

# CAUTION

KEEP OUT OF REACH OF CHILDREN  
READ SAFETY DIRECTIONS BEFORE OPENING OR USING

TITAN

# Mancozeb

## 750 DF Fungicide

ACTIVE CONSTITUENT: 750g/kg MANCOZEB

GROUP **Y** FUNGICIDE

For the control of certain fungus diseases of fruit, field crops, tobacco, turf, vegetables and ornamentals as per the Directions for Use Table.

**IMPORTANT: READ THOROUGHLY BEFORE OPENING OR USING THIS PRODUCT.**

APVMA Approval No.: 62383/0108

Pack Size: 25kg



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IN A TRANSPORT EMERGENCY

**DIAL 000**

POLICE OR FIRE BRIGADE

TRANSPORT AND HANDLING  
NOT A DANGEROUS GOOD  
ACCORDING TO THE AUSTRALIAN  
DANGEROUS GOODS (ADG) CODE  
FOR TRANSPORT BY ROAD AND RAIL.

## DIRECTIONS FOR USE

For use in All States where appropriate for crop and/or disease.

Restraints: DO NOT incorporate this product with an Integrated Mite control programme.

### TREE AND VINE CROPS

RATE				CRITICAL COMMENTS
In the following table, all rates are given for dilute spraying. For concentrate spraying refer to the application section.				For all uses in this table: Apply by dilute or concentrate spraying equipment. Apply the same total amount of product to the target crop whether applying this product by dilute or concentrate spraying methods.
CROPS	DISEASE/PEST	RATE	WHP DAYS Harvest (H)/Grazing (G)	CRITICAL COMMENTS
Citrus	Black Spot	200g/100L plus spray oil (used according to its label instructions)	Not required	<p><b>On Heavy soil:</b> Spray at 8 and 15 weeks following a Bordeaux spray (5-5-100) at petal fall.</p> <p><b>On light soil:</b> Add an adjuvant (spreader/sticker) according to label recommendations per 100 L. Spray at 6 and 13 weeks following a Bordeaux spray (3.5-3.5-100) at petal fall.</p> <p><b>Qld, NT:</b> Spray at 6 and 12 weeks after a copper spray at 1/2 to 3/4 petal fall. Apply at first sign of mite activity on fruit, usually between December and May. Choose a spray oil recommended for use on citrus.</p> <p>Apply when blossom malformation is observed, usually February. Choose a spray oil recommended for use on citrus.</p>
	Brown Citrus Mite, Citrus Rust Mite			
	Citrus Bud Mite			
Custard apples	Pseudocercospora Fruit Spot	200g/100L	1 day (H)	DO NOT apply during flowering. Apply at 3-4 week intervals from first fruit set until harvest. Apply at 2 week intervals in wet, cloudy weather.
Grapevines	Blackspot, Downy Mildew	200g/100L	30 days (H)	<p>For Blackspot control apply every 10-14 days starting at bud burst. If Downy Mildew is expected, continue spray programme at intervals of 10-14 days until the threat of disease has passed. Use the shorter spray interval during weather conditions favourable to disease development.</p> <p>Apply to budburst and then repeat 7 to 10 days later.</p>
	Phomopsis Cane, Leaf Spot	150 to 200g/100L		
Mangoes	Anthracoise ( <i>Collectotrichum gloeosporioides</i> )	200g/100L	1 day (H)	Spray at weekly intervals during flowering then monthly until near harvest.
Passionfruit	Septoria Leaf Spot, Brown Spot ( <i>Alternaria passiflorae</i> )	150g/100L	1 day (H)	<p>Apply at 10-14 day intervals from October to May and every 21-28 days for remainder of year.</p> <p>Spray at weekly intervals during flowering and then fortnightly until near harvest.</p>
	Anthracoise (NSW only)	200g/100L + 600mL/100L miscible summer oil		
Pawpaw (Papaya)	Black Spot	200g/100L	1 day (H)	Apply with a wetting agent at 10 to 14 day intervals during periods conducive to disease.
<b>Pome fruit:</b> Apples and pears	Apple Scab (Black Spot), Bitter Rot, Target Spot, Fly Speck, Sooty Blotch	150 to 200g/100L	14 days (H)	Apply at 7-14 day Intervals following a cover copper spray at green tip. Use higher rate or shorter interval between sprays where conditions favour disease. This product can be mixed with Systhane 400WP Fungicide for the control of Apple Scab (Black Spot). Read and follow all the recommendations on the label of the tank mix partner. This product may be harmful to <i>Typhlodromus pyri</i> and its use in orchards where integrated control is practiced should be avoided.
<b>Stone Fruit:</b> Almonds, Apricots, Cherries, Nectarines, Peaches, Plums*	Brown Rot, Rust, Shot Hole, Freckle	150 to 200g/100L	14 days (H)	<p>Apply at early bloom (1-10%), mid to full bloom (50-100%), petal fall and shuck fall, then at intervals of 14 days. Continue with a protective spray programme at 2 week intervals.</p> <p>* May be phytotoxic to Wilson, Wickson and Bellarosa varieties of plums. It is advisable to test any new plum varieties on a small scale before applying to the whole crop.</p>

