



Infosafe No™ 3NUN1 Issue Date : June 2011 ISSUED by NUFARMNZ

Product Name **CUPROFIX® DISPERS®**

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product Name CUPROFIX® DISPERS®
Product Code 02601
Product Type Fungicide
Company Name Nufarm NZ
Address 6 Manu Street, Otahuhu
Auckland 2024 New Zealand
Emergency Tel. 0800 651 911
Telephone/Fax Number Tel: 0-9-270 4157
Fax: 0-9-270 4159
Email www.nufarm.co.nz
Recommended Use A Bordeaux mixture fungicide formulated into a neutral pH water dispersible granule for disease control in fruit crops.
Other Information This SDS 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 Dangerous Goods according to the LTSA New Zealand.
Risk Phrase(s)
Other Information 6.1E acute toxicant, 6.3A skin irritant, 6.4A eye irritant, 6.9B target organ toxicant, 9.1A aquatic toxicant, TOXICITY
Harmful - may be harmful if swallowed, inhaled or absorbed through the skin. May cause skin and eye irritation. May cause liver damage from repeated oral exposure at high doses.
ECOTOXIC
Very toxic to aquatic organisms.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Characterization Solid

Ingredients	Name	CAS	Proportion
	Naphthalene sulfonic acid polymer with formaldehyde, sodium salt	9084-06-4	<15%
	Sodium xylene sulfonate	1300-72-7	<15%
	Kaolin clay	1332-58-7	<20%
	Copper as Bordeaux mixture	8011-63-0	200g/kg

4. FIRST AID MEASURES

First Aid Measures For advice contact the National Poisons Centre 0800 POISON (0800 764 766) or a doctor immediately. Begin artificial respiration if the victim is not breathing. Use mouth-to-nose rather than mouth-to-mouth. Obtain medical attention.
Inhalation Remove patient to fresh air. Lay down and keep warm and rested. If breathing is shallow or has stopped ensure airway is clear and apply resuscitation. Seek medical assistance immediately.
Ingestion Never give anything by mouth to an unconscious person. If swallowed do NOT induce vomiting. For advice, contact the National Poisons Centre (0800 764 766). Seek medical assistance immediately.
Skin Immediately flush body and clothes with large amounts of water. Remove contaminated clothing and footwear. Wash affected areas with soap and water.



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Eye	If a large area is affected seek medical assistance. Flush eyes with plenty of water for 15 minutes holding eyelids open if necessary. Seek medical assistance.
First Aid Facilities	Facilities storing or utilizing this material should be equipped with an eyewash facility and safety shower.
Advice to Doctor	Treat symptomatically. Copper salts may be corrosive to the oesophagus. Do NOT induce vomiting. If spontaneous vomiting has occurred or is suspected, gastric intubation is contraindicated. In cases of severe intoxication, consider chelation therapy with dimercaprol (BAL).

5. FIRE FIGHTING MEASURES

Suitable Extinguishing Media	Choose extinguishing media to suit the burning material. Water fog, foam, carbon dioxide or dry chemical.
Hazards from Combustion Products	If involved in a major fire, could evolve oxides of copper or sulphur, calcium sulphate and water.
Special Protective Equipment for fire fighters	Full protective clothing and self-contained breathing apparatus.
Specific Methods	Keep up wind. Do not allow washings to reach sewage or effluent systems.
Hazchem Code	2X
Other Information	Location Certificate: Not applicable Hazardous Atmosphere Zone: Not applicable Number of Fire Extinguishers: Not applicable

6. ACCIDENTAL RELEASE MEASURES

Spills & Disposal	Wear protective clothing. Clear area of unprotected personnel. Sweep up solids without generating dust. Contain and absorb liquid spills with inert material and place in waste containers. If spill does enter waterways contact the local authority. Collect in an appropriate sealable container for disposal in an approved landfill.
Personal Protection	For appropriate personal protective equipment (PPE), refer Section 8.
Environmental Precautions	Prevent from entering drains, waterways or sewers.

