

# Material Safety Data Sheet

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Product Name : **Fortress 500 Fungicide**

## 1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

**Product Name** Fortress 500 Fungicide  
**Product Code** 5123  
**Product Type** Group B 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  
**Telephone/Fax Number** Tel: (07) 3909 2000 Fax: (07) 3909 2010  
**Recommended Use** For the control of certain fungal diseases on various crops 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)** R61(2) May cause harm to the unborn child  
**Safety Phrase(s)** S1/2 Keep locked up and out of reach of children.  
S13 Keep away from food, drink and animal feeding stuffs.  
S36 Wear suitable protective clothing.  
S45 In case of accident or if you feel unwell seek medical advice immediately  
**Other Information** Poisons Schedule S7 DANGEROUS POISON

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

**Chemical Characterization** Liquid  
**Ingredients**

<u>Name</u>	<u>CAS</u>	<u>Proportion</u>
Procymidone tech	32809-16-8	500 g/L
Other ingredients (non-hazardous)		Balance

## 4. FIRST AID MEASURES

**Inhalation** Over-exposure by inhalation is improbable. Check for other causes of observed symptoms and seek medical advice.  
**Ingestion** Rinse mouth and then drink plenty of water.  
If vomiting occurs, give more water to drink to assist dilution.  
Seek medical advice immediately.  
**Skin** Remove contaminated clothing and launder before re-use.  
Wash affected areas thoroughly with soap and water.  
**Eye** If in eyes, hold eyelids open and wash with copious amounts of water for at least 15 minutes.  
Seek medical advice.  
**First Aid Facilities** If poisoning occurs, contact a doctor or Poisons Information Centre on 13 11 26 (Australia).  
**Advice to Doctor** Treat symptomatically.

## 5. FIRE FIGHTING MEASURES

**Suitable Extinguishing Media** If involved in a fire, the product will not burn. Choose extinguishing media to suit the burning material.

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<b>Hazards from Combustion Products</b>	Non-combustible. May emit toxic fumes of hydrogen chloride or phosgene if involved in fires or exposed to extreme heat.
<b>Speical Protective Equipment for fire fighters</b>	Breathable air apparatus should be worn when fighting a fire in which this product is involved.
<b>Specific Hazards</b>	Considered low risk due to water content, however upon evaporation of water the product is combustible.
<b>Hazchem Code</b>	None Allocated

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## 6. ACCIDENTAL RELEASE MEASURES

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<b>Spills &amp; Disposal</b>	Contain spill and absorb with clay, sand, soil or proprietary absorbent (such as vermiculite). Collect spilled material and waste in sealable open-top type containers for disposal. On-site disposal of concentrate is not acceptable.
<b>Personal Protection</b>	For appropriate personal protective equipment (PPE), refer Section 8. If product has dried out and the possibility of dust generation exists, wear a suitable respirator.

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## 7. HANDLING AND STORAGE

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<b>Precautions for Safe Handling</b>	Women of child bearing age should avoid contact with procymidone. Seed treated with this product must not be used for animal or human consumption or be allowed to contaminate seed intended for animal or human consumption.
<b>Conditions for Safe Storage</b>	Store in the closed, original container in a cool, well ventilated area. Do not store for prolonged periods in direct sunlight. Keep container tightly sealed and do not store with seed, fertilisers or foodstuffs. Store in a locked enclosure. Treated seed, when stored, should be kept apart from other seed. The containers should be clearly marked to indicate the contents have been treated with this product.
<b>Other Information</b>	Always read the label and any attached leaflet before use.

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## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

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<b>National Exposure Standards</b>	No exposure standards have been set for this product or the active ingredients.
<b>Engineering Controls</b>	Handle in well ventilated areas, generally natural ventilation is adequate.
<b>Personal Protective Equipment</b>	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 and disposable mist mask. Re-entry Period - Do not allow entry into treated areas for 9 days after treatment. When prior entry is necessary, wear all protective clothing and chemical resistant gloves. Read the label for any other instructions.  Re-entry - (grapes only) - grape girdling should not be performed 24 days after spray application unless wearing cotton overalls buttons to the neck and wrist (or equivalent clothing), chemical resistant gloves and boots. Clothing must be laundered after each day's use.
<b>Hygiene Measures</b>	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.
<b>Requirements Concerning Special Training</b>	NSW regulations require that people who use pesticides in their job or business must have training in the application of the materials. By 1st September, 2005 all users must have received such training.