### NON TREE AND VINE CROPS

CROPS	DISEASE/PEST	RATE (per ha)	RATE (per 100L)	WHP DAYS Harvest (H)/Grazing (G)	CRITICAL COMMENTS
Fruit bananas	Leaf Spot	2.2 to 4.5kg/ha plus spray oil (used according to its label directions)	200g/100L plus spray oil (used according to its label directions)	NIL (H)	<p>Apply when weather conditions favour disease outbreak. Repeat treatments in accordance with locally recommended spray schedules. Use sufficient water to ensure good coverage.</p> <p><b>NSW: Ground application:-</b> Apply at 3 week intervals from December or January until May.</p> <p><b>Aerial application:-</b> Apply at 7 to 10 day Intervals from December or January until May.</p> <p><b>South Qld:</b> Apply at 3 week intervals from December or January until May.</p> <p><b>North Qld:</b> Apply every 2 weeks during the wet season. Extend to 3 weeks after this and then every 4 to 5 weeks during the drier months returning to 3 weeks prior to the next wet season.</p>
	Leaf Speckle, Cordana Leaf Spot, Fruit Speckle, Black Pit	2.2kg/ha	200g/100L		

**NON TREE AND VINE CROPS – continued**

CROPS	DISEASE/PEST	RATE (per ha)	RATE (per 100L)	WHP DAYS Harvest (H)/Grazing (G)	CRITICAL COMMENTS
Vegetables					
Peas and beans grown for fresh consumption					
Broadbeans / faba beans	Rust, Cercospora Leaf Spot	1.7-2.2kg/ha	–	7 days (H) 7 days (G)	Apply when disease symptoms first appear and then repeat at 7-10 day intervals. Use the higher rate and shorter spray interval during weather conditions favourable to disease development. Spray when leaves, flowers or pods show first signs of infection and weather conditions are likely to remain humid or wet and favour disease development.
	Chocolate Spot, Ascochyta Blight (suppression only)	1.7-2.5kg/ha	–		If disease pressure is severe and weather conditions favour spread of the disease, repeat the spray treatment at 2-3 week intervals in order to protect new growth and developing pods. Use the higher rate for dense crops and if disease pressure is severe. <b>Volume of application:</b> for ground apply 100L/ha; for aircraft apply at least 30L/ha.
Peas ( <i>Pisum sativum</i> )	Rust	1.7-2.2kg/ha	–		Apply when disease symptoms first appear and then repeat at 7-10 day intervals. Use the higher rate and shorter spray interval during weather conditions favourable to disease development. Spray when leaves, flowers or pods show first signs of infection and weather conditions are likely to remain humid or wet and favour disease development.
	Ascochyta Leaf Blight (suppression only)	1.7-2.5kg/ha	–		If disease pressure is severe and weather conditions favour spread of the disease, repeat the spray treatment at 2-3 week intervals in order to protect new growth and developing pods. Use the higher rate for dense crops and if disease pressure is severe. <b>Volume of application:</b> for ground apply 100L/ha; for aircraft apply at least 30L/ha.
Green Beans ( <i>Phaseolus</i> spp.)	Angular Leaf Spot, Anthracnose Rust	1.7-2.2kg/ha	–		Apply when disease symptoms first appear and then repeat at 7-10 day intervals. Use the higher rate and shorter spray interval during weather conditions favourable to disease development. Spray when leaves, flowers or pods show first signs of infection and weather conditions are likely to remain humid or wet and favour disease development.
Beetroot, Silverbeet, Spinach	Cercospora Leaf Spot, Downy Mildew	1.7-2.2kg/ha	150 to 200g/100L	14 days (H)	Spray at first sign of disease, then at 7-10 day intervals. Use the higher rate and shorter spray interval during weather conditions favourable to disease development.
Capsicum	Target Spot	2 to 3kg/ha		14 days (H)	
Carrots	Cercospora Leaf Spot, Alternaria Leaf Spot	1.7-2.2kg/ha		7 days (H)	
Celery	Septoria Leaf Spot				
<b>Cole crops</b> Broccoli Brussels sprouts Cabbage Cauliflower	Alternaria Spot, Anthracnose, Downy Mildew, Ring Spot				
<b>Cucurbits</b> Cantaloupe Cucumber Melons Pumpkin Squash Zucchini	Anthracnose, Downy Mildew, Gummy Stem Blight, Septoria Spot				
Fennel (Tas only)	Leaf Blight ( <i>Cercosporidium</i> )	2.2kg/ha	–	14 days (H)	Apply as a ground spray if disease symptoms are present in November, allow for one repeat treatment 10-14 days later. Aerial application may be required in prolonged wet periods.
Lettuce	Downy Mildew, Anthracnose, Septoria Leaf Spot	1.7-2.2kg/ha	150 to 200g/100L		Spray at first sign of disease, then at 7-10 day intervals. Use the higher rate and shorter spray interval during weather conditions favourable to disease development.
Onions Garlic	Downy Mildew, Purple Blotch	2.2 to 3.5kg/ha	150 to 200g/100L	7 days (H)	Apply when disease symptoms first appear and then repeat at 7-10 day intervals. Use higher rate and shorter spray interval during weather conditions favourable to disease development.
Potatoes	Early and Late Blight	1.7-2.2kg/ha	150 to 200g/100L	Not required	Apply when disease symptoms first appear and then repeat at 7-10 day intervals. Use the higher rate and shorter spray interval during weather conditions favourable to disease development.
Rhubarb	Downy Mildew, Rust			14 days (H)	
Tomatoes	Early Blight (Target Spot), Late Blight (Irish Blight), Leaf Mould, Anthracnose, Phoma Rot, Grey Leaf Spot	2 to 3kg/ha	150 to 200g/100L	7 days (H)	

