

Micropur Forte MF Flüssig

Print date 13.04.2023
Revision date 06.03.2023
Version 1.1 (en)
replaces version of 01.06.2022 (1.0)

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

1.1 Product identifier

Trade name/designation Micropur Forte MF Flüssig

Hazard components

sodium hypochlorite, solution, Silver

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

Sector of uses [SU]

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

Product Categories [PC]

disinfectants
PC8 Biocidal products

* **Use of the substance/mixture**

Disinfection and preservation of drinking water

1.3 Details of the supplier of the safety data sheet

Distribution Europe

Katadyn Deutschland GmbH
Hessenring 23
D-64546 Mörfelden-Walldorf
Department responsible for information:
This number is only available at office times.
Telephone +49 6105 45 67 89

Manufacturer / Distribution Switzerland

Katadyn Produkte AG
Pfäffikerstrasse 37
CH-8310 Kemptthal
Telephone +41 44 839 21 11

Department responsible for information:
This number is only available at office times.
Telephone +41 44 839 21 11

E-mail (competent person):
info@katadyn.ch

* **1.4 Emergency telephone number**

Swiss toxicological Information Center 145
Europe: GBK GmbH +49 (0)6132-84463

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

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

Skin Irrit. 2, H315

Eye Irrit. 2, H319

Aquatic Chronic 1, H410

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Hazard statements for health hazards

H315 Causes skin irritation.
H319 Causes serious eye irritation.

Hazard statements for environmental hazards

H410 Very toxic to aquatic life with long lasting effects.

Remark

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

2.2 Label elements

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

Hazard components

sodium hypochlorite, solution, Silver

Hazard pictograms



GHS07



GHS09

Signal word

Warning

Hazard statements

H315 Causes skin irritation.
H319 Causes serious eye irritation.
H410 Very toxic to aquatic life with long lasting effects.

Precautionary statements

P102 Keep out of reach of children.
P273 Avoid release to the environment.
P302 + P352 IF ON SKIN: Wash with plenty of 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.
P391 Collect spillage.
P501 Contents / container hand over to an approved waste disposal facility.

Special rules for supplemental label elements for certain mixtures

EUH206 Warning! Do not use together with other products. May release dangerous gases (chlorine).

2.3 Other hazards

No data available

SECTION 3: Composition / information on ingredients

3.2 Mixtures

Hazardous ingredients

CAS No.	EC No.	Substance name	Concentration	Classification according to Regulation (EC) No 1272/2008 [CLP]	SCL/ M/ ATE
7681-52-9	231-668-3	sodium hypochlorite, solution	< 2.5 weight-%	Skin Corr. 1B; H314 Eye Dam. 1; H318 Aquatic Acute 1; H400 Aquatic Chronic 1; H410; EUH031	EUH031: C>=5% M=10 (Aquatic Acute 1) M=1 (Aquatic Chronic 1)

Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH)

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CAS No.	EC No.	Substance name	Concentration	Classification according to Regulation (EC) No 1272/2008 [CLP]	SCL/ M/ ATE
7440-22-4	231-131-3	Silver	0.08 weight-%	Aquatic Acute 1; H400 Aquatic Chronic 1; H410	M=10 (Aquatic Acute 1) M=10 (Aquatic Chronic 1)

SECTION 4: First aid measures

4.1 Description of first aid measures

Following inhalation

Remove casualty to fresh air and keep warm and at rest.
In the event of symptoms refer for medical treatment.

Following skin contact

After contact with skin, wash immediately with plenty of water and soap.
In case of skin irritation, consult a physician.

After eye contact

After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an ophthalmologist immediately.

Following ingestion

If swallowed seek medical advice immediately and show the doctor packing or label.
Rinse mouth thoroughly with water.
Let water be drunken in little sips (dilution effect).

4.2 Most important symptoms and effects, both acute and delayed

No data available

4.3 Indication of any immediate medical attention and special treatment needed

No data available

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

alcohol resistant foam
Dry extinguishing powder
Carbon dioxide (CO₂)
Water spray jet

Unsuitable extinguishing media

Full water jet

5.2 Special hazards arising from the substance or mixture

Hazardous combustion products

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

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5.3 Advice for firefighters

Special protective equipment for firefighters

In case of fire: Wear self-contained breathing apparatus.

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

Additional information

The product itself does not burn.

Co-ordinate fire-fighting measures to the fire surroundings.

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 protection equipment.

6.2 Environmental precautions

Inform responsible authority with penetration in waters or drains.

Do not allow to enter into surface water or drains.

