

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

Product name : MICROCID  
Product code: refer to sales department

**1.2. Relevant identified uses of the substance or mixture and not recommended uses**

Antiseptic / Sulphites / Antioxidants  
Industrial Manufacturing[SU3], Manufacture of food products[SU4], Public domain (administration, education, entertainment, services, craftsmen)[SU22]  
Additive for enological use  
Not recommended uses  
Do not use for purposes other than those listed

**1.3. Details of the supplier of the safety data sheet**

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**1.4. Emergency telephone number**

Centralino/Switchboard +39.030.2307.1 - (h 8.30-12.00 13.30-18.00)

**SECTION 2. Hazards identification****2.1. Classification of the substance or mixture**

2.1.1 Classification according to Regulation (EC) No 1272/2008:

Pictograms:

GHS05, GHS07

Hazard Class and Category Code(s):

Skin Irrit. 2, Eye Dam. 1

Hazard statement Code(s):

H315 - Causes skin irritation.

H318 - Causes serious eye damage.

2.1.2 Classification according to Directive 1999/45/EEC:

Classification:

Xi; R38 R31 Xi; R41

Nature of special risks attributed:

R31 - Contact with acids liberates toxic gas.

R38 - Irritating to skin.

R41 - Risk of serious damage to eyes.

If brought into contact with the skin, the product causes significant inflammation with erythema, scabs, or edema.

If brought into contact with eyes, the product causes serious damages to eyes, such as an opaque cornea or injury to iris.

**2.2. Label elements**

Labelling according to Regulation (EC) No 1272/2008:

Pictogram, Signal Word Code(s):

GHS05 - Danger

Hazard statement Code(s):

H315 - Causes skin irritation.

H318 - Causes serious eye damage.

Supplemental Hazard statement Code(s):

EUH031 - Contact with acids liberates toxic gas.

Precautionary statements:

Prevention

P280 - Wear protective gloves/protective clothing/eye protection/face protection.

Response

P302+P352 - IF ON SKIN: Wash with plenty of soap and 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.

P310 - Immediately call a POISON CENTER or doctor/physician.

P332+P313 - If skin irritation occurs: Get medical advice/attention.

Contains:

POTASSIUM METABISULFITE

**2.3. Other hazards**

The substance / mixture does NOT contain substances PBT/vPvB according to Regulation (EC) No 1907/2006, Annex XIII

No information on other hazards


**SECTION 3. Composition/information on ingredients**
**3.1 Substances**

Irrelevant

**3.2 Mixtures**

Refer to paragraph 16 for full text of risk phrases and hazard statements

Substance	Concentration	Classification	Index	CAS	EINECS	REACH
2,4-HEXADIENOIC POTASSIUM SALT	> 50 <= 100%	Xi; R36/38 Skin Irrit. 2, H315; Eye Irrit. 2, H319		24634-61-5	246-376-1	01-2119950 315-41-XXXX
CITRIC ACID	> 20 <= 30%	Xi; R36 Eye Irrit. 2, H319		77-92-9	201-069-1	01-2119457 026-42-XXXX
POTASSIUM METABISULFITE	> 10 <= 20%	Xi; R37 R31 Xi; R41 Eye Dam. 1, H318; STOT SE 3, H335		16731-55-8	240-795-3	01-2119537 422-45-XXXX
ASCORBIC ACID	> 5 <= 10%			50-81-7	200-066-2	

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

Inhalation:

Ventilate the area. Move immediately the contaminated patient from the area and keep him at rest in a well ventilated area. If you feel unwell seek medical advice.

Direct contact with skin (of the pure product):

Take off immediately contaminated clothing.

Wash immediately with plenty of running water and possibly with soap, the areas of the body that have, or are only

suspected to have, come in contact with the product.

Direct contact with eyes (of the pure product):

Wash immediately and thoroughly with running water, keeping eyelids open for at least 10 minutes, then protect your eyes with a dry sterile gauze. Seek medical advice immediately

Do not use eye drops or ointments of any kind before the examination or advice from an oculist.

Ingestion:

Not hazardous. It's possible to give activated charcoal in water or medicinal mineral vaseline oil.

#### **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**

If skin irritation occurs: Get medical advice/attention.

Immediately call a POISON CENTER or doctor/physician.

### **SECTION 5. Firefighting measures**

#### **5.1. Extinguishing media**

Suggested extinguishing media:

Water spray, CO2, foam, dry chemical, depending on the materials involved in the fire.

Extinguishing media to avoid:

Water jets. Use water jets only to cool the surfaces of the containers exposed to fire.

#### **5.2. Special hazards arising from the substance or mixture**

No data available.

