



Material Safety Data Sheet

Page: 1 of 4

Infosafe No. 3NU13 Issue Date: January 2005 ISSUED by NUFARM

Product Name : **Oxydul DF Fungicide**

Classified as hazardous according to criteria of NOHSC

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY

Product Name Oxydul DF Fungicide
Product Code 5330
Product 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.
Company Name NUFARM AUSTRALIA LIMITED. (ABN 80 004 377 780)
Address 103-105 Pipe Road Laverton North
Victoria 3026 Australia
Emergency Tel. 24hr 1800 033 498
Telephone/Telex Number Tel: (03) 9282-1000 Fax: (03) 9282-1001
Product Type Group Y Fungicide
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. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Characterization Solid

| Ingredients | Name | CAS | Proportion |
|--------------------|--|------------|-------------------|
| | Copper (present as Copper Oxychloride) | 1332-40-7 | 500 g/kg |
| | Dispersants and fillers | | 10-30 % |

3. HAZARDS IDENTIFICATION

Harmful if swallowed.
Other Information Poisons Schedule S6

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 Poisons Information Centre on 13 11 26 (Australia).

Advice to Doctor Treat symptomatically.
No specific antidote.
Remove by gastric lavage. Victim may suffer stomach pains, symptoms attributed to the CNS and kidneys, hemolytic crisis accompanied by damage in the liver and brain.

5. FIRE FIGHTING MEASURES



Material Safety Data Sheet

Page: 2 of 4

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Extinguishing Media Water fog, foam, carbon dioxide or dry chemical.

Specific Hazards

Hazardous May emit toxic smoke and fumes if involved in fires or exposed to extreme heat.

Combustion Products

Protective Equipment Breathable air apparatus must be worn if material is involved in fires especially in confined spaces.

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

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.

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

Exposure Limits 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/m³.

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.

Eng. Controls Handle in well ventilated areas, generally natural ventilation is adequate.

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

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

Stability Stable under normal conditions.

Hazardous Hazardous polymerisation is not possible.

Polymerization

Materials to Avoid Incompatible with acids, calcium polysulphide, dithiocarbamates, alkaline pesticides such as lime sulphur, dinitro compounds, phosdrin, dimethoate, TMTD (thiram), calcium compounds and mercury compounds.

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.



Material Safety Data Sheet

Page: 3 of 4

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| | |
|------------------------------------|--|
| 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 LD50 (rat) 700 - 800 mg/kg for copper oxychloride |
| Acute Toxicity - Dermal | LD50 (rat) >2000 mg/kg for copper oxychloride |
| Acute Toxicity - Inhalation | LC50 (rat) (4hr) >30 mg/l for copper oxychloride |
| Human Effects | 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. |
| Acute Toxicity - Fish | LC50 (48 hr) for carp is 2.2 mg/l for copper oxychloride |
| Acute Toxicity - Daphnia | LC50 (48 hr) for daphnia is 3.5 mg/l for copper oxychloride . |
| Acute Toxicity - Other Organisms | Not toxic to bees. |

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 (ChemCollect). |
| Container Disposal | Shake the last amount of product from the bag into application equipment. Puncture or shred and bury containers in local authority landfill. If no landfill is available, bury the containers below 500mm in a disposal pit specifically marked and set up for this purpose clear of waterways, desirable vegetation and tree roots. Empty containers and product should not be burnt. |

14. TRANSPORT INFORMATION

| | |
|--------------------|----------------|
| U.N. Number | None Allocated |
|--------------------|----------------|



Material Safety Data Sheet

Page: 4 of 4

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Proper Shipping Name None Allocated

DG Class None Allocated

Hazchem Code None Allocated

Packing Group None Allocated

Storage and Transport Considered non dangerous for transport by the Australian Code for the Transport of Dangerous Goods by Road and Rail.

15. REGULATORY INFORMATION

Risk Phrase R22 Harmful if swallowed.

Safety Phrase 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.

Poisons Schedule S6

Hazard Category Harmful

Packaging & Labelling POISON

KEEP OUT OF REACH OF CHILDREN
READ SAFETY DIRECTIONS BEFORE OPENING OR USING

AICS (Australia) All of the components in this product are listed on the Australian Inventory of Chemical Substances.

16. OTHER INFORMATION

Contact Person/Point Normal Hours: Mr Volker Maier Phone: (03) 9282 1000
After Hours: Shift Supervisor Phone: 1800 033 498

Revisions Highlighted The MSDS was reviewed. Minor changes were made to the information. The MSDS is now issued in a 16 header format.

...End Of MSDS...