

SAFETY DATA SHEET



DuPont™ Kocide® Opti™ fungicide/bactericide

Version 2.0

Revision Date 07.03.2016

Document no. 130000024626

This SDS adheres to the standards and regulatory requirements of New Zealand and may not meet the regulatory requirements in other countries.

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

Product name : DuPont™ Kocide® Opti™ fungicide/bactericide
: (Cu 30%)

Other names : B12015094
DPX-GFJ52 46.1WG

Recommended use of the chemical and restriction on use

Recommended use : Fungicide

Manufacturer, importer, supplier

Company : DuPont (New Zealand) Limited
Street address : Level 1, 14 Ormiston Road, East Tamaki, Auckland 2016
New Zealand
Telephone : 0800 658080
Telefax : (09)-271-2961

Emergency telephone number : NZ Poisons Information Centre Ph: 0800 764766
24-hour Medical Emergency: 0800 111174 Transport Emergency: 0800 387668

2. HAZARDS IDENTIFICATION

Classified as hazardous according to criteria in the HS (Minimum Degrees of Hazard) Regulations 2001
Classified as a Dangerous Good according to NZS 5433

HSNO Classification:

6.1D : Acute toxicity (Oral)
6.1D : Acute toxicity (Inhalation)
6.3B : Skin irritation
6.5B : Skin sensitisation
6.9B : Specific Target Organ Toxicity (Lungs)
8.3A : Serious eye damage
9.1A : Aquatic toxicity (Acute or Chronic)
9.3C : Ecotoxic to terrestrial vertebrates

Endpoints which are not classified, cannot be classified or are not applicable are not shown.

Label content

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Pictogram

:



Signal word

: Danger

Hazardous warnings

: Harmful if swallowed.
 Causes mild skin irritation.
 May cause an allergic skin reaction.
 Causes serious eye damage.
 Harmful if inhaled.
 May cause damage to organs through prolonged or repeated exposure. (Lungs)
 Very toxic to aquatic life with long lasting effects.
 Harmful to terrestrial vertebrates.

Precautionary statements

: Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.
 Wash skin thoroughly after handling.
 Do not eat, drink or smoke when using this product.
 Use only outdoors or in a well-ventilated area.
 Contaminated work clothing should not be allowed out of the workplace.
 Wear protective gloves.
 IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.
 IF ON SKIN: Wash with plenty of soap and water.
 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 Immediately call a POISON CENTER/doctor.
 Specific treatment (see supplemental first aid instructions on this label).
 Rinse mouth.
 If skin irritation or rash occurs: Get medical advice/ attention.
 Wash contaminated clothing before reuse.
 Collect spillage.
 Dispose of contents/ container to an approved waste disposal plant.

Other hazards

If you mill or grind this product you may change its toxicological properties.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical nature

: Mixture

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Components

Chemical name	CAS-No.	Concentration
Copper Hydroxide	20427-59-2	46.1 %
Other Ingredients		53.9 %

4. FIRST AID MEASURES

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. Contact the National Poisons Centre 0800 POISON (0800 764766) or a doctor if you feel unwell.

- Inhalation** : Move to fresh air. Artificial respiration and/or oxygen may be necessary. Call a poison control center or doctor for treatment advice.
- Skin contact** : Take off all contaminated clothing immediately. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison information centre or doctor for treatment advice.
- Eye contact** : Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison information centre or doctor for treatment advice.
- Ingestion** : Have person sip a glass of water if able to swallow. DO NOT induce vomiting unless directed to do so by a physician or poison control center. Never give anything by mouth to an unconscious person. Call a poison information centre or doctor for treatment advice.
- Most important symptoms/effects, acute and delayed** : No information available.
- Protection of first-aiders** : No information available.
- Notes to physician** : Treat symptomatically.
Probable mucosal damage may contraindicate the use of gastric lavage.

5. FIREFIGHTING MEASURES

- Suitable extinguishing media** : Water spray, Dry chemical, Foam, Carbon dioxide (CO₂)
- Unsuitable extinguishing media** : High volume water jet, (contamination risk)
- Specific hazards** : No information available.
- Special protective equipment for firefighters** : Wear full protective equipment.
- Specific extinguishing methods** : No information available.

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Further information : Prevent fire extinguishing water from contaminating surface water or the ground water system. Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.
(on small fires) If area is heavily exposed to fire and if conditions permit, let fire burn itself out since water may increase the area contaminated. Cool containers/tanks with water spray.
Runoff from fire control may be a pollution hazard. Control Runoff.

Hazchem Code : 2Z

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures : Evacuate personnel, thoroughly ventilate area, use self-contained breathing apparatus. Use personal protective equipment.