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## 9. PHYSICAL AND CHEMICAL PROPERTIES

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<b>Form</b>	Liquid
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<b>Appearance</b>	Opaque white liquid
<b>Odour</b>	Solvent odour
<b>Solubility in Water</b>	Disperses in water.
<b>Specific Gravity</b>	1.18
<b>Vapour Pressure</b>	18 mPa @ 25°C for procymidone
<b>Volatile Component</b>	~40%
<b>Octanol/Water Partition Coefficient</b>	Kow Log P is 3.14 for procymidone
<b>Flammability</b>	Non combustible material.

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## 10. STABILITY AND REACTIVITY

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<b>Chemical Stability</b>	Stable under normal conditions.
<b>Incompatible Materials</b>	Avoid contact with alkaline materials.

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## 11. TOXICOLOGICAL INFORMATION

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<b>Inhalation</b>	May cause irritation to the respiratory tract.
<b>Ingestion</b>	Amounts swallowed incidental to normal handling procedures and use are not expected to cause injury. However, swallowing large amounts of concentrate may cause nausea and vomiting.
<b>Skin</b>	May irritate the skin.
<b>Eye</b>	May irritate the eyes.
<b>Chronic Effects</b>	Evidence from animal studies indicate that repeated or prolonged exposure to procymidone can result in damage to the liver and reproductive system.
<b>Reproductive Toxicity</b>	Studies have shown that exposure to male rats in utero may result in changes to the genital organs.
<b>Acute Toxicity - Oral</b>	LD50 (rat) 6800 mg/kg for procymidone
<b>Acute Toxicity - Dermal</b>	LD50 (rat) >2500 mg/kg for procymidone
<b>Acute Toxicity - Inhalation</b>	LC50 (rat) >1.5 mg/l
<b>Eye Irritation</b>	Mild eye irritant.
<b>Skin Irritation</b>	Mild skin irritant.
<b>Skin Sensitisation</b>	Product is not a skin sensitiser.
<b>Other Information</b>	The Australian Acceptable Daily Intake (ADI) for procymidone for a human is 0.03 mg/kg/day, set for the public for daily, lifetime exposure. This is based on the NOEL of 2.5/3.5 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 2005).

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## 12. ECOLOGICAL INFORMATION

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<b>Other Precautions</b>	Do not contaminate dams, waterways or sewers with this product or the containers which have held this product. Do not feed treated seed, or otherwise expose, to wildlife and domestic animals, particularly birds.
<b>Environ. Protection</b>	Spray drift should be avoided, read the label for more information.
<b>Acute Toxicity - Fish</b>	LC50 (96 hr) for rainbow trout is 7.2 mg/l for procymidone
<b>Acute Toxicity - Daphnia</b>	EC50 (48 hr) for daphnia magna is 10.3 mg/l for procymidone.
<b>Acute Toxicity - Other Organisms</b>	Not toxic to bees

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## 13. DISPOSAL CONSIDERATIONS

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**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** Do not use this container for any other purpose. Triple rinse containers, add rinsate to the spray tank, then offer the container for recycling/reconditioning, or puncture top, sides and bottom and dispose of in landfill in accordance with local regulations. drumMUSTER is the national program for the collection and recycling of empty, cleaned, non returnable crop production and on-farm animal health chemical containers. If the label on your container carries the drumMuster symbol, triple rinse the container, ring your local Council, and offer the container for collection in the program. If recycling, replace cap and return clean containers to recycler or designated collection point. 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 specifically marked and set up for this purpose clear of waterways, desirable vegetation and tree roots. Empty containers and product should not be burnt.

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## 14. TRANSPORT INFORMATION

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<b>U.N. Number</b>	None Allocated
<b>DG Class</b>	None Allocated
<b>Hazchem Code</b>	None Allocated
<b>Packing Group</b>	None Allocated
<b>Storage and Transport</b>	Considered non dangerous for transport by the Australian Code for the Transport of Dangerous Goods by Road and Rail.

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## 15. REGULATORY INFORMATION

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<b>Poisons Schedule</b>	S7
<b>Packaging &amp; Labelling</b>	DANGEROUS POISON KEEP OUT OF REACH OF CHILDREN READ SAFETY DIRECTIONS BEFORE OPENING OR USING
<b>Hazard Category</b>	Toxic
<b>AICS (Australia)</b>	All of the components in this product are listed on the Australian Inventory of Chemical Substances.

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## 16. OTHER INFORMATION

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<b>Contact Person/Point</b>	Normal Hours: Mr Volker Maier      Phone: (03) 9282 1000 After Hours: Shift Supervisor      Phone: 1800 033 498
<b>Revisions Highlighted</b>	The MSDS was reviewed. Various changes were made to the information.  ...End Of MSDS...