

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

### 1.1. Product identifier

**Name of product** Micropur Forte MF 1T

### 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

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## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

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

Xi; R36

N; R51/53

#### R-phrases

36 Irritating to eyes.

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.

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

Hazard classes and Hazard categories	Hazard Statements	Classification procedure
Eye Irrit. 2 Aquatic Chronic 2	H319 H411	

**Hazard statements for health hazards**

H319 Causes serious eye irritation.

**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]**



GHS07



GHS09

**Signal word**

Warning

**Hazard statements for health hazards**

H319 Causes serious eye irritation.

**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**

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

**Disposal**

P501 Contents / container hand over to an approved waste disposal facility.

**Hazardous ingredients for labeling**

adipic-acid, troclosene sodium, dihydrate

**2.3. Other hazards**

**Adverse human health effects and symptoms**

With moisture, product develops an alkaline pH-value and can cause irritation.  
Inhalation of dust may cause irritation of the respiratory system.

**Information pertaining to special dangers for human and environment**

Bei Kontakt mit sauren Produkten können gefährliche Chlorgase entstehen.  
Avoid contact with eyes.  
Contact with acids releases toxic gas.

## 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
124-04-9	204-673-3	adipic-acid	25 - 50	Xi R36
497-19-8	207-838-8	sodium carbonate	20 - 25	Xi R36
2893-78-9	220-767-7	troclosene sodium	< 10	E R2; O R8; Xn R22; Xi R36/37; R31; N R50-53
7440-22-4	231-131-3	Silver	< 0,2	--
7631-99-4	231-554-3	sodium nitrate	< 0,3	Xn R22; O R8

CAS No	EC No	Name	[%]	Classification according to Regulation (EC) No 1272/2008 [CLP/ GHS]
124-04-9	204-673-3	adipic-acid	25 - 50	Eye Irrit. 2, H319
497-19-8	207-838-8	sodium carbonate	20 - 25	Eye Irrit. 2, H319
2893-78-9	220-767-7	troclosene sodium	< 10	Ox. Sol. 2, H272 / Acute Tox. 4, H302 / Eye Irrit. 2, H319 / STOT SE 3, H335 / Aquatic Acute 1, H400 / Aquatic Chronic 1, H410
7440-22-4	231-131-3	Silver	< 0,2	
7631-99-4	231-554-3	sodium nitrate	< 0,3	Ox. Sol. 3, H272 / Acute Tox. 4, H302

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

#### General information

Remove contaminated soaked clothing immediately and dispose it safely.

Symptoms of poisoning may not occur for many hours, therefore keep under medical supervision for at least 48 hours.

#### 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

Do not induce vomiting.

If swallowed seek medical advice immediately and show the doctor packing or label.

Rinse out mouth thoroughly with water.

### 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.

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## **SECTION 5: Firefighting measures**

### **5.1. Extinguishing media**

#### **Suitable extinguishing media**

Alcohol-resistant foam

Dry powder

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.

Hydrogen chloride (HCl)

Hydrogen cyanide (HCN)

Chlorine (Cl<sub>2</sub>)

### **5.3. Advice for firefighters**

#### **Special protective equipment for fire-fighters**

Use breathing apparatus with independent air supply.

Wear full protective clothing.

Do not inhale explosion and/or combustion gases.

#### **Additional information**

Cool endangered containers with water spray jet.

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

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## **SECTION 6: Accidental release measures**

### **6.1. Personal precautions, protective equipment and emergency procedures**

#### **For non-emergency personnel**

Avoid contact with skin and eyes.

Ensure adequate ventilation.

Keep people away and stay on the upwind side.

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**

Ensure adequate ventilation.

After taking up the material dispose according to regulation.

Take up mechanically and send for disposal.

#### **Additional Information**

Informations for safe handling see chapter 7.

Informations for personal protective equipment see chapter 8.

Informations for disposal see chapter 13.

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#### **6.4. Reference to other sections**

No information available.

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### **SECTION 7: Handling and storage**

#### **7.1. Precautions for safe handling**

##### **Advice on safe handling**

Avoid contact with skin and eyes.  
Do not breathe dust.  
Keep container tightly closed.  
Avoid the formation and deposition of dust.  
Use only in thoroughly ventilated areas.

##### **General protective measures**

Avoid contact with eyes and skin  
Take the usual precautions when handling chemicals.  
Ensure adequate ventilation.

##### **Hygiene measures**

Remove soiled or soaked clothing immediately.  
Keep away from food and drink.  
Wash hands before breaks and after work.

##### **Advice on protection against fire and explosion**

Keep away from sources of ignition - No smoking  
The product is not combustible.

#### **7.2. Conditions for safe storage, including any incompatibilities**

##### **Requirements for storage rooms and vessels**

Keep in closed original container.

##### **Advice on storage compatibility**

Do not store with acids.  
Do not store together with food.

##### **Further information on storage conditions**

Keep container dry, tightly closed and store at cool and aired place.

