Smart Read Safety Directions Before Opening or Using Mancoze D TEO WG

FUNGICIDE

ACTIVE CONSTITUENT: 750g/kg MANCOZEB



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 THE ATTACHED LEAFLET BEFORE
USING THIS PRODUCT



Contents: 10kg, 20kg, 25kg

APVMA APPROVAL NO: 87258/117956

CROP SMART PTY LTD ABN 28 093 927 961 Suite 2409, 4 Daydream Street Warriewood NSW 2102

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

TREE AND VINE (JRUPS			Critical Comments
	RATE e, all rates are given f g, refer to the Applica	Critical Comments For all uses in this tables: Apply by dilute or concentrate spraying equipment. Apply the same total amount of product to the target crop whether applying this product by dilute of concentrate spraying methods.		
CROPS	DISEASE/ PEST CONTROLLED	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	On Heavy Soil: Spray at 8 and 15 weeks following a Bordeaux spray (5-5-100) at petal fall. On Light Soil: Add an adjuvant (spreader/ sticker) according to label recommendations per 100L. Spray at 6 and 13 weeks following a Bordeaux spray (3.5-3.5-100) at petal fall. Qld, NT: Spray at 6 and 12 weeks after a copper
	Citrus rust mite, Brown citrus mite Citrus bud mite			spray at ½ to ¾ 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.
				Apply when blossom malformation is observed, usually February. Choose a spray oil recommended for use on citrus.
Custard apples	Pseudo- cercospora fruit spot	200g/100L	1 day (H)	Do not apply during flowering Apply at 3 to 4 week intervals from first fruit set until harvest. Apply at 2 week intervals in wet, cloudy weather.
Grapevines	Downy mildew, Black Spot	200g/100L	30 days (H)	For Black spot control apply every 10 to 14 days starting at bud burst. If Downy mildew is expected, continue spray programme at intervals of 10 to 14 days until the threat of disease has passed. Use the shorter spray interval during weather conditions favourable to disease development.
	Phomopsis cane and leaf spot	150 to 200g/100L		Apply at budburst and then repeat 7 to 10 days later.
Mangoes	Anthracnose (Collectotrichum gloeosporioides)	200g/100L	1 day (H)	Spray at weekly intervals during flowering then monthly until near harvest.
Passionfruit	Septoria leaf spot, Brown spot (Alternaria passiflorae)	150g/100L		Apply at 10 to 14 day intervals from October to May and every 21 to 28 days for remainder of year.
	Anthracnose (NSW only)	200g/100L plus 600mL/100L miscible summer oil		Spray at weekly intervals during flowering and then fortnightly until near harvest.
Pawpaws (papaya)	Black spot	200g/100L		Apply with a wetting agent at 10 to 14 day intervals during periods conducive to disease.
Pome Fruit 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 to 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 400 WP 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.

Stone Fruit	Brown rot, Rust,	Apply at early bloom (1 to 10%), mid to full bloom
Almonds	Shot hole, Freckle	(50 to 100%), petal fall and shuck fall, then at
Apricots,		intervals of 14 days.
Cherries Nectarines		Continue with a protective spray programme at 2
Peaches,		week intervals.
Plums*		
		*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.

NON TREE AND VINE CROPS

CROPS	DISEASE	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 plus spray oil (used according to its label directions)	Nil (H)	Apply when weather conditions favour disease outbreak. Repeat treatments in accordance with locally recommended spray schedules. Use sufficient water to ensure good coverage. NSW: Ground application – Apply at 3 week intervals from December or January until May. Aerial application: - Apply at 7 to 10 day
	Leaf speckle, Cordana leaf spot, Fruit speckle, Black pit	2.2kg/ha	200g		intervals from December or January until May. South Qld: Apply at 3 week intervals from December or January until May. North Qld: 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.
VEGETABLES Peas and beans grown for fresh consumption					
Broadbeans/ Faba beans	Rust, Cercospora leaf spot	1.7 to 2.2kg/ha	-	7 days (H) 7 days (G)	Apply when disease symptoms first appear and then repeat at 7 to 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 leaf blight (suppression only)	1.7 to 2.5kg/ha			If disease pressure is severe and weather conditions favour spread of the disease, repeat the spray treatment at 2 to 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. Volume of application: for ground apply 100L/ha; for aircraft apply at least 30L/ha.
Peas (<i>Pisum</i> sativum)	Rust	1.7 to 2.2kg/ha	-		Apply when disease symptoms first appear and then repeat at 7 to 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 ony)	1.7 to 2.5kg/ha			If disease pressure is severe and weather conditions favour spread of the disease, repeat the spray treatment at 2 to 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. Volume of application: for ground apply 100L/ha; for aircraft apply at least 30L/ha.