**NON TREE AND VINE CROPS – continued**

CROPS	DISEASE/PEST	RATE (per ha)	RATE (per 100L)	WHP DAYS Harvest (H)/Grazing (G)	CRITICAL COMMENTS
<b>ORNAMENTALS</b>					
Carnations	Rust, Alternaria Leaf Spot	150 to 200g/100L	-	-	Apply when disease symptoms first appear and then repeat at 7-10 day intervals. Use higher rate and shorter intervals during weather conditions are favourable to disease development. <b>Caution:</b> This product may be phytotoxic to some ornamental species, in particular some varieties of ferns. It is recommended to test a few plants before widespread use.
Chrysanthemum, Gladioli	Botrytis, Septoria Leaf Spot				
Roses	Black Spot				
<b>FIELD CROPS</b>					
Cotton Pima var only	Alternaria Leaf Spot	2.5kg/ha	-	14 days (H)	TITAN Mancozeb 750 DF is a protectant fungicide. To maximize control ensure thorough coverage of all plant surfaces. Begin applications as soon as disease symptoms appear. Repeat before each infection period (eg dew or rain) but no later than 7 to 10 days after the last application. DO NOT apply more than 4 sprays per season.
Peanuts	Cercospora Leaf Spot, Peanut Rust	1.7 to 2.2kg/ha	-	14 days (H), 14 days (G)	Apply at interval of 10-14 days, starting when the disease symptoms first appear. If rust anticipated apply at 7 to 10 day intervals. Use the higher rate and shorter spray interval during weather conditions favourable to disease development.
Poppies	Downy Mildew	2.5kg/ha	-	7 weeks (H)	Apply as a protectant spray when weather conditions favour disease development. Repeat spray at 14 day intervals if conditions persist.
<b>PULSES GROWN FOR DRY BEANS</b>					
Broadbeans / Faba beans	Ascochyta Blight, Chocolate Spot, Rust, Cercospora	1 to 2.2kg/ha	-	4 weeks (H) 14 days (G)	Spray when leaves, flowers or pods on plants first show signs of infection and weather conditions are likely to remain humid or wet and favour disease development. If disease pressure is severe and conditions favour the spread of disease, repeat sprays at 2-3 weeks to protect new growth and developing pods. Use the higher rate for dense crops and if disease is severe. Repeat more frequently if severe disease persists. For improved coverage add a registered surfactant at 10-20mL/100L of spray.
Chickpeas	Ascochyta Blight, Botrytis Grey Mould				
Field peas	Ascochyta Blight, Black Spot, Botrytis Grey Mould, Rust				