**Storage group** 11

#### **7.3. Specific end use(s)**

No information available.

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### **SECTION 8: Exposure controls/personal protection**

#### **8.1. Control parameters**

#### **8.2. Exposure controls**

##### **Respiratory protection**

In case of dust formation wear micro dust mask.

##### **Hand protection**

Glove material specification [make/type, thickness, permeation time/life, wetting resistance]: butyle rubber, 0,7mm, 480 Min.

Please observe the glove manufacturer's instructions on permeability and ruptur times as well as the specific workplace conditions.

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**Eye protection**

No special measures necessary if used correctly.

**Other protection measures**

No special measures necessary if used correctly.

**Appropriate engineering controls**

Avoid the formation and deposition of dust.

No further data, see item 7.

Avoid contact with skin and eyes.

Care for thorough room ventilation, if necessary provide local air ventilation.

**SECTION 9: Physical and chemical properties**

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

**Appearance**

tablet

**Colour**

white

**Odour**

typical, pungent

**Odour threshold**

not determined

**Important health, safety and environmental information**

	Value	Temperature	at	Method	Remark
<b>pH value</b>	5,97	20 °C	100 g/l		emulsion in water
<b>boiling point</b>	not applicable				
<b>melting point</b>	133 °C				
<b>Flash point</b>	not applicable				
<b>Vapourisation rate</b>	not determined				
<b>Flammable (solid)</b>	not applicable				
<b>Flammability (gas)</b>	not determined				
<b>Ignition temperature</b>	No data available.				
<b>Self ignition temperature</b>					The product is not self-igniting.
<b>Lower explosion limit</b>	not determined				
<b>Upper explosion limit</b>	not determined				
<b>Vapour pressure</b>	not determined				
<b>Relative density</b>	1,66 g/cm <sup>3</sup>	20 °C			
<b>Bulk density</b>	0,85 kg/m <sup>3</sup>				

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	Value	Temperature	at	Method	Remark
<b>Vapour density</b>	not determined				
<b>Solubility in water</b>					easy soluble
<b>Solubility/other</b>	not determined				
<b>Partition coefficient n-octanol/water (log P O/W)</b>	not determined				
<b>Decomposition temperature</b>	not determined				
<b>Viscosity</b>	not determined				
<b>Solids content</b>	100 %				

**Oxidising properties**

No information available.

**Explosive properties**

The product is not explosiv.

**9.2. Other information**

No information available.

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**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**

Evolution of chlorine under influence of acids.

**10.6. Hazardous decomposition products**

In case of fire formation of dangerous gases possible.

Hydrogen chloride (HCl)

Chlorine

Chlorine compounds

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## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

#### Acute toxicity/Irritability/Sensitization

	Value/Validation	Species	Method	Remark
<b>LD50 acute oral</b>	ca. 1400 mg/kg	rat		
<b>LD50 acute dermal</b>	> 2000 mg/kg	rabbit		
<b>Irritability skin</b>	Irritant to skin and mucous membranes.			
<b>Irritability eye</b>	irritant			
<b>Skin sensitization</b>	non-sensitizing			

#### Additional information

Toxicological data refer to base substance.

The declarations of toxicology refer to main component.

The product has not been tested. The information is derived from the properties of the individual components.

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

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## SECTION 12: Ecological information

### 12.1. Toxicity

#### Ecotoxicological effects

	Value	Species	Method	Validation
<b>Fish</b>	LC50 0,13 mg/l (96 h)	rainbow trout		
<b>Daphnia</b>	EC50 0,28 mg/l (48 h)	Daphnia magna		

### 12.2. Persistence and degradability

No information 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

#### General regulation

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

Risk of harmful effect to microorganisms in sewage processing plants.

Because of damage to water organism do not fill in presurge.

Ecological data are not available.

Do not allow uncontrolled leakage of product into the environment.



Harmful to fishes and bacteria.  
The information to ecology refers to active substance.

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

Waste code No.	Name of waste
16 05 07*	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.  
Collect waste separated in suitable, labeled and lockable containers.

### 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
<b>14.1. UN number</b>	3077	3077	3077
<b>14.2. UN proper shipping name</b>	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (troclosene sodium)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O. S. (troclosene sodium)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (troclosene sodium)
<b>14.3. Transport hazard class(es)</b>	9	9	9
<b>14.4. Packing group</b>	III	III	III
<b>14.5. Environmental hazards</b>	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.

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**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.

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**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 2 Risk of explosion by shock, friction, fire or other sources of ignition.  
R 22 Harmful if swallowed.  
R 31 Contact with acids liberates toxic gas.  
R 36 Irritating to eyes.  
R 36/37 Irritating to eyes and respiratory system.  
R 50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.  
R 8 Contact with combustible material may cause fire.

H272 May intensify fire; oxidiser.  
H302 Harmful if swallowed.  
H319 Causes serious eye irritation.  
H335 May cause respiratory irritation.  
H400 Very toxic to aquatic life.  
H410 Very toxic to aquatic life with long lasting effects.

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