

Material Safety Data Sheet

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Infosafe No.	3NU6O	Issue Date : August 2007	ISSUED by CRPCARE
Product Name :	CAPTAN WG Fungicide		

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product Name	CAPTAN WG Fungicide
Product Code	5121
Product Type	Group Y Fungicide
Company Name	Crop Care Australasia Pty Ltd (ABN 53 061 362 347)
Address	Unit 15/16 Metroplex Avenue Murarrie Queensland 4172 Australia
Emergency Tel.	1800 033 498 (24hr Australia)
Telephone/Fax Number	Tel: +61 7 3909 2000 Fax: +61 7 3909 2010
Recommended Use	For the control of certain diseases in a range of fruit crops, turf 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	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)	R23 Toxic by inhalation. R40 Limited evidence of a carcinogenic effect. R41 Risk of serious damage to eyes. R43 May cause sensitization by skin contact.
Safety Phrase(s)	S1/2 Keep locked up and out of reach of children. S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. S36/37/39 Wear suitable protective clothing, gloves and eye/face protection. S38 If insufficient ventilation, wear suitable respiratory equipment. S45 In case of accident or if you feel unwell seek medical advice immediately
Other Information	Poisons Schedule S6

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Characterization	Solid		
Ingredients	Name	CAS	Proportion
	Captan	133-06-2	800 g/kg
	Non hazardous components		<10%
	Talc	14807-96-6	<10%

4. FIRST AID MEASURES

Inhalation	Remove affected person to fresh air until recovered. If symptoms persist, seek medical attention immediately.
Ingestion	If poisoning occurs, contact a doctor or the Poisons Information Centre (Australia) on 13 11 26. If vomiting occurs, give more water to drink to assist dilution. Rinse mouth and then drink plenty of water.
Skin	Wash affected areas thoroughly with soap and water. Remove contaminated clothing and launder before re-use. If irritation persists, seek medical advice.
Eye	If in eyes, hold eyelids open and wash with copious amounts of water for at least 15 minutes.

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Product Name : **CAPTAN WG Fungicide**

Advice to Doctor Seek medical advice immediately.
 Treat symptomatically.

5. FIRE FIGHTING MEASURES

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

Hazards from Combustion Products If involved in a fire, it will emit oxides of nitrogen and carbon, hydrogen chloride and possibly thio phosgene.

Other Information Hazchem code 2[Z] .
 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.
 On-site disposal of concentrate is not acceptable.

Personal Protection Wear a face mask that protects against toxic dusts, eye protection, chemically resistant gloves and overalls while dealing with spilled material.

7. HANDLING AND STORAGE

Precautions for Safe Handling Avoid generating dusts while handling the product and mixing. If dusts are generated, it is advisable to wear a dust mask, refer Section 8.

Conditions for Safe Storage Store in the closed, original container in a dry, well ventilated area out of direct sunlight.
 Store in a locked enclosure.
 Keep container tightly sealed and do not store with seed, fertilisers or foodstuffs.

Other Information Always read the label and any attached leaflet before use.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

National Exposure Standards NOHSC has set the following exposure standard for captan : TLV (TWA) 0.5 mg/m³, STEL - .
 The NOHSC exposure standard for captan (pre 1995) contains a carcinogen, sensitiser and skin notice.
 CARCINOGEN CATEGORY NOTICE: Category 2.
 Probable human carcinogen for which there is sufficient evidence to provide a strong presumption that human exposure might result in the development of cancer.
 'Sen' notice - sensitiser. The substance can cause a specific immune response in some people. An affected individual may subsequently react to minute levels of that substance.
 'SK' notice - absorption through the skin may be a significant source of exposure. The exposure standard is invalidated if such contact should occur.
 NOHSC has set the following exposure standard for talc : TLV (TWA) 2.5 mg/m³, STEL - .

 The most recent classification by the European Union (ATP28) in 2003 classifies captan as carcinogen Cat 3, substances that cause concern for man owing to possible carcinogenic effects but in respect of which the available information is not adequate for making a satisfactory assessment. There is some evidence from appropriate animal studies, but this is insufficient to place the substance in Category 2.
 Australia, in its most recent list (Hazardous Substances Information System) classifies captan as R40, Carc:Cat 3. The NOHSC exposure standard (above) has not been modified in the same database.
 The US EPA considers captan not likely to be a human carcinogen at levels that do not cause cytotoxicity and regenerative cell hyperplasia, therefore not likely to be a human carcinogen or pose cancer risks of concern when used in accordance with approved product labels.

Engineering Controls Handle in well ventilated areas, generally natural ventilation is adequate. Avoid generating and inhaling dusts.

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Product Name : **CAPTAN WG Fungicide**

Personal Protective Equipment	When opening the container, preparing spray and using the prepared spray wear cotton overalls buttoned to the neck and wrist and a washable hat, elbow-length PVC gloves and goggles. 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.
Requirements Concerning Special Training	NSW regulations require that people who use pesticides in their job or business must have training in the application of the materials.