Lentil and vetch	Ascochyta Blight, Rust, Botrytis Grey Mould				
Lupins	Botrytis Grey Mould, Anthracnose				
Beans (Phaseolus spp.)	Ascochyta Blight, Anthracnose, Rust, Angular Leaf Spot				
Tobacco (Field)	Blue Mould, Brown Spot, Frog Eye Leaf Spot	2.2kg/ha	200g/100L	Not required	<b>Field treatment:</b> Apply at 7 day intervals commencing 10 days after transplanting and ceasing 7 to 10 days before the first harvest. Increase spray volume accordingly as plant size increases. <b>Seed bed treatments:</b> Apply when seedlings are 1.5cm across and then repeat twice weekly. Wet the seedlings evenly without run-off.
Turf	Helminthosporium, Fusarium, Rhizoctonia	200-250g/100m <sup>2</sup>	-	-	Apply as a protective spray schedule at 7 day intervals throughout the susceptible season. Use sufficient water to ensure adequate coverage. DO NOT feed grass clippings from treated areas to poultry or animals.

**NOT TO BE USED FOR ANY PURPOSE, OR IN ANY MANNER, CONTRARY TO THIS LABEL UNLESS AUTHORISED UNDER APPROPRIATE LEGISLATION.**

**WITHHOLDING PERIODS:**

**HARVEST**

**BANANAS:**

**MANGOES:**

**CUSTARD APPLES AND PAWPAWS (PAPAYA):**

**BEANS, CARROTS, CELERY, COLE CROPS, CUCURBITS, GARLIC, ONIONS, PEAS, SOYBEANS, TOMATOES:**

**ALMONDS, BEETROOT, COTTON, CAPSICUM, FENNEL, LETTUCE, PASSIONFRUIT, PEANUTS, POME FRUIT, RHUBARB, SILVERBEET, SPINACH and STONE FRUIT:**

**GRAPEVINES:**

**POPPIES:**

**GREEN LEGUMES, PULSE CROPS:**

**CITRUS, POTATOES, TOBACCO:**

**NOT REQUIRED WHEN USED AS DIRECTED.**

**DO NOT APPLY LATER THAN 1 DAY BEFORE HARVEST.**

**DO NOT APPLY LATER THAN 1 DAY BEFORE HARVEST.**

**PAPAYA LEAVES MUST NOT BE MADE AVAILABLE FOR HUMAN CONSUMPTION.**

**DO NOT APPLY LATER THAN 7 DAYS BEFORE HARVEST.**

**DO NOT APPLY LATER THAN 14 DAYS BEFORE HARVEST.**

**DO NOT APPLY LATER THAN 30 DAYS BEFORE HARVEST.**

**DO NOT APPLY LATER THAN 7 WEEKS BEFORE HARVEST.**

**GREEN CROPS: DO NOT APPLY LATER THAN 7 DAYS BEFORE HARVEST.**

**GRAIN CROPS: DO NOT APPLY LATER THAN 4 WEEKS BEFORE HARVEST.**

**WITHHOLDING PERIOD NOT REQUIRED WHEN USED AS DIRECTED.**

*continued overleaf*

## WITHHOLDING PERIODS:

### GRAZING

#### COTTON:

**DO NOT ALLOW LIVESTOCK TO GRAZE COTTON CROP, STUBBLE OR GIN TRASH THAT HAS BEEN TREATED WITH TITAN MANCOZEB 750 DF FUNGICIDE.**