7. HANDLING AND STORAGE

Precautions for Safe Handling	Avoid skin and eye contact and inhalation of spray mist or dust. APPROVED HANDLER: This product must be under the control of an approved handler if applied in a wide dispersive manner, or used by a commercial contractor. TRACKING: Is not required RECORD KEEPING: Records of use as described in NZS 8409 Management of Agrichemicals must be kept if 3kg or more is applied within 24 hours.
Conditions for Safe Storage	Keep out of reach of children. Store in original container tightly closed and in a locked, dry, cool area away from foodstuffs. Storage must be in accordance with NZS 8409 Management of Agrichemicals. Stores containing 100kg of CUPROFIX DISPERSS are subject to signage, and more than 100kg require emergency response plans.
Other Information	Always read the label and any attached leaflet before use. Aggregate Storage Volume Thresholds: When stored with substances of the same hazard classification the aggregate quantity must be considered. For full details refer to the current NZS8409 Management of Agrichemicals and the HSNO Regulations.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

National Exposure Standards	No exposure limits (WES, TEL or EEL's) have been specifically assigned for this product. WES TWA for Dust and mists, as Cu = 1mg/m ³
Engineering Controls	Handle in well ventilated areas, generally natural ventilation is adequate. Avoid generating and inhaling dusts.
Personal Protective Equipment	When opening the container, preparing spray and using the prepared spray wear safety goggles, waterproof gloves, washable hat, cotton overalls buttoned to



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Hygiene Measures the neck and wrist, and boots.
Do not eat, drink or smoke while using.
Remove protective clothing and wash hands and face thoroughly before meals and after work. Wash protective clothing daily after work.

9. PHYSICAL AND CHEMICAL PROPERTIES

Form Solid

Appearance Blue-green microgranules

Solubility in Water Disperses in water. Not soluble.

pH Value 7.0 - 7.5 (dispersed at 1%)

Vapour Pressure Negligable

Density 1000kg/m³ (natural), 650g/L (tapped)

Flammability Non combustible material.

Other Information (WG) Water Dispersible Granule

10. STABILITY AND REACTIVITY

Chemical Stability When stored appropriately this product should show no significant degradation for 2 years from the date of manufacture.

Incompatible Materials Avoid contact with strong acids, iron, aluminium and its alloys.

Hazardous Decomposition Products Thermal decomposition products include: copper oxide, calcium sulphate and water.

Hazardous Polymerization Hazardous polymerisation will not occur.

11. TOXICOLOGICAL INFORMATION

Inhalation Not a likely route of exposure due to the physical form of the product. However, care should be taken to avoid the inhalation of excessive amounts of spray mist during field spraying, respiratory irritation may occur. Inhalation may be harmful.

Ingestion Not a likely route of exposure. Possible symptoms of exposure of the concentrate include: vomiting, stomach pains, symptoms attributed to the central nervous system and kidneys, and hemolytic crisis accompanied by damage in the liver and brain.

Skin The concentrated product may cause slight irritation on contact.

Eye The concentrate may cause irritation of the eyes unless washed off immediately.

Chronic Effects Prolonged contact may give rise to some skin diseases especially if small cuts, scratches or abrasions are present or if irritation by contaminated clothing occurs. Elementary hygiene precautions will avoid these risks.
Copper Sulphate:
Workers exposed by inhalation have reported irritation of the nose and throat, occasional ulceration of the nasal septum, and inflammation and diffuse fibrosis of the lungs. Humans exposed to high levels in drinking water have experienced abdominal pain, vomiting, diarrhea, nausea, and a metallic taste in the mouth.

