

Infosafe No™ 3NU40	Issue Date : March 2015	ISSUED by NUFARM
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 Product Name **PENNCOZEB® 750DF Fungicide**

Classified as hazardous

## 1. Identification

<b>GHS Product Identifier</b>	PENNCOZEB® 750DF Fungicide
<b>Product Code</b>	5360
<b>Product Type</b>	Group M3 Fungicide
<b>Company Name</b>	NUFARM AUSTRALIA LIMITED. (ABN 80 004 377 780)
<b>Address</b>	103-105 Pipe Road Laverton North Victoria 3026 Australia
<b>Telephone/Fax Number</b>	Tel: +61 3 9282-1000 Fax: +61 3 9282-1001
<b>Emergency phone number</b>	1800 033 498 (24hr Australia)
<b>Recommended use of the chemical and restrictions on use</b>	For the control of certain fungus diseases of field crops, vegetables, fruit, tobacco, turf and ornamentals as per the Directions for Use Table.
<b>Other Information</b>	This Safety Data Sheet describes the properties of the concentrated product. The physical properties and the assessments may not apply to the properties of the product once it has been diluted for application.

## 2. Hazard Identification

<b>GHS classification of the substance/mixture</b>	TR2 Toxic to Reproduction: Category 2 SS-1 Sensitization - Skin: Category 1
<b>Signal Word (s)</b>	WARNING
<b>Hazard Statement (s)</b>	H361 Suspected of damaging fertility or the unborn child. H317 May cause an allergic skin reaction.
<b>General Precautionary Statement (s)</b>	P101 If medical advice is needed, have product container or label at hand. P102 Keep out of reach of children. P103 Read label before use.
<b>Pictogram (s)</b>	Exclamation mark, Health hazard



<b>Precautionary statement – Prevention</b>	P201 Obtain special instructions before use. P202 Do not handle until all safety precautions have been read and understood. P261 Avoid breathing dusts. P272 Contaminated work clothing should not be allowed out of the workplace. P280 Wear protective gloves, clothing, eye and face protection.
<b>Precautionary statement – Response</b>	P308+P313 IF exposed or concerned: Get medical advice/attention. P302+P352 IF ON SKIN: Wash with plenty of soap and water. P333+P313 If skin irritation or rash occurs: Get medical advice/attention. P363 Wash contaminated clothing before reuse.
<b>Other Information</b>	Poisons Schedule S5

## 3. Composition/information on ingredients

<b>Chemical Characterization</b>	Solid		
<b>Ingredients</b>	<u>Name</u>	<u>CAS</u>	<u>Proportion</u>
	Mancozeb	8018-01-7	750g/Kg
	Inerts (not hazardous)		to 100%

## 4. First-aid measures

<b>Inhalation</b>	Remove affected person to fresh air until recovered. If symptoms develop or persist, seek medical advice.
<b>Ingestion</b>	If swallowed DO NOT induce vomiting.

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**Skin** Give a glass of water.  
Seek medical advice if effects persist.  
If poisoning occurs, contact a doctor or the Poisons Information Centre (Australia) on 13 11 26.

**Eye contact** If skin contact occurs, remove contaminated clothing and wash skin thoroughly with water.  
Remove contaminated clothing and launder before re-use.  
If in eyes, hold eyelids open and wash with copious amounts of water for at least 15 minutes.

**Advice to Doctor** Seek medical advice if irritation develops or persists.  
Treat symptomatically.  
Avoid giving alcohol - may cause vomiting and shock.

## 5. Fire-fighting measures

**Suitable extinguishing media** None required but use water spray to cool containers or personnel threatened by fire.  
If involved in a fire, the product will not burn. Choose extinguishing media to suit the burning material.  
Avoid using large volumes of water which would spread the product.

**Hazards from Combustion Products** Non-combustible.  
If involved in a fire, the dehydrated components may emit nitrogen and sulphur, possibly carbon disulphide or ethylene diamine and oxides of manganese or zinc.

**Special Protective Equipment for fire fighters** Breathable air apparatus should be worn when fighting a fire in which mancozeb is involved.

**Other Information** 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 in sealed open top containers for disposal.  
Do not mix recovered product with combustible waste (eg. saw dust, cotton waste, paper, card board etc). Spontaneous combustion is possible in the presence of moisture.

**Clean-up Methods - Large Spillages Environmental Precautions** Place damaged containers in recovery bins (if available) and return to manufacturer.  
Prevent from entering drains, waterways or sewers.

## 7. Handling and storage

**Precautions for Safe Handling** Do NOT spray in high winds.  
Do NOT contaminate dams, rivers or streams, or any other water bodies with pesticide or used containers.  
No special precautions are necessary when handling sealed containers.

**Conditions for safe storage, including any incompatibilities** Store in the closed, original container in a cool, well ventilated area.  
Do not store for prolonged periods in direct sunlight.

## 8. Exposure controls/personal protection

**Occupational exposure limit values** No exposure standard for this product has been set, however, an exposure standard has been set for manganese, dust and compounds at 1 mg/m<sup>3</sup>.

**Appropriate engineering controls** Natural ventilation is sufficient when handling concentrate and preparing spray solution.