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

Use protection for the breathing apparatus

Safety helmet and full protective clothing.

The water spray can be used to protect the people involved in the extinction.

You may also use self-contained breathing apparatus, especially when working in confined and poorly ventilated areas and if you use halogenated extinguishers (Halon 1211 fluobrene, Solkan 123, NAF, etc...)

Keep containers cool with water spray

### **SECTION 6. Accidental release measures**

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

6.1.1 For non-emergency personnel:

Leave the area surrounding the spill or release. Do not smoke

Wear mask, gloves and protective clothing.

6.1.2 For emergency responders:

Wear mask, gloves and protective clothing.

Eliminate all unguarded flames and possible sources of ignition. No smoking.

Provide a sufficient ventilation.

Evacuate the danger area and, in case, consult an expert.

#### **6.2. Environmental precautions**

Contain spills

Inform the competent authorities.

Dispose of the waste material in compliance with the regulations

### 6.3. Methods and material for containment and cleaning up

#### 6.3.1 Containment:

Rapidly recover the product, wear a mask and protective clothing  
Recover the product for reuse, if possible, or for elimination.

#### 6.3.2 Cleaning up:

After wiping up, wash with water the area and materials involved

#### 6.3.3 Other information:

None in particular.

### 6.4. Reference to other sections

Refer to paragraphs 8 and 13 for more information

## SECTION 7. Handling and storage

### 7.1. Precautions for safe handling

Avoid contact and inhalation of vapors or dust. See also paragraph 8 below.  
At work do not eat or drink.

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

Keep in original container closed tightly. Do not store in open or unlabelled containers.  
Keep containers upright and safe by avoiding the possibility of falls or collisions.  
Keep away from acids.  
Store in a cool place, away from heat sources and direct exposure to sunlight.

### 7.3. Specific end use(s)

#### Industrial Manufacturing:

Handle with extreme caution.

Store in a well ventilated place away from heat sources.

#### Manufacture of food products:

Handle with care.

Store in a clean, dry, ventilated area away from heat and direct sunlight.

Keep container tightly closed.

#### Public domain (administration, education, entertainment, services, craftsmen):

Handle with care. Store in a ventilated area and away from heat, keep the container tightly closed.

## SECTION 8. Exposure controls/personal protection

### 8.1. Control parameters

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#### Related to contained substances:

CITRIC ACID

Not available.

POTASSIUM METABISULFITE

Components with limit values applicable at workplace.

7446-09-5: Sulfur dioxide.

value of 0.25 ppm STEL (OEL (U.S.))

Reference limit value: ACGIH

PNEC

Fresh water: 1.17 mg / l

sea water: 0.12 mg / l

treatment plant: 88.1 mg / l

DNEL

inhalation

The limit of exposure to dust (inhalable fraction) was used as the basis for the DNEL.

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Exposure Limit Values  
not applicable

### 8.2. Exposure controls



Appropriate engineering controls:

Industrial Manufacturing:

No specific monitoring foreseen (act according to good practice and specific rules for the type of risk associated)

Manufacture of food products:

No specific monitoring foreseen (act according to good practice and specific rules for the type of risk associated)

Public domain (administration, education, entertainment, services, craftsmen):

No specific monitoring foreseen (act according to good practice and specific rules for the type of risk associated)

Individual protection measures:

(a) Eye / face protection

When handling the pure product use safety glasses (spectacles cage) (EN 166).

(b) Skin protection

(i) Hand protection

When handling the pure product use chemical resistant protective gloves (EN 374-1/EN374-2/EN374-3)

(ii) Other

Wear normal work clothing.

(c) Respiratory protection

Not needed for normal use.

(d) Thermal hazards

No hazard to report

Environmental exposure controls:

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Related to contained substances:

2,4-HEXADIENOIC POTASSIUM SALT

Technical protective measures

Ventilate working environments. Dust collection system. Avoid the accumulation of electrostatic charges.

Exposure limit values: not applicable

Individual protections

Goggles:

PVC/rubber gloves:-request the manufacturer break time and permeation (EN 374 part III)

Dust mask:

Rebreather:

Eye rinse bottle with pure water.

General protective regulations and labour hygiene

Do not eat, drink or smoke when handling.

Wash hands thoroughly after work and change clothes.

CITRIC ACID

Individual protections

Goggles:

Rubber/PVC gloves: Yes-ask the manufacturer break time and permeation (EN 374 Part III)

Dust mask:

Eye rinse bottle with pure water.

General rules for protection and hygiene

Do not eat, drink or smoke when handling.

Wash your hands after work and change clothes.