Acute Toxicity - Oral LD50 (rat) >2,000 mg/kg

Acute Toxicity - Dermal LD50 (rat) >4,000mg/kg

Acute Toxicity - Inhalation LC50 (rat) (4hr) 1.97 (male) - 2.02 (female) mg/l

Eye Irritation Irritant (rabbit)

Skin Irritation Irritant

Skin Sensitisation Not a skin sensitiser (Guinea pig)

Other Information The Australian Acceptable Daily Intake (ADI) for copper for a human is 0.2 mg/kg/day, set for the public for daily, lifetime exposure. There is no NOEL



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or LOEL or safety factor. (Ref: Comm. Dept. of Health and Ageing Office of Chemical Safety and Environmental Health, 'ADI List', March 2010).

12. ECOLOGICAL INFORMATION

Environmental Fate	For copper sulfate: The bioconcentration factor (BCF) in fish is 10-100, indicating a low potential for bioconcentration. The BCF is higher in molluscs, especially oysters, where it may reach 30,000. the biomagnification ration in fish is less than 1, indicting no biomagnification in the food chain. No bioaccumulation was obtained from a study of pollutant concentrations in the muscle and livers of 10 mammal species and no evidence of biomagnification in the food chain was observed.
Environ. Protection	Copper sprays can cause injury to tender foliage or hasten leaf fall.
Basis for Assessment	Data below is for the active ingredient unless otherwise stated.
Acute Toxicity - Fish	LC50 (96hr) for rainbow trout is 0.18 mg/l for copper hydroxide sulphate (active)
Acute Toxicity - Daphnia	LC50 (48hr) for daphnia is 0.089 mg/l for copper hydroxide sulphate (active).
Acute Toxicity - Algae	EC50 (96h) Phaeodactylum tricornutum(diatom) is 0.1 - 2ppm for copper hydroxide sulfate (active)
Acute Toxicity - Other Organisms	Not toxic to bees. LD50 (14d) colinus virginianus (northern bobwhite quail) <135mg/kg Acute LD50 (rat) 100mg/kg bw

13. DISPOSAL CONSIDERATIONS

Product Disposal	Dispose of product only by using according to the label, or at an approved landfill.
Container Disposal	Ensure container is completely empty. Burn in an appropriate incinerator if circumstances, such as wind direction, permit. Otherwise crush and bury in an appropriate landfill.

14. TRANSPORT INFORMATION

Transport Information	It is good practice not to transport agricultural chemical products with food, food related materials and animal feedstuffs.
U.N. Number	3077
Proper Shipping Name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. - (copper, 20%)
DG Class	9
Hazchem Code	2X
Packaging Method	-
Packing Group	III
EPG Number	-
IERG Number	47
IMO Marine Pollutant	Yes. Environmentally Hazardous Substance mark required.
IMDG EMS	F-A, S-F
Other Information	Do not carry more than 3kg of CUPROFIX DISPERSS on a passenger service vehicle. Segregation: Check the latest Land Transport Rule Dangerous Goods Rule 45001 for additional information. Sea transport may require additional segregation. Refer NZS5433 sea segregation for details.

15. REGULATORY INFORMATION

National and or International Regulatory Information	Registered pursuant to the ACVM Act 1997, No. P5672 See www.nzfsa.govt.nz/acvm/ for registration conditions Approved pursuant to the HSNO Act 1996, Approval Code HSR000605 See www.ermanz.govt.nz for approval controls
Packaging & Labelling	HARMFUL * ECOTOXIC - keep out of reach of children



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Hazard Rating Systems NFPA/HMIS: 2-0-0

16. OTHER INFORMATION

Contact Person/Point IN AN EMERGENCY, DIAL 111 - FIRE OR POLICE
24Hr Tollfree Emergency No: 0800 651 911
24Hr Emergency No: National Poisons Centre Phone: 0800 764 766

Revisions Highlighted The SDS was reviewed. Various changes were made to the information.
Section 2 - correction to historical data
Section 4, 8, 10, 12 - additional information,
Plus other minor updates

Other Information Supersedes SDS issued November 2006
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