

Product Name: APVMA Approval No:

GROCHEM THIRAM 800 WG FUNGICIDE 69018/137163

Label Name:	GROCHEM THIRAM 800 WG FUNGICIDE
Signal Headings:	POISON
	KEEP OUT OF REACH OF CHILDREN
	READ SAFETY DIRECTIONS BEFORE OPENING OR USING

Constituent Statements:	ACTIVE CONSTITUENT: 800 g/kg THIRAM

Mode of Action:		
	GROUP M3	FUNGICIDE

Vegetables & Ornamentals; and for use as a seed treatment to control various fungal diseases of Chickpeas, Lupins & Sorghum as per the Directions for Use table.	Statement of Claims:	Controls fungal diseases of Avocados, Mangoes, Fruit Trees, Grapevines, Strawberries, Vegetables & Ornamentals; and for use as a seed treatment to control various fungal diseases of Chickpeas, Lupins & Sorghum as per the Directions for Use table.
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Net Contents:	10kg to 25 kg
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Restraints:	RESTRAINTS: DO NOT apply by aircraft
	SPRAY DRIFT RESTRAINTS Specific definitions for terms used in this section of the label can be found at apvma.gov.au/ spraydrift
	DO NOT allow bystanders to come into contact with the spray cloud. DO NOT apply in a manner that may cause an unacceptable impact to native vegetation, agricultural crops, landscaped gardens and aquaculture production, or cause contamination of plant or livestock commodities, outside the application site from spray drift. Wherever possible, correctly use application equipment designed to reduce spray drift and apply when the wind direction is away from these sensitive areas. DO NOT apply unless the wind speed is between 3 and 20 kilometres per hour at the application site during the time of application. DO NOT apply if there are hazardous surface temperature inversion conditions present at the application site during the time of application.

	exist most evenings one to two hours before sunset and persist until one to two hours after sunrise.
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Directions for Use:	This section contains file attachment.

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Withholding Periods:	STRAWBERRIES: DO NOT HARVEST FOR 2 DAYS AFTER APPLICATION FRUIT AND VEGETABLES: DO NOT HARVEST FOR 7 DAYS AFTER APPLICATION MANGOES: DO NOT HARVEST FOR 14 DAYS AFTER APPLICATION SEED DRESSING: NOT REQUIRED WHEN USED AS DIRECTED.
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Trade Advice:	EXPORT OF TREATED PRODUCE: Growers should note that suitable MRLs or import tolerances may not be established in all markets for produce treated with Grochem Thiram 800 WG Fungicide. If you are growing produce for export, please check with Grochem Australia Pty Ltd for the latest information on MRLs and import tolerances BEFORE using Grochem Thiram 800 WG Fungicide.
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General Instructions:	GENERAL INSTRUCTIONS
	Foliar Apply when conditions favour disease development or at first sign of disease. Grochem Thiram 800 WG is a protectant fungicide only and will not eradicate infection which has already occurred. Spray to obtain thorough coverage of stems, leaves, buds and flowers.
	Seed Dressing This product does not adversely affect germination if used as directed, however when Rhizobium inoculum is also added to seed, the viability of the inoculum may be reduced. Always apply the fungicide first and allow to dry. Apply the inoculum immediately prior to sowing. Sow into a moist seed-bed as soon as possible after treatment. If seed is sown into a dry seed-bed, then fungicidal seed treatment can cause a reduction in nodulation. Seed treatment can alter seed flow characteristics. The drill should be recalibrated using treated seed prior to seeding. Equipment used for applying this product can be cleaned out
	with water. DO NOT carry over treated seed from season to season. Treated seed is to be used only for sowing.
	When mixing Grochem Thiram 800 WG with other seed protectant formulations add the seed protectant only after the Grochem Thiram 800 WG granules are fully dispersed. The mixture should be agitated before and during use to ensure even application. Grochem Thiram 800 WG does not contain pigments/dyes normally found in seed treatments. Treated seed may be difficult to distinguish from untreated seed. Seed treated with Grochem Thiram 800 WG may only be stored if it has been treated with other pigmented seed treatments. If Grochem Thiram 800 WG is used alone treated seed MUST NOT be stored. MIXING
	Foliar Application - This product mixes readily with water, no pre-mixing is required. During mixing, the spray vat should be no more than 25% full of water. Vigorous agitation of vat contents is required during the addition of the product. Pour product steadily when adding the required amount to the spray vat. DO NOT DUMP all the required product into the vat at once. When the product has been thoroughly dispersed and the spray tank is nearly full add Spreadwet 600 Wetting Agent at a rate of 16mL per 100 litres of spray solution. High Volume application Mix specific rates of product per 100 L water and spray plants to "point of run-off" stage
	thoroughly covering all plant surfaces.

