2008 [GHS].

2.2. Label elements

Labelling according to Regulation (EC) No 1272/2008 [CLP/GHS]



GHS09

Hazard statements for environmental hazards

H411 Toxic to aquatic life with long lasting effects.

Precautionary Statements

General

P102 Keep out of reach of children.

Prevention

P273 Avoid release to the environment.

Response

P391 Collect spillage.

Disposal

P501 Dispose of contents/container in accordance with local legislation.

Hazardous ingredients for labeling

sodium hypochlorite, solution, Silver

2.3. Other hazards

No information available.

SECTION 3: Composition/ information on ingredients

3.1. Substances

not applicable

3.2. Mixtures

Hazardous ingredients

| CAS No | EC No | Name | [%] | Classification according to 67/548/EEC |
|-----------|-----------|-------------------------------|-------|--|
| 7440-22-4 | 231-131-3 | Silver | 0,08 | -- |
| 7631-99-4 | 231-554-3 | sodium nitrate | < 0,1 | Xn R22; O R8 |
| 7681-52-9 | 231-668-3 | sodium hypochlorite, solution | < 2,5 | C R34; R31; N R50 |

Hazardous ingredients (continued)

| CAS No | EC No | Name | [%] | Classification according to Regulation (EC) No 1272/2008 [CLP/GHS] |
|-----------|-----------|-------------------------------|-------|--|
| 7440-22-4 | 231-131-3 | Silver | 0,08 | |
| 7631-99-4 | 231-554-3 | sodium nitrate | < 0,1 | Ox. Sol. 3, H272 / Acute Tox. 4, H302 |
| 7681-52-9 | 231-668-3 | sodium hypochlorite, solution | < 2,5 | Skin Corr. 1B, H314 / Aquatic Acute 1, H400 |

SECTION 4: First aid measures

4.1. Description of first aid measures

In case of inhalation

Remove the casualty into fresh air and keep him immobile.
In the event of symptoms refer for medical treatment.

In case of skin contact

In case of contact with skin wash off immediately with soap and water.
Consult a doctor if skin irritation persists.

In case of eye contact

In case of contact with eyes rinse with plenty of water carefully. In the event of persistent symptoms seek medical treatment.

In case of ingestion

If swallowed seek medical advice immediately and show the doctor packing or label.
Rinse out mouth thoroughly with water.
Give plenty of water to drink in small sips.

4.2. Most important symptoms and effects, both acute and delayed

No information available.

4.3. Indication of any immediate medical attention and special treatment needed

No information available.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Product does not burn, fire-extinguishing activities according to surrounding.
Alcohol-resistant foam
Dry fire-extinguishing substance
Carbon dioxide
Water spray jet

Unsuitable extinguishing media

Full water jet

5.2. Special hazards arising from the substance or mixture

In case of fire formation of dangerous gases possible.
Chlorine (Cl₂)

5.3. Advice for firefighters

Special protective equipment for fire-fighters

Use breathing apparatus with independent air supply.

Fire-fighting operations, rescue and clearing work under effect of combustion and smoulder gases just may be done with breathing apparatus.

Additional information

Fire residues and contaminated firefighting water must be disposed of in accordance with the local regulations.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Avoid contact with skin and eyes.

Use personal protective clothing.

6.2. Environmental precautions

Inform responsible authority with penetration in waters or drains.

Do not discharge into the drains/surface waters/groundwater.

6.3. Methods and material for containment and cleaning up

Take up with absorbent material (e.g. sand, kieselguhr, acid binder, general-purpose binder, sawdust).

Send in suitable containers for recovery or disposal.

Additional Information

Informations for safe handling see chapter 7.

Informations for personal protective equipment see chapter 8.

Informations for disposal see chapter 13.

6.4. Reference to other sections

No information available.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

Avoid contact with skin and eyes.

Care for thoroughly room ventilation, if necessary use in well ventilated area with local exhaust ventilation at workplace.

General protective measures

Avoid contact with eyes and skin

Take the usual precautions when handling chemicals.

Hygiene measures

At work do not eat, drink and smoke.

Keep away from food and drink.

Wash hands before breaks and after work.

Advice on protection against fire and explosion

Avoid effect of heat.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep in closed original container.
Provide ventilation of containers

Advice on storage compatibility

Do not store together with food.

Further information on storage conditions

Protect from atmospheric moisture and water
Protect from heat and direct solar radiation.
Keep container dry and store at cool and aired place.
Container should not be gas-tight closed.
Do not store at temperature above 25°C (=77°F).
Keep in a cool place, heat causes increase in pressure and risk of bursting.

7.3. Specific end use(s)

No information available.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.2. Exposure controls

Respiratory protection

No special measures necessary if used correctly.
If ventilation insufficient, wear respiratory protection.

Hand protection

No special measures necessary if used correctly.

Eye protection

safety goggles

Other protection measures

Light protective clothing.

Appropriate engineering controls

Provide suitable extraction at the processing machines.
Avoid contact with skin and eyes.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance

liquid

Colour

colourless

Odour

typical, pungent

Odour threshold

not determined

Important health, safety and environmental information

| | Value | Temperature | at | Method | Remark |
|----------|-------|-------------|----|--------|--------|
| pH value | 9,5 | 20 °C | | | |

| | Value | Temperature | at | Method | Remark |
|--|-----------------------|-------------|----|--------|-----------------------------------|
| boiling point | not determined | | | | |
| melting point | not determined | | | | |
| Flash point | not applicable | | | | |
| Vapourisation rate | not determined | | | | |
| Flammable (solid) | not determined | | | | |
| Flammability (gas) | not determined | | | | |
| Ignition temperature | not applicable | | | | |
| Self ignition temperature | not applicable | | | | The product is not self-igniting. |
| Lower explosion limit | not determined | | | | |
| Upper explosion limit | not determined | | | | |
| Vapour pressure | not applicable | | | | |
| Relative density | 1,2 g/cm ³ | | | | |
| Vapour density | not determined | | | | |
| Solubility in water | not determined | | | | multimiscible |
| Solubility/other | not determined | | | | |
| Partition coefficient n-octanol/water (log P O/W) | not determined | | | | |
| Decomposition temperature | not determined | | | | |
| Viscosity | not determined | | | | |

Oxidising properties
 No information available.

