

Infosafe No™ 3NUDR	Issue Date : April 2017	ISSUED by NUFARMNZ
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 Product Name **CHAMP® FLO**

1. Identification

GHS Product Identifier	CHAMP® FLO
Product Code	02579
Product Type	Fungicide
Company Name	Nufarm NZ
Address	6 Manu Street, Otahuhu Auckland 2024 New Zealand
Telephone/Fax Number	Tel: 0-9-270 4150 Fax: 0-9-270 4159
Emergency phone number	0800 651 911
Email	info@nz.nufarm.com
Recommended use of the chemical and restrictions on use	A protectant copper fungicide for the control of many diseases on certain fruit and vegetable 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. Hazard Identification

Other Information	6.1E acute toxicant, 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 lung damage from repeated oral exposure at high doses. ECOTOXIC Very toxic to aquatic organisms.
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3. Composition/information on ingredients

Chemical Characterization	Liquid		
Ingredients	<u>Name</u>	<u>CAS</u>	<u>Proportion</u>
	Ingredients determined to be non-hazardous	-	To volume
	Copper (as copper hydroxide)	20427-59-2	334.5g/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. If a large area is affected seek medical assistance.
Eye contact	Flush eyes with plenty of water for 15 minutes holding eyelids open if necessary. Remove contact lenses, if present and easy to do. Seek medical assistance even if there are no immediate symptoms.
First Aid Facilities	Facilities storing or utilizing this material should be equipped with an eyewash facility and safety shower.
Advice to Doctor	Treat symptomatically.

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5. Fire-fighting measures

Suitable extinguishing media Water fog, foam, carbon dioxide or dry chemical.

Hazards from Combustion Products Decomposes to copper oxide and water above 60°C.

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. Keep containers cool with water spray.

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. Contain spill and absorb with sand, soil or absorbent granules. If spill does enter waterways contact the local authority. Collect in an appropriate sealable container for disposal in an approved landfill.
Wash area with water and detergent and absorb with inert material. Dispose of waste safely 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.
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 3L or more is applied within 24 hours.
This product must not be applied onto or into water.

Conditions for safe storage, including any incompatibilities 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.

Other Information Stores containing 100L of CHAMP FLO require secondary containment and are subject to signage, and more than 100L require emergency response plans.
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

Occupational exposure limit values No exposure limits (WES, TEL or EEL's) have been specifically assigned for this product. WES TWA for copper dusts and mists, as Cu = 1 mg/m³

Appropriate engineering controls Handle in well ventilated areas, generally natural ventilation is adequate.

Personal Protective Equipment When opening the container, preparing spray and using the prepared spray wear safety goggles, waterproof gloves, cotton overalls buttoned to the neck and wrist, and boots.

Hygiene Measures 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. Wash splashes of concentrate from skin immediately.

9. Physical and chemical properties

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Form	Liquid
Appearance	Blue-green liquid
Odour	Slight copper odour
Solubility in Water	Disperses in water.
Specific Gravity	1.371g/mL
pH	8.7 (1% solution)
Flash Point	Not applicable, aqueous formulation
Other Information	(SC) Suspension Concentrate

10. Stability and reactivity

Chemical Stability	Stable under normal conditions of handling and storage.
Conditions to Avoid	Excessive heat. Decomposes to copper oxide and water above 60°C
Incompatible Materials	Strong acids, alkalis and oxidising agents. Sulphur.
Hazardous Polymerization	Hazardous polymerisation will not occur.

11. Toxicological Information

Toxicology Information	No specific toxicological data is available for this product. Data below is for a simliar formulation.
Acute Toxicity - Oral	LD50 (rat) 1,630mg/kg
Acute Toxicity - Dermal	LD50 (rabbit) >5,000mg/kg
Acute Toxicity - Inhalation	LC50 (rat) (4hr) >2.15mg/L
Skin Sensitisation	Not a contact sensitizer in guinea pigs following repeated skin exposure.
Carcinogenicity	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.
Serious eye damage/irritation	Rabbit: Mildly irritating
Skin corrosion/irritation	Rabbit: Slightly irritating
Subchronic/Chronic Toxicity	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 upppe respiratory tract such as the nasal mucosa that may progress to perforation of the nasal septum. Chronic cough may also occur. Copper hydroxide, which comprises 37.5% of this product, governs the toxicity of the product. The remaining components have low to negligible toxicity.
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 or LOEL or safety factor. (Ref: Aust Govt Dept. of Health, Office of Chemical Safety, 'ADI List', December 2014).

12. Ecological information

Persistence and degradability	Copper hydroxide is not rapidly degradable.
Environmental Fate	The degree of mobility of copper in the environment depends upon the pH of ambient soils and waters. The higher the acidity, the more soluble copper salts are and, hence, the more mobile. Partitioning of copper into air is negligible due to the low vapour pressure of copper salts.
Basis for Assessment	Ecotoxicological data have not been determined specifically for this product. Data below is for the active ingredient unless otherwise stated.
Acute Toxicity - Fish	LC50 (96hr) for fathead minnow is 0.023 mg/l for copper hydroxide LC50 (96hr) for rainbow trout is 0.08 mg/l for copper hydroxide

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Acute Toxicity - Daphnia LC50 (48hr) for Daphnia is 0.0065 mg/l for copper hydroxide.
Acute Toxicity - Other Organisms LD50 for bobwhite quail is >3,400 mg/kg for copper hydroxide
 Non toxic to honeybees

13. Disposal considerations

Product Disposal Dispose of product only by using according to the label, or at an approved landfill.
Container Disposal Triple rinse empty container and add rinsate to spray tank. Recycle empty container. Otherwise crush and bury in a suitable 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 3082
UN proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. - (copper, 33.5%)
Transport hazard class(es) 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 10L of CHAMP FLO 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. P3897
 See www.foodsafety.govt.nz for registration conditions
 Approved pursuant to the HSNO Act 1996, Approval Code HSR000612
 See www.epa.govt.nz for approval controls.
Packaging & Labelling HARMFUL * ECOTOXIC - keep out of reach of children
Hazard Rating Systems NFPA/HMIS: 2-1-0

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 5 yearly review carried out. Various changes and updates made to document.
Other Information Supersedes SDS issued February 2012
 ...End Of MSDS...

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