POTASSIUM METABISULFITE

Personal protection equipment: protect the respiratory system in the case of dust formation. Respiratory protection in case of weak concentrations or short actions: low retention filter for solid particles (e.g. EN 143 or 149 Type P1 or FFP1). In case of development of aerosol or inhalable dust use a combined filter for organic, inorganic, acid and basic

gas/vapors and toxic particles (e.g. EN 14387 Type ABEK-P3).

Hand protection: chemical resistant gloves (EN 374) even in the case of prolonged contact (recommendations: protection index 6, corresponding to a permeation time of >480 minutes second EN 374): e.g. nitrile rubber (0.4 mm), chlorinated rubber (0.5 mm), PVC (0.7 mm) and other. Additional information: the information is based on our tests, bibliographic data and information of gloves producers or derived by analogy from substances of similar composition. Please note that, due to several factors (e.g. temperature), the duration of use of a protection glove against chemical agents can be in practice noticeably lower than permeation time detected by tests. Due to the large variety of types, it is necessary to observe the operating instructions of manufacturers. Eye protection: safety goggles (glasses cage) (EN 166). General measures of protection and hygiene. Comply with usual precautions for the handling of chemicals. Do not breathe fumes and dust. Before the break and at the end of the work, wash your hands and face.

ASCORBIC ACID

personal precautions

Eye protection:

Gloves PVC / Rubber: Yes-Ask the manufacturer breakthrough times and permeation / EN 374

## SECTION 9. Physical and chemical properties

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

Physical and chemical properties	Value	Determination method
Appearance	moist granular powder colour grey	
Odour	not determined	
Odour threshold	not determined	
pH	5,25 ± 0,5 (20°C; sol. 5%)	
Melting point/freezing point	not applicable	
Initial boiling point and boiling range	not applicable	
Flash point	irrelevant	ASTM D92
Evaporation rate	irrelevant	
Flammability (solid, gas)	irrelevant	
Upper/lower flammability or explosive limits	irrelevant	
Vapour pressure	irrelevant	
Vapour density	irrelevant	
Relative density	0,44 ± 0,05 (20°C)	
Solubility	in water	
Water solubility	partially soluble	
Partition coefficient: n-octanol/water	not determined	
Auto-ignition temperature	irrelevant	
Decomposition temperature	irrelevant	
Viscosity	not determined	
Explosive properties	irrelevant	
Oxidising properties	irrelevant	

### 9.2. Other information

No data available.

## SECTION 10. Stability and reactivity

**10.1. Reactivity**

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Related to contained substances:

2,4-HEXADIENOIC POTASSIUM SALT

Stable under normal conditions

The presence of impurities can cause degradation in the presence of light or air

POTASSIUM METABISULFITE

No hazardous reactions if prescribed directions for storage and manipulation are followed.

**10.2. Chemical stability**

No hazardous reaction when handled and stored according to provisions.

**10.3. Possibility of hazardous reactions**

There are no hazardous reactions

**10.4. Conditions to avoid**

Nothing to report

**10.5. Incompatible materials**Acids, oxidizers, NaNO<sub>2</sub>, NaNO<sub>3</sub>**10.6. Hazardous decomposition products**

Sulfur dioxide

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

ATE(mix) oral = 0,0 mg/kg

ATE(mix) dermal = 0,0 mg/kg

ATE(mix) inhal = 0,0 mg/l/4 h

(a) acute toxicity: not applicable

(b) skin corrosion/irritation: If brought into contact with the skin, the product causes significant inflammation with erythema, scabs, or edema.

(c) serious eye damage/irritation: If brought into contact with eyes, the product causes serious damages to eyes, such as an opaque cornea or injury to iris.

(d) respiratory or skin sensitization: not applicable

(e) germ cell mutagenicity: not applicable

(f) carcinogenicity: not applicable

(g) reproductive toxicity: not applicable

(h) specific target organ toxicity (STOT) single exposure: not applicable

(i) specific target organ toxicity (STOT) repeated exposure: not applicable

(j) aspiration hazard: not applicable

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Related to contained substances:

2,4-HEXADIENOIC POTASSIUM SALT

LD50 (oral, rat): 4920 mg/kg

LD50 (rat, intraperitoneo): 1300 mg/kg

Chronic toxic: they are not to be expected effects

Cancerogenic: they are not to be expected effects

Mutagenic: they are not to be expected effects

Reproductive effects: no expected effect

CITRIC ACID

LD50 (oral, rat): 3000 mg/kg

LD50 (oral, rat): 5400 mg/kg

Chronic toxic (2 years):