Environmental precautions : Prevent material from entering sewers, waterways, or low areas.

Methods and materials for containment and cleaning up : Shovel or sweep up. Avoid dust formation. Shovel into suitable container for disposal.
Water Spill: If feasible, copper may be precipitated/-ultrafiltrated with caustics or other chemicals and resulting sludge disposed of in a chemical landfill.

Additional advice : Never return spills in original containers for re-use. Dispose of in accordance with local regulations.

7. HANDLING AND STORAGE

Handling

Technical measures/Precautions : Wash hands before breaks and immediately after handling the product. Remove and wash contaminated clothing before re-use.
Keep out of reach of children. Avoid contact with skin and eyes. Avoid breathing dust or spray mist. When using do not eat, drink or smoke. Wash hands and face before breaks and after work.

Precautions for safe handling : Keep away from heat and sources of ignition.

Storage

Suitable storage conditions : Store in original container. Store in a cool, dark place. Keep tightly closed in a dry, cool and well-ventilated place. Keep locked up. Do not store with feed, seeds or foodstuffs.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Chemical name	Occupational Exposure Limits	Regulation
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Copper Hydroxide		
TWA (as Cu)	0.2 mg/m ³ (Fume.)	US ACGIH (03 2014)
TWA (as Cu)	1 mg/m ³ (Dust and mist.)	US ACGIH (03 2014)

Engineering measures : Ensure adequate ventilation.

Biological occupational exposure limits : No information available.

Personal protective equipment

Respiratory protection : None specified.

Hand protection : Material: Waterproof gloves

Eye protection : Safety goggles

Skin protection : When mixing or applying wear:., Waterproof gloves, hat, Safety goggles, overalls, Footwear (shoes, boots).

Hygiene measures : Avoid contact with the skin and the eyes. Avoid breathing dust or spray mist. When using do not eat, drink or smoke. Wash hands and face before breaks and after work.

Protective measures : End users of this product should follow label instructions for personal protection when using this product.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance (Physical state, form, colour, etc.)

Physical state : solid
Form : solid, granular
Colour : blue

Odour : characteristic copper odor

Odour Threshold : not determined

pH : 7.5 - 9.5

Melting point/freezing point

No information available.

Initial boiling point and boiling range

No information available.

Flash point : No information available.

Evaporation rate : No information available.

Flammability (solid, gas) : Does not sustain combustion.

Upper/lower flammability or explosive limits

Upper explosion limit : No information available.


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Lower explosion limit	:	No information available.
Vapour pressure	:	No information available.
Vapour density	:	No information available.
Density		
Bulk density	:	529 - 705 kg/m ³
Solubility(ies)		
Water solubility	:	dispersible
Partition coefficient: n-octanol/water	:	No information available.
Auto-ignition temperature		
No information available.		
Decomposition temperature	:	No information available.
Viscosity		
Viscosity, kinematic	:	No information available.
Molecular weight	:	No information available.

10. STABILITY AND REACTIVITY

Reactivity	:	No hazards to be specially mentioned.
Chemical stability	:	Stable at normal temperatures and storage conditions.
Possibility of hazardous reactions	:	No information available.
Conditions to avoid	:	No information available.
Materials to avoid	:	None reasonably foreseeable.
Hazardous decomposition products	:	Hazardous thermal decomposition products: Copper oxides

11. TOXICOLOGICAL INFORMATION
Acute toxicity
Oral

 DuPont™ Kocide® Opti™
fungicide/bactericide : LD50/Rat: 1,847 mg/kg

Inhalation

 DuPont™ Kocide® Opti™
fungicide/bactericide : LC50/4 h/Rat: > 2.08 mg/l

Dermal

 DuPont™ Kocide® Opti™
fungicide/bactericide : LD50/Rat: > 2,000 mg/kg


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Skin corrosion/irritation

DuPont™ Kocide® Opti™
fungicide/bactericide : Species: Rabbit
Result: No skin irritation

Serious eye damage/eye irritation

DuPont™ Kocide® Opti™
fungicide/bactericide : Species: Rabbit
Result: Irritating to eyes.

Respiratory or skin sensitisation

DuPont™ Kocide® Opti™
fungicide/bactericide : Species: Guinea pig
Result: Did not cause sensitisation on laboratory animals.

Germ cell mutagenicity

Copper Hydroxide : Weight of evidence does not support classification as a germ cell
mutagen. Information given is based on data obtained from similar
substances.

Carcinogenicity

Copper Hydroxide : Not classifiable as a human carcinogen.
Animal testing did not show any carcinogenic effects.
Information given is based on data obtained from similar substances.

