

Trade name: Kocide Opti

Product no.: KOC_3000_PT

Current version : 4.5.0, issued: 08.06.2023

Replaced version: 4.4.0, issued: 07.06.2023

Region: GB

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

1.1 Product identifier

Trade name

Kocide Opti

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

Relevant identified uses of the substance or mixture

Plant protection product

Fungicide

Uses advised against

No data available.

1.3 Details of the supplier of the safety data sheet

Address

Cosaco GmbH
Singapurstrasse 1
20457 Hamburg
Germany

Telephone no. +49 (0)40-2365-20
Fax no. +49 (0)40-23652-255
e-mail sds@cosaco.com

Advice on Safety Data Sheet

sdb_info@umco.de

1.4 Emergency telephone number

Americas +1 866 519 4752* (US, Canada, Mexico) *Toll Free Access
+1-760-476-3962
Europe +1-760-476-3961
Asia Pacific +1-760-476-3960
Middle East/Africa +1-760-476-3959

Global Response Access Code: 334018
Account: 14537

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification in accordance with Regulation (EC) No 1272/2008 (CLP)

Acute Tox. 4; H302
Acute Tox. 4; H332
Aquatic Acute 1; H400
Aquatic Chronic 1; H410
Eye Irrit. 2; H319

Classification information

Classification and labelling are based on toxicological studies performed on the product (mixture).

Classification and labelling with respect to water pollution risks are based on ecotoxicological studies performed on the product (mixture).

This product is assessed and classified using the methods and criteria below referred to in Article 9 of Regulation (EC) n° 1272/2008:

Physical hazards: determined through assessment data based on the methods or standards referred to in part 2 of Annex I to CLP

Health hazards and environmental hazards: determined through toxicological and ecotoxicological assessment data based on the methods or standards referred to in Part 3, 4 and 5 of Annex I to CLP.

2.2 Label elements

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

Hazard pictograms

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GHS07



GHS09

Signal word

Warning

Hazard statement(s)

H302+H332

Harmful if swallowed or if inhaled

H319

Causes serious eye irritation.

H410

Very toxic to aquatic life with long lasting effects.

Hazard statements (EU)

EUH401

To avoid risks to human health and the environment, comply with the instructions for use.

Precautionary statement(s)

P261

Avoid breathing dust.

P270

Do not eat, drink or smoke when using this product.

P280

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

P312

Call a POISON CENTER/doctor if you feel unwell.

P337+P313

If eye irritation persists: Get medical advice/attention.

P391

Collect spillage.

P501

Dispose of contents/container to a facility in accordance with local and national regulations.

2.3 Other hazards

No data available.

SECTION 3: Composition/information on ingredients

3.1 Substances

Not applicable. The product is not a substance.

3.2 Mixtures
Hazardous ingredients

No	Substance name		Additional information	
	CAS / EC / Index / REACH no	Classification (EC) 1272/2008 (CLP)	Concentration	%
1	copper dihydroxide			
	20427-59-2 243-815-9 029-021-00-3 -	Acute Tox. 4; H302 Eye Dam. 1; H318 Acute Tox. 2; H330 Aquatic Acute 1; H400 Aquatic Chronic 1; H410	>= 25.00 - < 50.00	wt%
2	sodium hydroxide			
	1310-73-2 215-185-5 011-002-00-6 01-2119457892-27	Skin Corr. 1A; H314 Met. Corr. 1; H290 Eye Dam. 1; H318	< 2.50	wt%
3	glycerol			
	56-81-5 200-289-5 - -	-	< 2.50	wt%

Full Text for all H-phrases and EUH-phrases: pls. see section 16

No	Note	Specific concentration limits	M-factor (acute)	M-factor (chronic)
1	-	-	M = 10	M = 10

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2	-	Skin Irrit. 2; H315: C >= 0.5% Eye Irrit. 2; H319: C >= 0.5% Skin Corr. 1B; H314: C >= 2% Skin Corr. 1A; H314: C >= 5%	-	-
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Acute toxicity estimate (ATE) values			
No	oral	dermal	inhalative
1	500 mg/kg bodyweight		0,47 mg/l

SECTION 4: First aid measures

4.1 Description of first aid measures

General information

Seek medical advice immediately. Remove contaminated clothing and shoes immediately, and launder thoroughly before reusing. If the patient is likely to become unconscious, place and transport in stable sideways position. Poisonous symptoms can first be observed after several hours, therefore medical observation for at least 48 hours is necessary.