NOEL 1200 mg/kg/d (oral, rat)

Local effects:

strong eye-irritation (rabbit) (OECD 405, charts)

-moderate skin irritation (rabbit) (OECD 404, charts)

Chronic toxic: well tolerated 2000 mg/kg/d

(oral, rat .90 days)

Mutagenicity: not mutagenic

Carcinogenicity: not carcinogenic

Reproduction: non toxic carcinogen

In vivo: Genotoxicity: non-genotoxic

Reproductive toxic effects:

Teratogenicity: do not teratogenic

LD50 (rat) Oral (mg/kg body weight) = 3000

POTASSIUM METABISULFITE

Acute Toxicity

Assessment of irritating effects:

Risk of serious damage to eyes. Not irritating to the skin.

Corrosion / irritation rabbit: not irritating. (BASF test)

Serious eye damage / eye irritation rabbit: irreversible damage (OECD Guideline 405)

Respiratory sensitization / skin

Evaluation of sensitizer:

Tests on animals showed no sensitizing action. The product was not tested. The data derive from products of similar structure and composition. We can not exclude a sensitizing effect on particularly sensitive persons.

Experimental data calculated:

Try the local lymph nodes in mice (LLNA) mouse: not sensitizing (OECD - Guideline 429)

The product was not tested. Data derive from products of similar structure and composition.

Germ cell mutagenicity

Assessment of mutagenicity:

There was no evidence of mutagenic potential in various experiments on bacteria and mammals. The substance proved not to be mutagenic in experiments on mammals. The product was not tested. The data derive from products of similar structure and composition.

Carcinogenicity:

Evaluation of carcinogenicity:

In experiments on animals, with long-term administration of large quantities of drinking water, the substance is not carcinogenic.

reproductive toxicity

Evaluation of reproductive toxicity:

The results on animal studies show no effects of damaging fertility. The product was not tested. The data derive from products of similar structure and composition.

Toxic development.

Evaluation of teratogenicity:

Animal tests show no fetal damage.

Specific target organ toxicity (single exposure)

Rating STOT single:

Based on the available data, it is not expected to cause specific toxicity of the target organs after a single exposure.

Jeopardized by suction

not applicable

ASCORBIC ACID

May cause eye irritation.  
May cause irritation to the skin especially in the presence of moisture.  
May cause irritation to mucous membranes.  
4-12 g / day dose may cause urinary calculi in predisposed individuals.  
Not mutagenic, carcinogenic, teratogenic, embryotoxic.  
Oral doses of 9 g / day did not produce toxic effects, although smaller quantities can cause diarrhea.  
RDA: 60 mg  
LD50 (oral, rat): 11900 mg / kg  
LD50 (oral, rat): 8000 mg / kg

## SECTION 12. Ecological information

### 12.1. Toxicity

Use according to good working practices and avoid to disperse the product into the environment.

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Related to contained substances:

2,4-HEXADIENOIC POTASSIUM SALT

No data available

CITRIC ACID

LC50 (IDE-83d): 440-760 > mg/l

LC50 (Daphnia magna-charts): ca 120 mg/l

LC50 (Pseudomonas putida): > 10000 mg/l

POTASSIUM METABISULFITE

Assessment of aquatic toxicity:

Harmful (acute harm) to aquatic organisms.

The product can hydrolyze. The test result may be partly caused by decomposition products.

Toxicity to fish:

LC50 (96 h) 460 - 1000 mg / l, Brachydanio rerio (OECD 203, ISO 7346, 84/449/EEC, C.1, static)

Nominal concentration.

Aquatic invertebrates:

EC50 (48 h) 89 mg / l, Daphnia magna (Directive 79/831/EEC, static)

Nominal concentration. The product was not tested. The data derive from products with similar structure and composition.

Aquatic plants:

EC50 (72 h) 43.8 mg / l (growth rate), Scenedesmus subspicatus (Test of static inhibition growth)

Nominal concentration. The product was not tested. The data derive from products with similar structure and composition.

Microorganisms / Effect on activated sludge:

NOEC (180 min) > = 1,000 mg / l (OECD - Guideline 209, Water)

Nominal concentration. The product was not tested. The data derive from products with similar structure and composition.

Chronic toxicity to fish:

NOEC (34 d) > = 316 mg / l, Brachydanio rerio (OECD Guideline 210, Stream.)

The indications of toxicity refer to the nominal concentration. The product has not been tested. The data derive from products with similar structure and composition.

Chronic toxicity to aquatic invertebrates:

NOEC (21 d), > 10 mg / l, Daphnia magna (OECD - Guideline 211, semi-static)

Nominal concentration. The product was not tested. The data derive from products with similar structure and composition.