Explosive properties
 The product is not explosiv.

9.2. Other information
 No information available.

SECTION 10: Stability and reactivity

10.1. Reactivity

No information available.

10.2. Chemical stability

No information available.

10.3. Possibility of hazardous reactions

No information available.

10.4. Conditions to avoid

No decomposition if used as directed.

10.5. Incompatible materials

Materials to avoid

Reactions with strong acids.

Reactions with reducing agents.

10.6. Hazardous decomposition products

In case of fire formation of dangerous gases possible.

Chlorine

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity/Irritability/Sensitization

| | Value/Validation | Species | Method | Remark |
|---------------------------|--|---------|--------|--------|
| LD50 acute oral | > 2000 mg/kg | rat | | |
| Irritability skin | low irritant effect - not necessary to label | | | |
| Irritability eye | low irritant - no labeling duty | | | |
| Skin sensitization | non-sensitizing | | | |

Toxicity test (Additional information)

No experimental indication of genotoxicity in vitro (Ames-test negative).

Additional information

The product was classified on the basis of the calculation procedure of the preparation directive (1999/45/EC).

No toxicological data available.

SECTION 12: Ecological information

12.1. Toxicity

Ecotoxicological effects

| | Value | Species | Method | Validation |
|----------------|-------------------|---------|--------|------------|
| Fish | No data available | | | |
| Daphnia | No data available | | | |
| Algae | No data available | | | |

12.2. Persistence and degradability

Biological degradability No data available

12.3. Bioaccumulative potential

No information available.

12.4. Mobility in soil

No information available.

12.5. Results of PBT and vPvB assessment

No information available.

12.6. Other adverse effects

Behaviour in sewage plant

No data available.

General regulation

Ecological dates are not available.

Do not allow uncontrolled leakage of product into the environment.

Product is not allowed to be discharged into aquatic environment, drains or sewage treatment plants.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste code No.

16 05 07*

Name of waste

discarded inorganic chemicals consisting of or containing dangerous substances

Wastes marked with an asterisk are considered to be hazardous waste pursuant to Directive 2008/98/EC on hazardous waste.

Recommendations for the product

In accordance with regulations for special waste, must be taken to a special waste disposal.

The waste disposal has to be proved.

Dispose of as hazardous waste.

Recommendations for packaging

Contaminated packaging should be emptied as far as possible and after appropriate cleansing may be taken for reuse.

Packaging that cannot be cleaned should be disposed of like the product.

General information

Partially emptied packaging must be taken to point of sale or to a special waste disposal. Dispose of empty containers as urban waste.

SECTION 14: Transport information

| | ADR/RID | IMDG | IATA-DGR |
|---|--|--|--|
| 14.1. UN number | 3082 | 3082 | 3082 |
| 14.2. UN proper shipping name | Environmentally Hazardous Substance, Liquide, n.o.s. (sodium hypochlorite, solution) | Environmentally Hazardous Substance, Liquide, n.o.s. (sodium hypochlorite, solution) | Environmentally Hazardous Substance, Liquide, n.o.s. (sodium hypochlorite, solution) |
| 14.3. Transport hazard class(es) | 9 | 9 | 9 |
| 14.4. Packing group | III | III | III |
| 14.5. Environmental hazards | Yes | Yes | Yes |

14.6. Special precautions for user

No information available.

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

No information available.

Land and inland navigation transport ADR/RID

Hazard label(s) 9

tunnel restriction code E

The product is not subject of the regulations ADR / RID in packaging < 5 L / < 5 kg in accordance with Special Provision 375.

Marine transport IMDG

MARINE POLLUTANT

The product is not subject of the regulations IMDG in packaging < 5 L / < 5 kg in accordance with section 2.10.2.7 IMDG.

Air transport ICAO/IATA-DGR

The product is not subject of the IATA regulations in packaging < 5 L / < 5 kg in accordance with Special Provision A197.

Transport/further information

Additional marking for environmentally hazardous (fish and tree) required.

SECTION 15: Regulatory information

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

National regulations

Water hazard class

2

hazardous to waters, self-classification

15.2. Chemical Safety Assessment

Chemical safety assessments for substances in this mixture were not carried out.

SECTION 16: Other information

Recommended uses and restrictions

National and local regulations concerning chemicals shall be observed.

Further information

The information contained herein is based on the state of our knowledge. It characterizes the product with regard to the appropriate safety precautions. It does not represent a guarantee of the properties of the product.

Wording of the R/H-phrases specified in chapter 3 (not the classification of the mixture!)

R 22 Harmful if swallowed.

R 31 Contact with acids liberates toxic gas.

R 34 Causes burns.

R 50 Very toxic to aquatic organisms.

R 8 Contact with combustible material may cause fire.

H272 May intensify fire; oxidiser.

H302 Harmful if swallowed.

H314 Causes severe skin burns and eye damage.

H400 Very toxic to aquatic life.