#### GREEN LEGUMES, PEANUTS, PULSE CROPS

(grown for dry beans):

#### FIELD PEAS AND BEANS (for fresh consumption):

**DO NOT GRAZE OR CUT FOR STOCKFOOD FOR 14 DAYS AFTER THE LAST APPLICATION.**

**DO NOT GRAZE OR CUT FOR STOCKFOOD FOR 7 DAYS AFTER THE LAST APPLICATION.**

#### PAPAYA:

**DO NOT USE OR SUPPLY TREATED PAPAYA INCLUDING LEAVES FOR STOCK FOOD.**

#### SOYBEANS:

**DO NOT GRAZE OR CUT FOR STOCKFOOD FOR 14 DAYS AFTER THE LAST APPLICATION.**

## GENERAL INSTRUCTIONS

TITAN Mancozeb 750 DF Fungicide is a protectant fungicide for the control of certain fungus diseases in many crops. For best results, apply as a regular spray programme. Thorough coverage of the treated crop is essential.

## APPLICATION

### Dilute Spraying:

Use a sprayer designed to apply high volumes of water up to the point of run-off and matched to the crop being sprayed. Set up and operate the sprayer to achieve even coverage throughout the crop canopy. Apply sufficient water to cover the crop to point of run-off. Avoid excessive run-off. The required water volume may be determined by applying different test volumes, using different settings on the sprayer, from industry guidelines or expert advice. Add the amount of product specified in the Directions for Use table for each 100L of water. Spray to the point of run-off. The required dilute spray volume will change and the sprayer set up and operation may also need to be changed, as the crop grows.

### Concentrate spraying:

Use a sprayer designed and set up for concentrate spraying (that is a sprayer which applies water volumes less than those required to reach the point of run-off) and matched to the crop being sprayed. Set up and operate the sprayer to achieve even coverage throughout the crop canopy using your chosen water volume. Determine an appropriate dilute spray volume (see dilute spraying above) for the crop canopy. This is needed to calculate the concentrate mixing rate. The mixing rate for concentrate spraying can then be calculated in the following way:

#### EXAMPLE ONLY:

- Dilute spray volume as determined above:  
For example 1500L/ha
- Your chosen concentrate spray volume: For example 500L/ha
- The concentration factor in this example is:  
 $3 \times$  (ie  $1500L \div 500L = 3$ )
- If the dilute label rate is 10mL/100L, then the concentrate rate becomes  $3 \times 10$ , that is 30m/100L of concentrate spray.
  - The chosen spray volume, amount of product per 100L of water, and the sprayer set up and operation may need to be changed as the crop grows.
  - For further information on concentrate spraying, users are advised to consult the relevant industry guidelines, undertake appropriate competency training and follow industry Best Practices.

For fruit trees and some row crops apply as a high volume dilute spray.

The spray volume will vary according to the type of crop to be treated and should be increased in heavy growth and on large plants to ensure thorough coverage. The spray volume should also be increased as the size of treated crops increases throughout the growing season. As a guide for mature crops:

Crops	Spray volume
Bananas, Tobacco, Vines and other row crops	200 to 1100 L/ha
Pome and Stone fruit	1100 to 4000 L/ha
Citrus	4000 to 8000 L/ha

## Aerial Application

May be applied by agricultural aircraft. Use at least 30 to 50 L/ha of spray mixture per hectare. (Refer Directions for Use table).

## SPRAY TIMING

Treatments should begin prior to disease infection and continue until the threat of disease passes. Repeated applications may be required to protect new growth. Reduce the spray interval when weather conditions favour disease development.

