

Infosafe No™ 3NU13	Issue Date : November 2011	ISSUED by NUFARM
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Product Name **Oxydul DF Fungicide**

Classified as hazardous

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product Name	Oxydul DF Fungicide
Product Code	5330
Product Type	Group M1 Fungicide
Company Name	NUFARM AUSTRALIA LIMITED. (ABN 80 004 377 780)
Address	103-105 Pipe Road Laverton North Victoria 3026 Australia
Emergency Tel.	1800 033 498 (24hr Australia)
Telephone/Fax Number	Tel: +61 3 9282-1000 Fax: +61 3 9282-1001
Recommended Use	For the control of certain fungal and bacterial diseases in grapevines and other fruit and vegetable crops and ornamentals as per the Directions for Use table on the label.
Other Information	This MSDS describes, to the best of our knowledge, the properties of the concentrated product. The physical properties and some of the assessments do not apply to the properties of the product once it has been diluted for application. Acute health effects of the diluted product are likely to be much less severe.

2. HAZARDS IDENTIFICATION

Hazard Classification	Classified as hazardous HAZARDOUS SUBSTANCE. NON-DANGEROUS GOODS. Hazard classification according to the criteria of NOHSC. Dangerous goods classification according to the Australia Dangerous Goods Code.
Risk Phrase(s)	Classified as hazardous R22 Harmful if swallowed.
Safety Phrase(s)	S13 Keep away from food, drink and animal feeding stuffs. S2 Keep out of reach of children. S20 When using do not eat or drink.
Other Information	Poisons Schedule S6

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Characterization	Solid		
Ingredients	<u>Name</u>	<u>CAS</u>	<u>Proportion</u>
	Copper (present as Copper Oxychloride)	1332-40-7	500 g/kg
	Dispersants and fillers		10-30 %

4. FIRST AID MEASURES

Inhalation	Remove affected person to fresh air until recovered. If symptoms develop or persist, seek medical advice.
Ingestion	If swallowed DO NOT induce vomiting. Rinse mouth and then drink plenty of water. Obtain medical advice.
Skin	Wash affected areas thoroughly with soap and water. Remove contaminated clothing and launder before re-use.
Eye	If in eyes, hold eyelids open and wash with copious amounts of water for at least 15 minutes. Seek medical advice if irritation develops or persists.
First Aid Facilities	If poisoning occurs, contact a doctor or the Poisons Information Centre (Australia) on 13 11 26.
Advice to Doctor	Treat symptomatically. No specific antidote. Remove by gastric lavage. Victim may suffer stomach pains, symptoms

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attributed to the CNS and kidneys, hemolytic crisis accompanied by damage in the liver and brain.

5. FIRE FIGHTING MEASURES

Suitable Extinguishing Media	Water fog, foam, carbon dioxide or dry chemical.
Hazards from Combustion	May emit toxic smoke and fumes if involved in fires or exposed to extreme heat.
Products	
Special Protective Equipment for fire fighters	Breathable air apparatus must be worn if material is involved in fires especially in confined spaces.
Other Information	STOP FIRE WATER FROM ENTERING DRAINS OR WATER BODIES.

6. ACCIDENTAL RELEASE MEASURES

Spills & Disposal	Recover the product by sweeping up or vacuuming without raising dust. Collect spilled material and waste in sealable open-top type containers for disposal.
Personal Protection	For appropriate personal protective equipment (PPE), refer Section 8.

7. HANDLING AND STORAGE

Precautions for Safe Handling	Avoid generating dusts while handling the product and mixing. Do NOT contaminate dams, rivers or streams, or any other water bodies with chemical or used containers.
Conditions for Safe Storage	Store in the closed, original container in a dry, cool well ventilated area out of direct sunlight.
Other Information	Always read the label and any attached leaflet before use.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

National Exposure Standards	No exposure standard for this product has been set, however, an exposure standard has been set for copper, dusts and mists (as Cu) at 1 mg/m ³ .
Engineering Controls	Handle in well ventilated areas, generally natural ventilation is adequate.
Personal Protective Equipment	When opening the container, preparing the spray and using the prepared spray, wear cotton overalls buttoned to the neck and wrist and a washable hat, nitrile or elbow-length PVC gloves and face shield or goggles and disposable dust mask. Re-entry period: Do not enter treated area until spray has dried.
Hygiene Measures	After use and before eating, drinking or smoking, wash hands, arms and face thoroughly with soap and water. After each day's use, wash contaminated clothing and safety equipment.

9. PHYSICAL AND CHEMICAL PROPERTIES

Form	Solid
Appearance	Blue to green microgranules
Odour	Odourless
Solubility in Water	Disperses in water.
pH Value	6.5 - 7.5 (10% suspension)
Vapour Pressure	Negligible at 20°C
Flammability	Non combustible material.

10. STABILITY AND REACTIVITY

Chemical Stability	Stable under normal conditions.
Incompatible Materials	Incompatible with acids, calcium polysulphide, dithiocarbamates, alkaline pesticides such as lime sulphur, dinitro compounds, phosdrin, dimethoate, TMTD (thiram), calcium compounds and mercury compounds.