After inhalation

Remove affected person from the immediate area. Ensure supply of fresh air. Irregular breathing/no breathing: artificial respiration.

After skin contact

Wash off immediately with soap and water.

After eye contact

Remove contact lenses. Rinse eye thoroughly under running water keeping eyelids wide open and protecting the unaffected eye (at least 10 to 15 minutes). Seek medical assistance.

After ingestion

Rinse out mouth and give plenty of water to drink. Never give anything by mouth to an unconscious person. Do not induce vomiting.

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

Carbon dioxide; Extinguishing powder; Water spray jet; Foam

Unsuitable extinguishing media

High power water jet

5.2 Special hazards arising from the substance or mixture

copper oxide

5.3 Advice for firefighters

Use self-contained breathing apparatus. Wear protective clothing. Fire residues and contaminated firefighting water must be disposed of in accordance with the local regulations. Run-off water from fire fighting must not be discharged into drains or enter surface water.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Refer to protective measures listed in sections 7 and 8. Ensure adequate ventilation. Avoid dust formation.

For emergency responders

No data available. Personal protective equipment (PPE) - see Section 8.

6.2 Environmental precautions

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

6.3 Methods and material for containment and cleaning up

Collect mechanically. When collected, handle material as described under the section heading "Disposal considerations".

6.4 Reference to other sections

No data available.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advice on safe handling

Provide good ventilation at the work area (local exhaust ventilation, if necessary). Avoid the formation and deposition of dust.

General protective and hygiene measures

Do not eat, drink or smoke during work time. Keep away from foodstuffs and beverages. Avoid contact with eyes and skin. Remove soiled or soaked clothing immediately. Wash hands before breaks and after work. Do not inhale dust.

Advice on protection against fire and explosion

Keep away from sources of heat and ignition. Take precautionary measures against static charges. Dust can form an explosive mixture with air.

7.2 Conditions for safe storage, including any incompatibilities

Technical measures and storage conditions

Keep container tightly closed in a cool, well-ventilated place. Store in a dry place.

Recommended storage temperature

Value < 35 °C

Requirements for storage rooms and vessels

Containers which are opened must be carefully closed and kept upright to prevent leakage. Always keep in containers of same material as the original.

Incompatible products

Do not store together with foodstuffs. Do not store together with: Acids

7.3 Specific end use(s)

Industry solution

Always read the label and product information before use.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limit values

No	Substance name	CAS no.	EC no.
1	copper dihydroxide	20427-59-2	243-815-9
List of approved workplace exposure limits (WELs) / EH40			
Copper and compounds (as Cu) dusts and mists			
	WEL short-term (15 min reference period)	2	mg/m ³
	WEL long-term (8-hr TWA reference period)	1	mg/m ³
2	glycerol	56-81-5	200-289-5
List of approved workplace exposure limits (WELs) / EH40			
Glycerol mist			
	WEL long-term (8-hr TWA reference period)	10	mg/m ³

8.2 Exposure controls

Appropriate engineering controls

No data available.

Personal protective equipment

Respiratory protection

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If workplace exposure limits are exceeded, a respiration protection approved for this particular job must be worn. In case of aerosol and mist formation, take appropriate measures for breathing protection in the event workplace threshold values are not specified.

Respiratory filter (part): P2

Eye / face protection

Tightly fitting safety glasses (EN 166).

Hand protection

Sufficient protection is given wearing suitable protective gloves checked according to i.e. EN 374, in the event of risk of skin contact with the product. Before use, the protective gloves should be tested in any case for its specific work-station suitability (i.e. mechanical resistance, product compatibility and antistatic properties). Adhere to the manufacturer's instructions and information relating to the use, storage, care and replacement of protective gloves. Protective gloves shall be replaced immediately when physically damaged or worn. Design operations thus to avoid permanent use of protective gloves.

Appropriate Material	nitrile rubber			
Material thickness	0.4	-	0.7	mm
Breakthrough time	>		480	min

Other

Normal chemical work clothing. Thermal hazards not applicable.

Environmental exposure controls

No data available.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

State of aggregation	
solid	
Form	
solid; granules	
Colour	
blue	
Odour	
characteristic	
pH value	
Value	8.2
Reference temperature	20 °C
Concentration	10 g/l
Boiling point / boiling range	
No data available	
Melting point/freezing point	
No data available	
Decomposition temperature	
No data available	
Flash point	
No data available	
Ignition temperature	
No data available	
Auto-ignition temperature	
Value	340 °C
Comments	Product is not selfigniting.
Explosive properties	
The product does not have explosive properties.	
Flammability	

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The substance is not flammable.