Low volume application Use specified rates per hectare in a convenient volume of water, using effective low volume boom sprays, misters etc. Aim to apply an even droplet coverage over all plant surfaces. Water volumes may range from 30 to 500L/ha depending on crop and equipment. Instructions for Avocado Crops Dilute Spraying
 Use a sprayer designed to apply high volumes of water up to the point of run-off and match 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 the point of first 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. Consult your local advisor, agronomist or Department of Agriculture to determine this volume. This is needed to calculate the concentrate mixing rate. The mixing rate for concentrate spraying can be then calculated in the following way:
Concentrate Spraying Example 1. Dilute spray volume as determined above: For example 1500L/ha 2. Your chosen concentrate spray volume: For example 500L/ha
3. The concentration factor in this example is: $3 \times (1500 \div 500L)$ 4. If the dilute label rate is 200 g/100L, then the concentrate rate becomes 3×200 , that is 600g/100L of concentrate spray.
5. 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.
DO NOT use a concentrate rate higher than that specified in the Critical Comments for the relevant crop.
Concentrate spraying of this product is only appropriate for apples, apricots, avocados, cherries, grape vines, mangoes, nectarines, peaches, pears and plums. For further information on concentrate spraying, users are advised to consult relevant industry guidelines, undertake appropriate competency training. Always follow Industry Best
Practices. Seed Treatment - Refer to Critical Comments in Table B below (Grochem Thiram 800 WG
Applied as a Seed Dressing). DO NOT let the spray solution or slurry dry in application equipment as flakes can block filters and limit the flow to spray nozzles. Where the diluted product has been permitted to stand for an extended period, then the mixture should be again agitated well. COMPATIBILITY
DO NOT mix with lime sulphur or Copper Sulphate/Lime Mix.

Resistance Warning:	FUNGICIDE RESISTANCE WARNING GROUP M3 FUNGICIDE For fungicide resistance management, Grochem Thiram 800 WG Fungicide is a Group M3 fungicide. Some naturally occurring individual fungi resistant to Grochem Thiram 800 WG Fungicide and other Group M3 fungicides may exist through normal genetic variability in any fungal population. The resistant individuals can eventually dominate the fungal population if these fungicides are used repeatedly. These resistant fungi will not be controlled by Grochem Thiram 800 WG Fungicide or other Group M3 fungicides, thus resulting in a reduction in efficacy and possible yield loss.
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Since the occurrence of resistant fungi is difficult to detect prior to use, Grochem Australia Pty Ltd accepts no liability for any losses that may result from the failure of Grochem Thiram 800 WG Fungicide to control resistant fungi.
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Precautions:	PRECAUTIONS DO NOT use treated seed for animal or human consumption. DO NOT allow treated seed to contaminate grain/ other seed intended for animal or human consumption. DO NOT feed treated seed, or otherwise expose, to wild or domestic birds.
	RE-ENTRY PERIOD
	Mangoes: DO NOT enter treated areas for 34 days after application for high exposure activities such as harvesting, pruning and training unless wearing cotton overalls buttoned to the neck and wrist over normal clothing and chemical resistant gloves. Clothing must be laundered after each day's use.
	DO NOT enter treated areas for 15 days after application for low exposure activities such as irrigation and scouting unless wearing cotton overalls buttoned to the neck and wrist over normal clothing and chemical resistant gloves. Clothing must be laundered after each day's use. Avocados:
	DO NOT enter treated areas for 38 days after application for high exposure activities such as harvesting, pruning and training unless wearing cotton overalls buttoned to the neck and wrist over normal clothing and chemical resistant gloves. Clothing must be laundered after each day's use.
	DO NOT enter treated areas for 19 days after application for low exposure activities such as irrigation and scouting unless wearing cotton overalls buttoned to the neck and wrist over normal clothing and chemical resistant gloves. Clothing must be laundered after each day's use.