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Hazardous Polymerization Hazardous polymerisation is not possible.

11. TOXICOLOGICAL INFORMATION

Toxicology Information	No harmful effects are expected if the precautions on the label and this MSDS are followed.
Inhalation	Avoid inhalation of spray mist. Excessive exposure to product dust may cause cough, mucous production and shortness of breath, reflecting metal fume fever.
Ingestion	Not a likely route of exposure. Ingestion of large doses of copper salts may result progressively in irritation of the gastrointestinal tract, nausea, vomiting, salivation, gastric pain, hemorrhagic gastritis, diarrhea, capillary damage, liver and kidney damage, and central nervous system stimulation followed by depression. Jaundice, pain in the liver, and hemolytic anemia have been reported following acute human poisonings.
Skin	Prolonged contact with the concentrate may cause irritation. Repeated or prolonged contact with the concentrate may lead to irritant contact dermatitis.
Eye	May cause slight irritation to the eyes. Possible symptoms include redness, swelling, tearing and pain.
Chronic Effects	Low chronic toxicity unless excessive exposure is encountered. Excessive exposure to copper by inhalation may result in irritation of the upper respiratory tract which, if severe, may lead to perforation of the nasal septum after long periods of exposure. Repeated ingestion of copper salts may result in anemia, liver and kidney damage. Chronic inhalation exposure may cause a metallic taste in the mouth, irritation of the upper respiratory tract such as the nasal mucosa that may progress to perforation of the nasal septum. Chronic cough may also occur. Copper oxychloride, which comprises 87.7% of this product, governs the toxicity of the product. The remaining components have low to negligible toxicity.
Acute Toxicity - Oral	LD50 (rat) 1500 mg/kg for the formulated product
Acute Toxicity - Dermal	LD50 (rat) 700 - 800 mg/kg for copper oxychloride
Acute Toxicity - Inhalation	LD50 (rat) >2000 mg/kg for copper oxychloride
Human Effects	LC50 (rat) (4hr) >30 mg/l for copper oxychloride
	Copper-intolerant individuals should not be exposed to this material. No additional information is available on whether overexposure to this material would aggravate other existing special medical conditions.

12. ECOLOGICAL INFORMATION

Environ. Protection	Spray drift should be avoided, read the label for more information. Marine pollutant.
Acute Toxicity - Fish	LC50 (96hr) for rainbow trout is >43.8 mg/l for copper oxychloride
Acute Toxicity - Daphnia	LC50 (48hr) for daphnia is 0.29 mg/l for copper oxychloride .
Acute Toxicity - Algae	EC50 (72hr) for Pseudokirchneriella subcapitata 0.033 mg/l for copper oxychloride.
Acute Toxicity - Other Organisms	Bees: Toxic to bees. LD50 12 µg/bee.

13. DISPOSAL CONSIDERATIONS

Product Disposal	On site disposal of the concentrated product is not acceptable. Ideally, the product should be used for its intended purpose. If there is a need to dispose of the product, approach local authorities who hold periodic collections of unwanted chemicals (ChemClear®). Disposal of spent dip: Bury the spent dip 500mm below the ground surface in a disposal pit specifically marked and set up for this purpose clear of waterways, desirable vegetation and tree roots.
Container Disposal	Shake the last amount of product from the bag into application equipment. If not recycling, puncture or shred and bury containers in local authority landfill. If no landfill is available, bury the containers below 500mm in a disposal pit

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Empty containers and product should not be burnt.

14. TRANSPORT INFORMATION

Transport Information	It is good practice not to transport agricultural chemical products with food, food related materials and animal feedstuffs.
Storage and Transport	Considered non dangerous for transport by the Australian Code for the Transport of Dangerous Goods by Road and Rail. Exempt from classification as a Dangerous Good in packs less than 3,000 kg or L as per ADG7, SP no. AU01. For bulk shipments as Class 9, use UN 3077, HazChem code 2Z.
UN Number (Sea Transport)	3077
IMO Class/Packing Group	Class 9
IMO Marine Pollutant	Marine Pollutant
IMO Proper Shipping Name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (contains Copper Oxychloride)

15. REGULATORY INFORMATION

Poisons Schedule	S6
Packaging & Labelling	POISON KEEP OUT OF REACH OF CHILDREN READ SAFETY DIRECTIONS BEFORE OPENING OR USING
Hazard Category	Harmful
AICS (Australia)	All of the components in this product are listed on the Australian Inventory of Chemical Substances.

16. OTHER INFORMATION

Date of preparation or last revision of MSDS	Revised 25/11/2011
Contact Person/Point	Normal Hours: Mrs Kathleen Marsh Phone: +61 3 9282 1000 After Hours: Shift Supervisor Phone: 1800 033 498
Revisions Highlighted	The MSDS was reviewed. Various changes were made to the information. See section 12 for updated ecological information. Other minor changes made as per label. ...End Of MSDS...

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