**Respiratory Protection** Do not inhale spray mist.

**Personal Protective Equipment** When opening the container and preparing the spray wear cotton overalls buttoned to the neck and wrist and a washable hat, elbow-length PVC gloves and face shield or 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.

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## 9. Physical and chemical properties

<b>Form</b>	Solid
<b>Appearance</b>	Greyish free flowing granules
<b>Melting Point</b>	None - decomposes at about 192°C without melting
<b>Solubility in Water</b>	Disperses in water. Not soluble. Solubility of mancozeb is 6.2 mg/l @ 25°C
<b>pH</b>	6 - 7.5 (1% dispersion)
<b>Vapour Pressure</b>	Negligible at 20°C mancozeb
<b>Volatile Component</b>	None
<b>Flammability</b>	Not flammable

## 10. Stability and reactivity

<b>Chemical Stability</b>	Stable under normal conditions. May decompose slowly in the presence of heat or moisture.
<b>Incompatible Materials</b>	Avoid contact of the concentrate with strong acids, strong oxidizing agents, quaternary ammonium salts and sequestering agents.
<b>Hazardous Polymerization</b>	Hazardous polymerisation is not possible.

## 11. Toxicological Information

<b>Toxicology Information</b>	No harmful effects are expected if the precautions on the label and this MSDS are followed.
<b>Acute Toxicity - Oral</b>	LD50 (rat) >5000 mg/kg for mancozeb technical
<b>Acute Toxicity - Dermal</b>	LD50 (percutaneous, rat) >2,000 mg/kg for mancozeb
<b>Acute Toxicity - Inhalation</b>	LC50 (rat) (4hr) 5.14 mg/l
<b>Ingestion</b>	The concentrate is of low toxicity if swallowed.
<b>Inhalation</b>	Inhalation of dust may result in respiratory irritation.
<b>Skin</b>	May cause sensitisation by prolonged skin contact.
<b>Eye</b>	May irritate the eyes.
<b>Reproductive Toxicity</b>	Evidence from animal studies suggests the potential for developmental toxicity on repeated or prolonged exposure.
<b>Chronic Effects</b>	Prolonged exposure to dust or mists containing manganese compounds can cause progressive poisoning. The signs and symptoms are apathy, loss of balance and weakness. More advanced poisoning may show evidence of central nervous system disturbance.
<b>Skin corrosion/irritation</b>	Mild to moderate skin irritant.
<b>Human Effects</b>	Prolonged and repeated exposure can occasionally cause skin irritation, conjunctivitis and bronchitis. May cause sensitisation by inhalation or skin contact.
<b>Other Information</b>	The Australian Acceptable Daily Intake (ADI) for mancozeb for a human is 0.006 mg/kg/day, set for the public for daily, lifetime exposure. This is based on the NOEL of 0.6 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, Office of Chemical Safety, 'ADI List', June 2014).

## 12. Ecological information

<b>Persistence and degradability</b>	Mancozeb is rapidly absorbed and inactivated by contact with soil. Half life in soil is typically 6 - 15 days.
<b>Acute Toxicity - Fish</b>	Harmful to fish. LC50 (48hr) for rainbow trout is 0.074 mg/l.

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<b>Acute Toxicity - Daphnia</b>	EC50 (48hr) for daphnia magna is 0.073 mg/l for mancozeb.
<b>Acute Toxicity - Algae</b>	EC50 for Pseudokirchneriella subcapitata is 0.044 mg/l.
<b>Acute Toxicity - Other Organisms</b>	Bees: Not toxic to bees. LD50 193 µg/bee. Birds: Not toxic to birds. LD50 for mancozeb is >1000 mg/kg

### 13. Disposal considerations

<b>Product Disposal</b>	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®).
<b>Container Disposal</b>	Shake the last amount of product from the bag into application equipment. Dispose of in accordance with local regulations. 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

<b>Storage and Transport</b>	Considered non dangerous for road and rail transport (in packaging) by the Australian Code for the Transport of Dangerous Goods by Road and Rail. Ref: ADG7; SP No. AU01. For bulk shipments as Class 9, use UN 3077, HazChem code 2Z.
<b>UN Number (Sea Transport)</b>	3077
<b>IMO Class/Packing Group</b>	Class 9; Packing Group III
<b>IMO Marine Pollutant</b>	Marine Pollutant
<b>IMO Proper Shipping Name</b>	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (contains Mancozeb)

### 15. Regulatory information

<b>Poisons Schedule</b>	S5
<b>Packaging &amp; Labelling</b>	CAUTION KEEP OUT OF REACH OF CHILDREN READ SAFETY DIRECTIONS BEFORE OPENING OR USING
<b>Other Information</b>	This product is registered with the Australian Pesticides and Veterinary Medicines Authority (APVMA). APVMA product number: 53987.

### 16. Other Information

<b>Date of preparation or last revision of SDS</b>	Revised 05/03/2015 This SDS replaces document dated February 2011
<b>Contact Person/Point</b>	Normal Hours: Mrs Kathleen Marsh Phone: +61 3 9282 1000 After Hours: Shift Supervisor Phone: 1800 033 498
<b>Revisions Highlighted</b>	The SDS was reviewed to include GHS requirements.
<b>Other Information</b>	® Registered trademark of Cerexagri BV ...End Of MSDS...

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