6.3 Methods and material for containment and cleaning up

For containment

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

Send in suitable containers for recovery or disposal.

6.4 Reference to other sections

Safe handling: see section 7

Personal protection equipment: see section 8

Disposal: see section 13

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Protective measures

Avoid contact with skin and eyes.

If local exhaust ventilation is not possible or not sufficient, the entire working area should be ventilated by technical means.

Avoid effect of heat.

Keep the packing dry and well sealed to prevent contamination and absorption of humidity.

Keep in a cool, well-ventilated place.

Avoid:

Eye contact

Skin contact

Take the usual precautions when handling chemicals.

Advices on general occupational hygiene

When using do not eat, drink, smoke, sniff.

Keep away from food and drink.

Wash hands before breaks and after work.

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7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep/Store only in original container.
Keep container tightly closed.
Provide ventilation of containers
Container should not be closed gas-tight.

Materials to avoid

Do not store together with:
Food and feedingstuffs

Further information on storage conditions

Protect from atmospheric moisture and water
Protect from heat and direct solar radiation.
Do not store at temperature above 25°C (=77°F).
Keep in a cool, well-ventilated place.
Heating causes rise in pressure with risk of bursting.

7.3 Specific end use(s)

No data available

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limit values

CAS No.	EC No.	Substance name	occupational exposure limit value
7440-22-4	231-131-3	Silver, metallic	0,1 [mg/m ³] 2000/39/EC
	231-131-3	Silver (soluble compounds as Ag)	0,01 [mg/m ³] 2006/15/EC
7440-22-4	231-131-3	Silver, metallic	0,1 [mg/m ³] (IE)
7440-22-4	231-131-3	Silver compounds, soluble	0,01 [mg/m ³] (IE)
7440-22-4	231-131-3	Silver, metallic	0,1 [mg/m ³] (UK)
7440-22-4	231-131-3	Silver compounds, soluble	0,01 [mg/m ³] (UK)

8.2 Exposure controls

Appropriate engineering controls

Technical measures to prevent exposure

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

Personal protection equipment

Eye/face protection

safety goggles

Hand protection

No special measures necessary if used correctly.

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Body protection:

Light protective clothing.

Respiratory protection

No special measures necessary if used correctly.
Respiratory protection necessary at:
insufficient ventilation

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state

liquid

Colour

colourless

Odour

characteristic
stinging

Safety relevant basis data

	Value	Method	Source, Remark
Odour threshold:	not determined		
Melting point/freezing point	Melting point		not determined
Boiling point or initial boiling point and boiling range			not determined
flammability	not determined		
Lower and upper explosion limit	not determined		
Flash point	not determined		
Auto-ignition temperature			The product ist not self-igniting.
Decomposition temperature	not determined		
pH	in delivery state 9.5 (20°C)		
Viscosity	not determined		
Solubility(ies)	Water solubility		multimiscible not determined
Partition coefficient n-octanol/water (log value)	not determined		
Vapour pressure	not determined		
Density and/or relative density	1.2 g/cm ³		
Relative vapour density	not determined		
particle characteristics	not determined		

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9.2 Other information

Other safety characteristics

	Value	Method	Source, Remark
Explosive properties			The product is not explosiv.

SECTION 10: Stability and reactivity

10.1 Reactivity

No data available

10.2 Chemical stability

No data available

10.3 Possibility of hazardous reactions

No data available

10.4 Conditions to avoid

No decomposition if used as directed.

10.5 Incompatible materials

Reactions with strong acids.
 Reducing agent

10.6 Hazardous decomposition products

In case of fire formation of dangerous gases possible.
 Chlorine

SECTION 11: Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity

Animal data

	Effective dose	Method, Evaluation	Source, Remark
Acute oral toxicity	> 2000 mg/kg Species Rat		
Acute dermal toxicity	not determined		
Acute inhalation toxicity	not determined		

Skin corrosion/irritation

Animal data

Result / Evaluation	Method	Source, Remark
Irritant in contact with skin and mucous membranes.		

Serious eye damage/irritation

Animal data

Result / Evaluation	Method	Source, Remark
Irritant.		

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Sensitisation to the respiratory tract

not determined

Skin sensitisation

Animal data

Result / Evaluation	Dose / Concentration	Method	Source, Remark
not sensitising.			