9. PHYSICAL AND CHEMICAL PROPERTIES

Form	Solid
Appearance	Grey brown granules
Odour	Faint characteristic odour.
Melting Point	175 - 178°C for captan
Solubility in Water	Disperses in water.
Vapour Pressure	<1.3 mPa @ 25°C for captan
Octanol/Water Partition Coefficient	Kow Log P is 2.8 (25°C for captan)
Flammability	Combustible

10. STABILITY AND REACTIVITY

Chemical Stability	Stable under normal conditions. Hydrolyses at pH >7.
Conditions to Avoid	Excessive heat and fire.
Hazardous Reactions	Keep away from strong oxidising agents.
Hazardous Polymerization	Hazardous polymerisation is not possible.

11. TOXICOLOGICAL INFORMATION

Inhalation	Breathing in high concentrations of dusts or aerosols of this material may cause headache, nausea, dizziness and weakness.
Ingestion	Possible symptoms of exposure include: nausea, vomiting and gastrointestinal discomfort and diarrhoea.
Skin	Prolonged contact with the concentrate may result in absorption of captan in harmful amounts. May cause sensitisation by prolonged skin contact. Repeated or prolonged contact with the concentrate may lead to irritant contact dermatitis.
Eye	The concentrate may cause irritation of the eyes.
Carcinogenicity	Worksafe Australia has classified captan in the occupational environment as a Carcinogen Category 3 substance. This means that the substance is not classifiable as to carcinogenicity to humans. IARC (International Agency for Research on Cancer) has determined that the mechanism in rats and mice is unlikely to occur in humans; hence captan has been classified by IARC as Cat 3, not classifiable as to carcinogenicity to humans. The US EPA considers captan not likely to be a human carcinogen at levels that do not cause cytotoxicity and regenerative cell hyperplasia, therefore not likely to be a human carcinogen or pose cancer risks of concern when used in accordance with approved product labels.
Acute Toxicity - Oral	LD50 (rat) 9,000 mg/kg for captan
Acute Toxicity - Dermal	LD50 (rabbit) >4,500 mg/kg for captan
Acute Toxicity - Inhalation	LC50 (rat) 0.668 mg/l

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Product Name : **CAPTAN WG Fungicide**

Eye Irritation	Captan is a severe eye irritant.
Skin Irritation	Mild to moderate skin irritant.
Respiratory Irritation	The product is a respiratory irritant.
Skin Sensitisation	Prolonged and repeated skin contact may result in skin sensitisation.
Other Information	The Australian Acceptable Daily Intake (ADI) for captan for a human is 0.1 mg/kg/day, set for the public for daily, lifetime exposure. This is based on the NOEL of 10 mg/kg/day, the level determined to show no effects during long term exposure for the most sensitive indicators and the most sensitive species. (Ref: Comm. Dept. of Health and Ageing, 'ADI List', TGA, September 2006).

12. ECOLOGICAL INFORMATION

Persistence / Degradability	Half life in soil is typically 1 day.
Known Harmful Effects on the Environment	The active ingredient captan is highly toxic to fish and aquatic organisms.
Other Precautions	Do not contaminate dams, waterways or sewers with this product or the containers which have held this product.
Environ. Protection	Marine pollutant. Spray drift should be avoided, read the label for more information.
Acute Toxicity - Fish	The following is data for the active ingredient, captan. LC50 (96 hr) for bluegill sunfish is 0.072 mg/l. LC50 (96 hr) for brook trout is 0.034 mg/l.
Acute Toxicity - Daphnia	LC50 (48 hr) for daphnia is 7 - 10 mg/l for captan.
Acute Toxicity - Other Organisms	Bees: Not toxic to bees. LD50 91 µg/bee. Birds: Not toxic to birds. LD50 for mallard ducks and pheasants is >5,000 mg/kg LD50 for bobwhite quail is 2,000 - 4,000 mg/kg

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®).
Container Disposal	Do not use this container for any other purpose. Shake the last amount of product from the bag into application equipment. Do not dispose of undiluted chemicals on site. Puncture or shred and bury empty containers in a 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

Storage and Transport	Considered non dangerous for transport by the Australian Code for the Transport of Dangerous Goods by Road and Rail.
UN Number (Sea Transport)	3077
IMO Class/Packing Group	Class 9; Packing Group III
IMO Proper Shipping Name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (contains Captan)

15. REGULATORY INFORMATION

Poisons Schedule	S6
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Product Name : **CAPTAN WG Fungicide**

Packaging & Labelling POISON
KEEP OUT OF REACH OF CHILDREN
READ SAFETY DIRECTIONS BEFORE OPENING OR USING

Hazard Category Toxic, Irritant

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

Literature References
1. IPCS INTOX Databank
2. US EPA notice CFR Vol 69, No. 226 pg 68357

Revisions Highlighted
The MSDS was reviewed. Minor changes were made to the information.
...End Of MSDS...