Lower explosion limit

No data available

Upper explosion limit

No data available

Vapour pressure

No data available

Relative vapour density

No data available

Relative density

Value	0.712
Reference temperature	20 °C

Density

No data available

Bulk density

Value	880 kg/m ³
Reference temperature	20 °C

Solubility in water

Comments dispersible

Solubility

No data available

Partition coefficient n-octanol/water (log value)

No data available

Kinematic viscosity

No data available

Particle characteristics

No data available

9.2 Other information

Other information

No data available.

SECTION 10: Stability and reactivity

10.1 Reactivity

No data available.

10.2 Chemical stability

Stable under recommended storage and handling conditions (See section 7).

10.3 Possibility of hazardous reactions

No data available.

10.4 Conditions to avoid

temperatures > 140 °C. Avoid raising dust.

10.5 Incompatible materials

Acids

10.6 Hazardous decomposition products

Copper oxides

SECTION 11: Toxicological information

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

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Acute oral toxicity			
No	Product Name		
1	Kocide Opti		
LD50		1847	mg/kg
Species	rat		
Method	OPPTS 870.1100		
Source	Manufacturer		

Acute dermal toxicity			
No	Product Name		
1	Kocide Opti		
LD50	>	2000	mg/kg
Species	rat		
Method	OPPTS 870.1200		
Source	Manufacturer		

Acute inhalational toxicity			
No	Product Name		
1	Kocide Opti		
LC50	>	2.08	mg/l
Duration of exposure		4	h
State of aggregation	Dust/mist		
Species	rat		
Method	OPPTS 870.1300		
Source	Manufacturer		

Skin corrosion/irritation			
No	Product Name		
1	Kocide Opti		
Species	rabbit		
Method	OPPTS 870.2500		
Source	Manufacturer		
Evaluation	non-irritant		

Serious eye damage/irritation			
No	Product Name		
1	Kocide Opti		
Species	rabbit		
Method	OPPTS 870.2400		
Source	Manufacturer		
Evaluation	irritant		

Respiratory or skin sensitisation			
No	Product Name		
1	Kocide Opti		
Route of exposure	Skin		
Species	guinea pig		
Method	Magnussen/Kligmann-Test		
Source	Manufacturer		
Evaluation	non-sensitizing		

Germ cell mutagenicity			
No data available			

Reproduction toxicity			
No data available			

Carcinogenicity			
No data available			

STOT - single exposure			
No data available			

STOT - repeated exposure			
No data available			

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Aspiration hazard

No data available

11.2 Information on other hazards

Endocrine disrupting properties

No data available.

Other information

No data available.

SECTION 12: Ecological information

12.1 Toxicity

Toxicity to fish (acute)

No	Product Name			
1	Kocide Opti			
LC50		0.24	mg/l	
Duration of exposure		96	h	
Species	Oncorhynchus mykiss			
Method	OECD 203			
Source	Manufacturer			

Toxicity to fish (chronic)

No data available

Toxicity to Daphnia (acute)

No	Product Name			
1	Kocide Opti			
EC50		118.0	µg/l	
Duration of exposure		48	h	
Species	Daphnia magna			
Method	OECD 202			
Source	Manufacturer			

Toxicity to Daphnia (chronic)

No	Product Name			
1	Kocide Opti			
NOEC		12	µg/l	
Duration of exposure		21	day(s)	
Species	Daphnia magna			
Method	OECD 211			
Source	Manufacturer			

Toxicity to algae (acute)

No	Product Name			
1	Kocide Opti			
ErC50		51.59	µg/l	
Duration of exposure		72	h	
Species	Selenastrum capricornutum			
Method	OECD 201			
Source	Manufacturer			

Toxicity to algae (chronic)

No data available

Bacteria toxicity

No data available

12.2 Persistence and degradability

No data available.

12.3 Bioaccumulative potential

No data available.

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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

No data available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product

Allocation of a waste code number, according to the European Waste Catalogue, should be carried out in agreement with the regional waste disposal company.

Packaging

Residues must be removed from packaging and when emptied completely disposed of in accordance with the regulations for waste removal. Incompletely emptied packaging must be disposed of in the form of disposal specified by the regional disposer.