Germ cell mutagenicity

not determined

Carcinogenicity

not determined

Reproductive toxicity

not determined

STOT-single exposure

not determined

STOT-repeated exposure

not determined

Aspiration hazard

not determined

11.2 Information on other hazards

Symptoms related to the physical, chemical and toxicological characteristics

	Effective dose	Method, Evaluation	Source, Remark
Endocrine disrupting properties		No data available	

Other information

No experimental indication of genotoxicity in vitro (Ames-test negative).
 The product was classified on the basis of the calculation procedure of the Regulation (EU) Nr. 1272/2008 (CLP).
 Toxicological data are not available.

SECTION 12: Ecological information

12.1 Toxicity

Aquatic toxicity

	Effective dose	Method, Evaluation	Source, Remark
Acute (short-term) fish toxicity			
Chronic (long-term) fish toxicity	not determined		
Acute (short-term) toxicity to crustacea			
Chronic (long-term) toxicity to aquatic invertebrate	not determined		
Acute (short-term) toxicity to algae and cyanobacteria			
Chronic (long-term) toxicity to aquatic algae and cyanobacteria	not determined		
Toxicity to other aquatic plants/organisms	not determined		

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	Effective dose	Method, Evaluation	Source, Remark
Toxicity to microorganisms	not determined		

12.2 Persistence and degradability

	Value	Method	Source, Remark
Biodegradation			No data available

12.3 Bioaccumulative potential

No data available

12.4 Mobility in soil

No data available

12.5 Results of PBT and vPvB assessment

No data available

12.6 Endocrine disrupting properties

No data available

12.7 Other adverse effects

Additional ecotoxicological information

Additional information

Ecological data are not available.
 Do not allow uncontrolled discharge 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 codes/waste designations according to EWC/AVV

Waste code product	Waste name
160507 *	discarded inorganic chemicals consisting of or containing hazardous substances

Appropriate disposal / Product

In accordance with regulations for special waste, must be taken to a special waste disposal.
 Waste disposal according to directive 2008/98/EC, covering waste and dangerous waste.

Appropriate disposal / Package

Non-contaminated packages may be recycled.
 Handle contaminated packages in the same way as the substance itself.

Remark

Evidence for disposal must be provided.
 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**

	Land transport (ADR/RID)	Sea transport (IMDG)	Air transport (ICAO-TI / IATA-DGR)
14.1 UN number or ID number	UN 3082	UN 3082	UN 3082

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	Land transport (ADR/RID)	Sea transport (IMDG)	Air transport (ICAO-TI / IATA-DGR)
14.2 UN proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (sodium hypochlorite, solution)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (sodium hypochlorite, solution)	Environmentally hazardous substance, liquid, 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	ENVIRONMENTALLY HAZARDOUS	ENVIRONMENTALLY HAZARDOUS	ENVIRONMENTALLY HAZARDOUS

14.6 Special precautions for user

No data available

14.7 Maritime transport in bulk according to IMO instruments

No data available

All transport carriers

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

Land transport (ADR/RID)

UN number or ID number UN 3082
 UN proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (sodium hypochlorite, solution)
 Transport hazard class(es) 9
 Hazard label(s) 9
 Classification code M6
 Packing group III
 Environmental hazards ENVIRONMENTALLY HAZARDOUS
 Limited quantity (LQ) 5 L
 Special provisions 274, 335, 375, 601
 Tunnel restriction code -

Remark

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

Sea transport (IMDG)

UN number or ID number UN 3082
 UN proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (sodium hypochlorite, solution)
 Transport hazard class(es) 9
 Packing group III
 Environmental hazards ENVIRONMENTALLY HAZARDOUS
 Limited quantity (LQ) 5 L
 Marine pollutant No
 EmS F-A, S-F

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Remark

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-TI / IATA-DGR)

UN number or ID number UN 3082
UN proper shipping name Environmentally hazardous substance, liquid, n.o.s. (sodium hypochlorite, solution)
Transport hazard class(es) 9
Packing group III
Environmental hazards ENVIRONMENTALLY HAZARDOUS

Remark

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

*** SECTION 15: Regulatory information**

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

*** Other regulations (EU)**

*** Directive 2010/75/EU on industrial emissions [Industrial Emissions Directive] VOC**

VOC content, ready-to-use condition 0 g/L
VOC content, delivery state 0 %
VOC-value 0 g/L

15.2 Chemical Safety Assessment

National regulations

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

SECTION 16: Other information

Additional information

National and local regulations concerning chemicals shall be observed.
The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

Relevant H- and EUH-phrases (Number and full text)

H314 Causes severe skin burns and eye damage.
H318 Causes serious eye damage.
H400 Very toxic to aquatic life.
H410 Very toxic to aquatic life with long lasting effects.

Indication of changes

* Data changed compared with the previous version