Reproductive toxicity

Copper Hydroxide : Reproductive toxicity: No toxicity to reproduction
Animal testing did not show any effects on fertility.
Information given is based on data obtained from similar substances.
Teratogenicity: The following effects occurred at levels of exposure that
significantly exceed those expected under labeled usage conditions.
Animal testing showed effects on embryo-fetal development at levels
equal to or above those causing maternal toxicity.

Specific Target Organ Toxicity

Specific target organ toxicity - single exposure

DuPont™ Kocide® Opti™
fungicide/bactericide : Refer to acute toxicity and/or repeated dose toxicity data for more
information on target organs if applicable.

Aspiration hazard

DuPont™ Kocide® Opti™
fungicide/bactericide : No aspiration toxicity classification

Other

Copper Hydroxide : Repeated dose toxicity:
No toxicological effects warranting significant target organ toxicity
classification were seen below the recommended guidance values for
classification., The following effects occurred at levels of exposure that
significantly exceed those expected under labeled usage conditions.
Oral/Rat
Liver effects, Kidney effects, microcytic anemia
Information given is based on data obtained from similar substances.
Oral - feed/Rat
Spleen effects
Information given is based on data obtained from similar substances.

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12. ECOLOGICAL INFORMATION

Ecotoxicity effects

Acute and prolonged toxicity to fish

DuPont™ Kocide® Opti™ fungicide/bactericide : LC50/96 h/Oncorhynchus mykiss (rainbow trout): 0.24 mg/l

Toxicity to aquatic plants

Copper Hydroxide : ErC50/72 h/Pseudokirchneriella subcapitata (green algae): 0.00939 mg/l

Acute toxicity to aquatic invertebrates

DuPont™ Kocide® Opti™ fungicide/bactericide : EC50/48 h/Daphnia magna (Water flea): 0.118 mg/l

Chronic toxicity to fish

Copper Hydroxide : NOEC/90 d: 0.0017 mg/l

Chronic toxicity to aquatic Invertebrates

Copper Hydroxide : NOEC/21 d: 0.03 mg/l

Persistence and degradability

DuPont™ Kocide® Opti™ fungicide/bactericide : Not readily biodegradable. Estimation based on data obtained on active ingredient.

Bioaccumulation

DuPont™ Kocide® Opti™ fungicide/bactericide : Does not bioaccumulate. Estimation based on data obtained on active ingredient.

Mobility in soil

No information available.

Other adverse effects

DuPont™ Kocide® Opti™ fungicide/bactericide : See product label for additional application instructions relating to environmental precautions.

13. DISPOSAL CONSIDERATIONS

Waste disposal methods : In accordance with local and national regulations. Ensure container is empty.

Contaminated packaging : Do not re-use empty containers.
If not recycling, burn if circumstances permit otherwise bury in an approved landfill. Dispose of this product only by using according to this label. Dispose of in accordance with local regulations.

14. TRANSPORT INFORMATION

NZS 5433

UN number : 3077
Proper shipping name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.
(Copper hydroxide)
Class : 9
Packing group : III

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IMDG

UN number : 3077
Proper shipping name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.
(Copper hydroxide)
Class : 9
Packing group : III
Marine pollutant : yes

IATA

UN number : 3077
Proper shipping name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.
(Copper hydroxide)
Class : 9
Packing group : III

Matters needing attention for transportation : Marine Pollutants in single or combination packaging containing a net quantity per single or inner packaging of 5 L or less for liquids or having a net mass per single or inner packaging of 5 KG or less for solids may be transported as non-dangerous goods as provided in section 2.10.2.7 of IMDG code and IATA special provision A197. If the product meets these special provisions, it may be shipped in New Zealand as a non-dangerous goods under provisions in NZS 5433 code which accepts IMDG and IATA classification.

15. REGULATORY INFORMATION

HSNO Number : HSR000739
HSNO Controls : T1, T2, T4, T5, T7
E1, E2, E4, E5, E6, E7, E8
I1, I2, I3, I8, I9, I10, I11, I16, I17, I18, I19, I20, I21, I22, I23, I28, I29, I30
P1, P3, P13, P15, PG3
D4, D5, D6, D7, D8
EM1, EM6, EM7, EM8, EM11, EM13, AH1

ACVM Number: P007726

16. OTHER INFORMATION

References

SDS Number: 130000024626

Revision Date/Version

Date of first preparation : 07.03.2016
Revision Date : 07.03.2016
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Before use read DuPont's safety information. Take notice of the directions of use on the label.

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Significant change from previous version is denoted with a double bar.

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The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The above information relates only to the specific material(s) designated herein and may not be valid for such material(s) used in combination with any other materials or in any process or if the material is altered or processed, unless specified in the text.