## FUNGICIDE RESISTANCE WARNING

Multi-site activity group of fungicides. For fungicide resistance management TITAN Mancozeb 750 DF Fungicide is a Group Y Fungicide. Some naturally occurring individual fungi resistant to TITAN Mancozeb 750 DF Fungicide and other Group Y Fungicides may exist through normal genetic variability in any fungal population. The resistant individuals can eventually dominate the fungi population if these fungicides are used repeatedly. These resistant fungi will not be controlled by TITAN Mancozeb 750 DF Fungicide and other Group Y Fungicides, thus resulting in a reduction in efficacy and possible yield loss. Since the occurrence of resistant fungi is difficult to detect prior to use, TITAN AG Pty Ltd accepts no liability for any losses that may result from the failure of TITAN Mancozeb 750 DF Fungicide to control resistant fungi.

**GROUP Y FUNGICIDE**

## MIXING

Slowly add the required amount of this product to the spray tank as it is being filled or thoroughly premix in a nurse tank for concentrate and aerial spraying. Add other products after TITAN Mancozeb 750 DF Fungicide is in suspension. Continue agitation while spraying to prevent product settling out and to ensure a uniform spray mixture.

Rinse out spray tank, pumps, nozzles at the end of the day. When preparing spray solutions for use in a hand sprayer, premix as a slurry in a small container, and then add to sprayer containing one-third to half the desired final water volume.

## COMPATIBILITY

This product may be harmful to *Typhlodromus pyri* and its use in orchards where integrated pest control is practiced should be avoided.

TITAN Mancozeb 750 DF Fungicide is compatible with most commonly used insecticides and miticides such as Azinphos, Carbaryl, Dicofol, Endosulfan, Pirimicarb, Propargite, Sulphur Power, Wetting Agent or Spreader-Sticker. Also compatible with DC-Tron.

The user is advised to check the label recommendation for the companion product before preparing tank mixes.

## Surfactants

The addition of a surfactant will improve initial spray deposits, fungicide redistribution and weatherability. Refer to manufacturers label instructions for further details.

## PROTECTION OF LIVESTOCK

DO NOT graze treated turf/grass; or feed turf/grass clippings from any treated area to poultry or livestock.

## PROTECTION OF WILDLIFE, FISH, CRUSTACEANS AND ENVIRONMENT

Toxic to fish. Drift and run-off from treated areas may be hazardous to aquatic organisms in neighbouring areas.

DO NOT contaminate streams, rivers or waterways with the chemical or used container.

DO NOT re-use container.

## STORAGE AND DISPOSAL

Store in the closed, original container in a dry, cool, well-ventilated area out of direct sunlight. Shake bag contents into spray tank until the bag is empty.

DO NOT dispose of undiluted chemicals on site. Puncture or shred and bury empty containers in local authority landfill.

If no landfill is available, bury the containers below 500 mm in a disposal pit specifically marked and set up for this purpose clear of waterways, desirable vegetation and tree roots. Empty bags and product should not be burnt.

## SAFETY DIRECTIONS

May irritate the eyes and skin. Repeated exposure may cause allergic disorders. Avoid contact with eyes and skin. DO NOT inhale dust. When opening the container and preparing spray, wear cotton overalls over normal clothing, buttoned to the neck and wrist and a washable hat, elbow-length PVC gloves, goggles, and disposable dust mask covering mouth and nose. When using the prepared spray, wear cotton overalls over normal clothing, buttoned to the neck and wrist and a washable hat and elbow-length PVC gloves. Wash hands after use. After each day's use, wash gloves, goggles and contaminated clothing.

## FIRST AID

If poisoning occurs, contact a doctor or Poisons Information Centre. Phone Australia 13 11 26. Avoid giving alcohol.

## MATERIAL SAFETY DATA SHEET

Additional information is listed in the material safety data sheet (MSDS). A material safety data sheet for TITAN Mancozeb 750 DF Fungicide is available from TITAN AG Pty Ltd on request. Call Customer Service on (02) 9986 2943 or visit [www.titanag.com.au](http://www.titanag.com.au)

## CONDITIONS OF SALE

TITAN AG Pty Ltd shall not be liable for any loss injury damage or death whether consequential or otherwise whatsoever or howsoever arising whether through negligence or otherwise in connection with the sale supply use or application of this product. The supply of this product is on the express condition that the purchaser does not rely on TITAN AG's skill or judgment in purchasing or using the same and every person dealing with this product does so at his own risk absolutely. No representative of TITAN AG Pty Ltd has any authority to add to or alter these conditions.

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