Green Beans (Phaseolus spp.) Beetroot, Silverbeet, Spinach	Angular leaf spot, Anthracnose , Rust Cercospora leaf spot, Downy mildew	1.7 to 2.2kg/ha 1.7 to 2.2kg/ha	- 150 to 200g/100L	14 days (H)	Apply when disease symptoms first appear and then repeat at 7 to 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. Spray at first sign of disease, then at 7 to 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	150 to 200g/100L	14 days (H)	Spray at first sign of disease, then at 7 to 10 day intervals. Use the higher rate and shorter spray interval during weather conditions favourable to disease development.
Carrots	Cercospora leaf spot, Alternaria leaf spot	1.7 to 2.2kg/ha		7 days (H)	
Celery	Septoria leaf spot				
Cole crops Broccoli, Brussels sprouts, Cabbage, Cauliflower Cucurbits	Alternaria spot, Anthracnose , Downy mildew, Ring spot				
Cantaloupe, Cucumber, Melons, Pumpkin, Squash, Zucchini	Anthracnose , Downy mildew, Gummy Stem blight, Septoria				
Fennel (TAS only)	spot Leaf blight (Cercosporid ium)	2.2kg/ha	-	14 days (H)	Apply as a ground spray. If disease symptoms are present in November, allow for one repeat treatment 10 to 14 days later. Aerial application may be required in prolonged wet periods.
Lettuce	Downy mildew, Anthracnose , Septoria leaf spot	1.7 to 2.2kg/ha	150 to 200g/100L		Spray at first sign of disease, then at 7 to 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 to 10 day intervals. Use higher rate and shorter spray intervals during weather conditions are favourable to disease development.
Potatoes	Early and late blight	1.7 to 2.2kg/ha	150 to 200g/100L	Not required	Apply when disease symptoms first appear and then repeat at 7 to 10 day intervals. Use higher rate and shorter spray intervals during weather conditions favourable to disease development.
Rhubarb	Downy mildew, Rust	1.7 to 2.2kg/ha	150 to 200g/100L	14 days (H)	Apply when disease symptoms first appear and then repeat at 7 to 10 day intervals. Use higher rate and shorter spray intervals during weather conditions favourable to disease development.
Tomatoes	Anthracnose , Early blight (Target spot), Late blight (Irish blight), Leaf mould, Phoma rot, Grey leaf spot	2 to 3kg/ha	150 to 200g/100L	7 days (H)	
ORNAMENTALS Carnations	Rust, Alternaria leaf spot	150 to 20	0g/100L	-	Apply when disease symptoms first appear and then repeat at 7 to 10 day intervals. Use higher rate and shorter intervals during weather conditions favourable to disease
Chrysanthemum, Gladioli Roses	Botrytis, Septoria leaf spot Black spot				development. Caution: This product may be phytotoxic to some ornamental species, in particular some varieties of fern. It is recommended to test a few plants before widespread use.
Field Crops					
Cotton (Pima variety only)	Alternaria leaf spot	2.5kg/ha	-	14 days (H)	Smart Mancozeb 750 WG Fungicide is a protectant fungicide. To maximize control ensure thorough coverage of all plant surfaces. Begin application as soon as disease symptoms appear. Repeat before each infection period (e.g. 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 to 14 days, starting when the disease symptoms first appear. If rust is 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 in conditions persist.
Pulses grown for dry beans:			I	ı	
Broadbeans/ Faba beans	Ascochyta blight, Cercospora, Chocolate spot, Rust	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
Chickpeas	Ascochyta blight, Botrytis grey mould				2 to 3 weeks to protect new growth and developing pods. Use the higher rate for dense crops and if disease is severe. Repeat more

Field peas	Ascochyta blight, Black spot, Botrytis grey mould, Rust				frequently if severe disease persists. For improved coverage add a registered surfactant at 10 to 20mL/100L of spray.
Lentils and vetch	Ascochyta blight, Botrytis grey mould, Rust				
Lupins	Anthracnose , Botrytis grey mould				
Beans (<i>Phaseolus</i> spp.)	Angular leaf spot, Anthracnose , Ascochyta blight, Rust				
Tobacco (Field)	Blue mould, Brown spot, Frog eye leaf spot	2.2kg/ha	200g/100L	Not required	Field treatment: 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. Seed bed treatments: Apply when seedlings are 1.5cm across and then repeat twice weekly. Wet the seedlings evenly without runoff.
Turf	Helmintho- sporium, Fusarium, Rhizoctonia	200 to 250g/100m ²		-	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 PERIOD:

HARVEST

BANANAS - NOT REQUIRED WHEN USED AS DIRECTED

MANGOES, PASSIONFRUIT, CUSTARD APPLES AND PAWPAWS (PAPAYA) – DO NOT APPLY LATER THAN 1 DAY BEFORE HARVEST. PAPAYA LEAVES MUST NOT BE MADE AVAILABLE FOR HUMAN CONSUMPTION

BEANS, CARROTS, CELERY, COLE CROPS, CUCURBITS, GARLIC, ONIONS, PEAS, TOMATOES – DO NOT APPLY LATER THAN 7 DAYS BEFORE HARVEST

ALMONDS, BEETROOT, COTTON, CAPSICUMS, FENNEL, LETTUCE, PEANUTS, POME FRUIT, RHUBARB, SILVERBEET, SPINACH AND STONE FRUIT – DO NOT APPLY LATER THAN 14 DAYS BEFORE HARVEST

