

**DuPont™ Kocide® 3000 Fungicide/Bactericide**

Version 2.0

Revision Date 10/02/2009

Ref. 130000024626

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

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : DuPont™ Kocide® 3000 Fungicide/Bactericide
Product Grade/Type : (Cu 30%)
Tradename/Synonym : B12015094
DPX-GFJ52 30WG
GX-569 30WG
Kocide Opti
MSDS Number : 130000024626
Product Use : Fungicide
Manufacturer : DuPont
1007 Market Street
Wilmington, DE 19898
Product Information : 1-800-441-7515 (outside the U.S. 1-302-774-1000)
Medical Emergency : 1-800-441-3637 (outside the U.S. 1-302-774-1139)
Transport Emergency : CHEMTREC: 1-800-424-9300 (outside the U.S. 1-703-527-3887)

SECTION 2. HAZARDS IDENTIFICATION

Emergency Overview

Caution

Causes moderate eye irritation. Harmful if swallowed, inhaled or absorbed through skin. Avoid contact with skin, eyes and clothing. Avoid breathing dust. Wash thoroughly with soap and water after handling.

This product is toxic to: Fish Aquatic organisms

Potential Health Effects

This section includes potential acute adverse effects which could occur if this material is not used according to the label.

Skin : No adverse effects expected. Prolonged contact may cause:, Irritation, There are no reports of human skin sensitization..
Eyes : May cause: Irritation with discomfort, pain, redness, or visual impairment.
Inhalation : May cause irritation of respiratory tract. Cough
Ingestion : Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhoea. Metallic taste, Gross overexposure may cause:, Kidney failure, Bloody urine, anemia, Loss of consciousness.

Carcinogenicity

None of the components present in this material at concentrations equal to or greater than 0.1% are listed by IARC, NTP, or OSHA, as a carcinogen.


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SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS-No.	Concentration
Copper Hydroxide	20427-59-2	46.1 %
Inert Ingredients		53.9 %

SECTION 4. FIRST AID MEASURES

- Skin contact : Take off all contaminated clothing immediately. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center 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 control center or doctor for treatment advice.
- Inhalation : Move to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth, if possible. Call a poison control center or doctor for treatment advice.
- Ingestion : Call a poison control center or doctor for treatment advice. 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.
- General advice : Have the product container or label with you when calling a poison control center or doctor, or going for treatment.
For medical emergencies involving this product, call toll free 1-800-441-3637. See Label for Additional Precautions and Directions for Use.
- Notes to physician : Probable mucosal damage may contraindicate the use of gastric lavage.

SECTION 5. FIRE-FIGHTING MEASURES

- Suitable extinguishing media : Water spray, Dry powder, Carbon dioxide (CO₂), Foam
- Firefighting Instructions : In the event of fire, wear self-contained breathing apparatus. Wear full protective equipment. 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



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fire control may be a pollution hazard. Control Runoff.

SECTION 6. ACCIDENTAL RELEASE MEASURES

NOTE: Review FIRE FIGHTING MEASURES and HANDLING (PERSONNEL) sections before proceeding with clean-up. Use appropriate PERSONAL PROTECTIVE EQUIPMENT during clean-up.

Spill Cleanup : 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.

Accidental Release Measures : Prevent material from entering sewers, waterways, or low areas. Follow applicable Federal, State/Provincial and Local laws/regulations.

SECTION 7. HANDLING AND STORAGE

Handling (Personnel) : Wash hands thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet. Remove clothing/PPE immediately if material gets inside. Wash thoroughly and put on clean clothing.

Handling (Physical Aspects) : Avoid dust formation. Keep away from heat and sources of ignition.

Storage : Do not contaminate water, other pesticides, fertilizer, food or feed in storage. Store in a cool, dry place. Keep out of the reach of children.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering controls : Ensure adequate ventilation.

Personal protective equipment

Skin and body protection : Applicators and other handlers must wear:
 Long sleeved shirt and long pants
 Shoes plus socks
 Chemical resistant gloves made of any waterproof material
 Natural Rubber
 PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water, is:
 Coveralls
 Chemical resistant gloves made of any waterproof material, such as polyvinyl chloride, nitrile rubber, or butyl rubber
 Shoes plus socks

Protective measures : Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product. Do not reuse them. Follow


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manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

Exposure Guidelines
 Exposure Limit Values
 Copper Hydroxide
 AEL *

(DUPONT) 1.5 mg/m³ 8 & 12 hr. TWA as Cu

* AEL is DuPont's Acceptable Exposure Limit. Where governmentally imposed occupational exposure limits which are lower than the AEL are in effect, such limits shall take precedence.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Form : solid, granular
 Color : blue
 pH : 7.5 - 9.5
 Bulk density : 33 - 44 lb/ft³
 Water solubility : dispersible