SECTION 14: Transport information

14.1 Transport ADR/RID/ADN

Class	9
Classification code	M7
Packing group	III
Hazard identification no.	90
UN number	UN3077
Proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.
Tunnel restriction code	-
Label	9
Environmentally hazardous substance mark	Symbol "fish and tree"

14.2 Transport IMDG

Class	9
Packing group	III
UN number	UN3077
Proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.
EmS	F-A, S-F
Label	9
Marine pollutant mark	Symbol "fish and tree"

14.3 Transport ICAO-TI / IATA

Class	9
Packing group	III
UN number	UN3077
Proper shipping name	Environmentally hazardous substance, solid, n.o.s.
Label	9
Environmentally hazardous substance mark	Symbol "fish and tree"

14.4 Other information

No data available.

14.5 Environmental hazards

Information on environmental hazards, if relevant, please see 14.1 - 14.3.

14.6 Special precautions for user

No data available.

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14.7 Maritime transport in bulk according to IMO instruments

Not relevant

SECTION 15: Regulatory information

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

EU regulations

Regulation (EC) No 1907/2006 (REACH) Annex XIV (List of substances subject to authorisation)

According to the data available and/or specifications supplied by upstream suppliers, this product does not contain any substances considered as substances requiring authorisation as listed on Annex XIV of the REACH regulation (EC) 1907/2006.

REACH candidate list of substances of very high concern (SVHC) for authorisation

According to available data and the information provided by preliminary suppliers, the product does not contain substances that are considered substances meeting the criteria for inclusion in annex XIV (List of Substances Subject to Authorisation) as laid down in Article 57 and article 59 of REACH (EC) 1907/2006.

Regulation (EC) No 1907/2006 (REACH) Annex XVII: RESTRICTIONS ON THE MANUFACTURE, PLACING ON THE MARKET AND USE OF CERTAIN DANGEROUS SUBSTANCES, MIXTURES AND ARTICLES

The product contains following substance(s) that are considered being subject to REACH regulation (EC) 1907/2006 annex XVII.

No	Substance name	CAS no.	EC no.	No
1	acrylic-acid	79-10-7	201-177-9	75
2	copper dihydroxide	20427-59-2	243-815-9	75
3	sodium carbonate	497-19-8	207-838-8	75
4	sodium hydroxide	1310-73-2	215-185-5	75

Directive 2012/18/EU on the control of major-accident hazards involving dangerous substances

This product is subject to Part I of Annex I, risk category: E1

Regulation (EC) No 1107/2009 concerning the placing of plant protection products on the market

Regulation (EU) No 547/2011 implementing Regulation (EC) No 1107/2009 as regards labelling requirements for plant protection products

Annex III

SP1	Do not contaminate water with the product or its container (Do not clean application equipment near surface water/Avoid contamination via drains from farmyards and roads).
SPe3a	For protection of aquatic organisms do not apply on agricultural land adjacent to surface waters.
SPPT3	The empty packaging shall not be washed and its contents shall be completely depleted, closed, rendered unusable and placed in collection bags and delivered in a authorized reception center.

15.2 Chemical safety assessment

A chemical safety assessment has not been carried out for this mixture.

SECTION 16: Other information

Sources of key data used to compile the data sheet:

Regulation (EC) No 1907/2006 (REACH), 1272/2008 (CLP) as amended in each case.

Directives 2000/39/EC, 2006/15/EC, 2009/161/EU, (EU) 2017/164.

National Threshold Limit Values of the corresponding countries as amended in each case.

Transport regulations according to ADR, RID, IMDG, IATA as amended in each case.

The data sources used to determine physical, toxic and ecotoxic data, are indicated directly in the corresponding section.

Full text of the H- and EUH- phrases drawn up in sections 2 and 3 (provided not already drawn up in these sections)

H290	May be corrosive to metals.
H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H318	Causes serious eye damage.
H330	Fatal if inhaled.
H332	Harmful if inhaled.

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H400 Very toxic to aquatic life.

Creation of the safety data sheet

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This information is based on our present knowledge and experience.

The safety data sheet describes products with a view to safety requirements.

It does not however, constitute a guarantee for any specific product properties and shall not establish a legally valid contractual relationship. END of the safety data sheet

Alterations/supplements:

Alterations to the previous edition are marked in the left-hand margin.

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