GRAPEVINES - DO NOT APPLY LATER THAN 30 DAYS BEFORE HARVEST

POPPIES - DO NOT APPLY LATER THAN 7 WEEKS BEFORE HARVEST

GREEN LEGUMES, PULSE CROPS – GREEN CROPS: DO NOT APPLY LATER THAN 7 DAYS BEFORE HARVEST; GRAIN CROPS: DO NOT APPLY LATER THAN 4 WEEKS BEFORE HARVEST

CITRUS, POTATOES, TOBACCO – WITHHOLDING PERIOD NOT REQUIRED WHEN USED AS DIRECTED

WITHHOLDING PERIOD: GRAZING

COTTON – DO NOT ALLOW LIVESTOCK TO GRAZE COTTON CROP, STUBBLE OR GIN TRASH THAT HAS BEEN TREATED WITH SMART MANCOZEB 750 WG FUNGICIDE

GREEN LEGUMES, PEANUTS, PULSE CROPS (grown for dry beans) – DO NOT GRAZE OF CUT FOR STOCKFOOD FOR 14 DAYS AFTER THE LAST APPLICATION

PEAS AND BEANS (for fresh consumption) - DO NOT GRAZE OF CUT FOR STOCKFOOD FOR 7 DAYS AFTER THE LAST APPLICATION

PAPAYA - DO NOT USE OR SUPPLY TREATED PAPAYA INCLUDING LEAVES FOR STOCKFOOD

GENERAL INSTRUCTIONS

SMART MANCOZEB 750 WG FUNGICIDE is a protectant fungicide for certain diseases of 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 required amount of product specified in the Directions for Use for each 100L of water. Spray to the point of run-off.
- The required dilute spray volume will change as 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 the appropriate dilute spray (see dilute spraying above) for 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:

- i) Dilute spray volume as determined above: For example 1500L/ha
- ii) Your chosen concentrate spray volume: For example 500L/ha
- iii) The concentration factor in this example is: $3 \times (i.e. 1500L \div 500L = 3)$
- iv) If the dilute label rate is 10mL/100L, then the concentrate rate becomes 3 x 10 that is 30mL/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 1100L/ha
Pome and Stone fruit	1100 to 4000L/ha
Citrus	4000 to 8000L/ha

Aerial Application

May be applied by agricultural aircraft.

Use at least 30 to 50L/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.

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 SMART MANCOZEB 750 WG 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.

SMART MANCOZEB 750 WG FUNGICIDE is compatible with most commonly used insecticides and miticides such as Azinphos, Carbaryl, Dicofol, Endosulfan, Pirimicarb, Propargite, Sulphur Powder, Wetting Agent or Spreader-Sticker. Also compatible with D-C-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.

FUNGICIDE RESISTANCE WARNING

GROUP M3 FUNGICIDE

SMART MANCOZEB 750 WG FUNGICIDE is a member of the Multi-site activity group of fungicides. For fungicide resistance management SMART MANCOZEB 750 WG FUNGICIDE is a Group M3 Fungicide. Some naturally occurring individual fungi resistant to SMART MANCOZEB 750 WG FUNGICIDE and other Group M3 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 SMART MANCOZEB 750 WG FUNGICIDE and other Group M3 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, Crop Smart Pty Ltd accepts no liability for any losses that may result from the failure of SMART MANCOZEB 750 WG FUNGICIDE to control resistant fungi.

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 and empty contents into spray tank. Do not dispose of undiluted chemicals on site. Break, crush, or puncture and deliver empty packaging to an approved waste management facility. If an approved waste management facility is not available, bury the empty packaging 500 mm below the surface in a disposal pit specifically marked and set up for this purpose, clear of waterways, desirable vegetation and tree roots, in compliance with relevant local, state or territory government regulations. Do not burn empty containers or product.

SAFETY DIRECTIONS

May irritate the eyes and skin. Repeated exposure may cause allergic disorders. Avoid contact with eyes and skin. DO NOT inhale dust. Wash hands after use.

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.

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.

SAFETY DATA SHEET

Additional information is listed in the Safety Data Sheet which can be obtained from the supplier.

CONDITIONS OF SALE:

Crop Smart Pty Ltd. accepts responsibility for the consistent quality of the product; however since the use and application of the product is beyond control, the company accepts no responsibility whatsoever for any loss, damage or other result following the use of the product whether used in accordance with directions or not; other than those mandatorily imposed by statutes, the liability is limited to the replacement of the goods and is conditional upon a claim made in writing and, where necessary, a sufficient part of the goods being returned for proper examination by the company within thirty days of sale.

UN: 3077

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S MANCOZEB

IN CASE OF AN EMERGENCY PHONE 000



Additional GHS Statement

May cause sensitisation from prolonged skin contact. May cause organ damage from repeated oral exposure at high doses. Avoid eye and skin contact. Avoid inhalation of spray mist. Very toxic to dish and aquatic organisms.