SECTION 10. STABILITY AND REACTIVITY

Stability : Stable at normal temperatures and storage conditions.
 Incompatibility : None reasonably foreseeable.
 Hazardous decomposition products : Copper oxides

SECTION 11. TOXICOLOGICAL INFORMATION

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Inhalation 4 h LC50 : > 2.08 mg/l , rat

Dermal LD50 : > 2,000 mg/kg , rat

Oral LD50 : 1,847 mg/kg , rat

Skin irritation : Species: rabbit, No skin irritation

Eye irritation : Species: rabbit, Moderate eye irritation

Sensitisation : Species: guinea pig, Animal test did not cause sensitization by skin contact.

Copper Hydroxide

Repeated dose toxicity : Oral, rat

The following effects occurred at levels of exposure that significantly exceed those expected under labeled usage conditions., Liver effects, Kidney effects, microcytic anemia



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		Information given is based on data obtained from similar substances.
Carcinogenicity	:	Animal testing did not show any carcinogenic effects.
		Information given is based on data obtained from similar substances.
Mutagenicity	:	Evidence suggests this substance does not cause genetic damage in cultured bacterial cells., Evidence suggests this substance does not cause genetic damage in animals.
Reproductive toxicity	:	Animal testing did not show any effects on fertility.
		Information given is based on data obtained from similar substances.
Teratogenicity	:	Animal testing showed effects on embryo-foetal development at levels equal to or above those causing maternal toxicity.

SECTION 12. ECOLOGICAL INFORMATION

Aquatic Toxicity

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96 h LC50 : Oncorhynchus mykiss (rainbow trout) 0.24 mg/l
(Data on the product itself)

48 h EC50 : Daphnia magna (Water flea) 0.118 mg/l
(Data on the product itself)

Copper Hydroxide

96 h LC50 : Oncorhynchus mykiss (rainbow trout) 0.135 mg/l

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

48 h EC50 : Daphnia magna (Water flea) 0.0422 mg/l

90 d : NOEC 0.0017 mg/l

21 d : NOEC 0.03 mg/l

Toxicity to other organisms

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LD50 : Colinus virginianus (Bobwhite quail) 496 mg/kg
Information given is based on data obtained from similar product.

Copper Hydroxide

8 d LC50 : Colinus virginianus (Bobwhite quail) > 3,400 mg/kg
Dietary

8 d LC50 : Anas platyrhynchos (Mallard duck) > 5,000 mg/kg


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Dietary

Additional ecological information : Environmental Hazards: Do not apply directly to water, or to areas where surface water is present, or to intertidal areas below the mean high water mark. Drift and runoff from treated areas may be hazardous to fish and aquatic organisms in adjacent aquatic sites. Do not contaminate water when cleaning equipment or disposing of equipment washwaters or rinsate.

SECTION 13. DISPOSAL CONSIDERATIONS

Waste Disposal : Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal Law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

Container Disposal : Completely empty bag into application equipment. Then dispose of empty bag in a sanitary landfill or by incineration or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

SECTION 14. TRANSPORT INFORMATION

IMDG UN-Number : 3077
 Proper shipping name : Environmentally hazardous substance, solid, n.o.s. (Copper hydroxide)
 Class : 9
 Packaging group : III
 Labelling No. : 9

Marine pollutant

Not regulated by DOT/49 CFR unless shipped in bulk package or by water.

Not regulated as a hazardous material by IATA.

Optional classification as per IATA Special Provision A97.

SECTION 15. REGULATORY INFORMATION

SARA 313 Regulated Chemical(s) : Copper Hydroxide

Title III hazard classification : Acute Health Hazard: Yes
 Chronic Health Hazard: No
 Fire: No
 Reactivity/Physical hazard: No
 Pressure: No



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EPA Reg. No. : 352-662

In the United States this product is regulated by the US Environmental Protection Agency (EPA) under the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA). It is a violation of Federal law to use this product in a manner inconsistent with its labeling. Read and follow all label directions. This product is excluded from listing requirements under EPA/TSCA.

California Prop. 65 : Chemicals known to State of California to cause cancer, birth defects or any other harm: none known

SECTION 16. OTHER INFORMATION

	NFPA	HMIS
Health :	2	2
Flammability :	1	1
Reactivity/Physical hazard :	0	0

MSDS preparation date : 10/02/2009

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Contact person : DuPont Crop Protection, Wilmington, DE, 19898, Phone: 1-888-638-7668

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