Evaluation of the earth toxicity:

The study is not necessary

ASCORBIC ACID

Toxicity to fish

LC50 (rainbow trout, 96 h): 1020 mg / l (OECD No203)

### 12.2. Persistence and degradability

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Related to contained substances:

**CITRIC ACID**

Well degradable: 98% .2 days-OECD 302B

**POTASSIUM METABISULFITE**

Assessment of biodegradation and elimination (H<sub>2</sub>O):

Inorganic product, it can not be eliminated from water by a process of biological treatment.

Evaluation of the stability in water:

Study scientifically unjustified.

**ASCORBIC ACID**

100% biodegradable, 15 days (Zahn-Wellens test, OECD Test No. 302B).

**12.3. Bioaccumulative potential**

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Related to contained substances:

**POTASSIUM METABISULFITE**

Evaluation of the potential for bioaccumulation:

According to the partition coefficient n-octanol/water (log Pow) an

Accumulation in organisms is not expected.

**ASCORBIC ACID**

Not available

**12.4. Mobility in soil**

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Related to contained substances:

**POTASSIUM METABISULFITE**

Transport evaluation for environmental departments:

The substance does not evaporate into the atmosphere from the water surface.

The absorption into the soil solid phase is not predictable.

**ASCORBIC ACID**

Not available

**12.5. Results of PBT and vPvB assessment**

The substance / mixture does NOT contain substances PBT/vPvB according to Regulation (EC) No 1907/2006, Annex XIII

**12.6. Other adverse effects**

No adverse effects

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

Do not reuse empty containers. Dispose of them in accordance with the regulations in force. Any remaining product should be disposed of according to applicable regulations by addressing to authorized companies.

Recover if possible. Send to authorized discharge plants or for incineration under controlled conditions. Operate according to local and National rules in force

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

Not included in the field of application of regulations concerning the transport of dangerous goods: by road (ADR); by rail (RID); by air (ICAO / IATA); by sea (IMDG).

**14.2. UN proper shipping name**

None

**14.3. Transport hazard class(es)**

None

**14.4. Packing group**

None

**14.5. Environmental hazards**

None

**14.6. Special precautions for user**

No data available.

**14.7. Transport in bulk according to Annex II of MARPOL73/78 and IBC Code**

Transport in bulk is not foreseen

**SECTION 15. Regulatory information****15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**

Leg. 3/2/1997 n. 52 (Classification, packaging and labeling of dangerous substances). Decree No. 14/3/2003. 65 (Classification, packaging and labeling of dangerous substances). Leg. 2/2/2002 n. 25 (risks related to chemical agents at work). Ministerial Decree Jobs 26/02/2004 (occupational exposure limits); DM 04/03/2007 (Implementation of Directive no. 2006/8/EC). Regulation (EC) n. 1907/2006 (REACH) Regulation (EC) n. 1272/2008 (CLP), Regulation (EC) n.790/2009.D.Lgs. September 21, 2005 n. 238 (Seveso Directive Ter).

**15.2. Chemical safety assessment**

No chemical safety assessment was carried out by the supplier

**SECTION 16. Other information****16.1. Other information**

Description of risk phrases set out in paragraph 3

R31 = Contact with acids liberates toxic gas.

R36 = Irritating to eyes.

R37 = Irritating to respiratory system.

R38 = Irritating to skin.

R41 = Risk of serious damage to eyes.

Description of hazard statements set out in paragraph 3

H315 = Causes skin irritation.

H319 = Causes serious eye irritation.

H318 = Causes serious eye damage.

H335 = May cause respiratory irritation.

Classification based on data of all mixture components

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## SAFETY DATA SHEET

### MICROCID

Issued on 04/04/2014 - Rel. # 2 on 04/04/2014

# 12 / 12

In conformity to Regulation (EC) No 453/2010 of 20 May 2010

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#### Main normative references:

Directive 1999/45/EC.

Directive 2001/60/EC.

Regulation 1272/2008/EC.

Regulation 2010/453/EC.

This msds was made in good faith by AEB technical Office on the basis of the information available at the date of the last revision. The person in charge must regularly inform the employees about the specific risks they encounter when using this substance/product. The information contained here relate only to the substance/the preparation indicated and may not apply if the product is used improperly or in combination with others. Nothing contained herein shall be construed as a guarantee, either express or implied. It is the responsibility of the user to ensure the opportunities and completeness of the information contained herein for their own particular use.

\*\*\* this tab annuls and replaces any previous edition. (IIXX0281-CLP)

Changes to the previous edition: regulatory update

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