Protections:	PROTECTION OF LIVESTOCK DO NOT feed grass clippings from treated areas to poultry or animals. Seed treated with Grochem Thiram 800 WG must not be used for animal consumption or allowed to contaminate grain intended for animal consumption. Grain should not be left EXPOSED on the ground (particularly during sowing). Treated seed MUST NOT be held over for
	sowing the following season if treated with Grochem Thiram 800 WG alone. (Any seed not intended to be used for sowing should be destroyed). PROTECTION OF WILDLIFE, FISH, CRUSTACEANS AND ENVIRONMENT DO NOT feed or expose treated grain to wildlife and domestic animals, particularly birds. Dangerous to fish. DO NOT contaminate streams, rivers or watercourses with the chemical or used container or containers which have held treated seed.

Storage and Disposal:	Single rinse before disposal. Add rinsings to spray tank. Do not dispose of undiluted chemicals on site. Puncture and deliver empty packaging for appropriate disposal to an approved waste management facility. If an approved waste management facility is not available bury the empty packaging 500mm below the surface in a 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.
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Safety Directions:	Will irritate the eyes. Repeated exposure may cause allergic disorders. Avoid contact with eyes and skin. When opening the container, mixing, loading and preparing the spray wear cotton overalls buttoned to the neck and wrist and a washable hat, elbow length chemical resistant gloves and goggles and half face-piece respirator. If product in eyes, wash it out immediately with water. Wash hands after use. After each
	days use wash gloves and contaminated clothing.

First Aid Instructions:	If poisoning occurs, contact a doctor or Poisons Information Centre. Telephone: Australia
	13 11 26; New Zealand 0800 764 766. Avoid giving alcohol.

First Aid Warnings:	
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DIRECTIONS FOR USE

Table A: Grochem Thiram 800 WG applied as a Foliar spray

CROP	DISEASE	STATE	RATE	
				CRITICAL COMMENTS
Avocado	Anthracnose (Glomerella cingulata) Stem end rot (Dorthiorella spp.)	All States	Dilute Spraying 150 – 300 g/100 L <u>Concentrate</u> Spraying	Spray every 30 days from flowering until harvest. During extended wet periods reduce the spray interval to every 14 days. Use the higher rate under more intense disease pressure. Apply only using air blast equipment with an enclosed cab.
			Refer to application section	
Grapes	Black Spot - Anthracnose (<i>Elsinoe</i> <i>ampelina</i>)	All States	150g/100 L of water	Apply at bud swell, at bud burst and when shoots are 15-20cm long. Repeat every 14 days if weather conditions favour development. Do not spray this product within 4 days of applying (before or after) a copper fungicide spray.
Mangoes	Anthracnose (Collectotrichum gloeosporiodes)	All States	200 g/100 L water	Apply at weekly intervals during flowering and then at 14-28 day intervals until 14 days before harvest. Apply only using air blast equipment with an enclosed cab.
POME FRUITS Apples	Black Spot (<i>Venturia</i> <i>inaequalis</i>); Target Spot & Ripe Spot (<i>Pezicula</i> spp.)		150 g/100 L of water	Apply after early green tip sprays. Apply at pink bud stage and at calyx stage. Follow by 4 cover sprays at 10-14 day intervals. Then apply every 14-21 days if required, until 7 days before harvest.
Pears	Black Spot (Venturia pirina)	Qld, NSW, ACT, Vic, Tas, & SA only		Apply at spur burst after green tip copper spray. Apply again at white bud followed by 4 cover sprays at 10-14 day intervals, thereafter apply at 2-3 week intervals depending on weather.
		WA only		After usual early sprays, apply at finger stage, full bloom, petal fall, then as a cover spray at 10-14 day intervals or as required.
STONE FRUITS Apricots Cherries Nectarines	Brown Rot (fruit) (<i>Monilinia</i> fructicola)	All States		Apply early full bloom, after bud swell copper sprays, at petal fall, at shuck fall and then every 3-4 weeks if required, until 7 days before harvest.
Peaches Plums	Freckle (Apricot) (Venturia carpophila); Shot Hole (Stigmina carpophila)			Apply at shuck fall, after early bud swell copper sprays and again 4 and 8 weeks later. (Apply 2 weeks after shuck fall for susceptible varieties).
Strawberries	Black Spot (<i>Colletotrichum</i> <i>acutatum</i>); Grey Mould (<i>Botrytis cinerea</i>)	Qld, Vic, Tas, SA & WA only		Apply as a protective spray at flowering and then at 10- 14 day intervals until (if necessary) 2 days before harvest.
VEGETABLES Celery Lettuce	Septoria Leaf Spot (Septoria spp.)	All States		Apply when disease first appears and at intervals of 7- 10 days if weather favours disease development.
	Anthracnose (Colletotrichum/ Microdochium spp.); Botrytis (Botrytis cinerea)	Qld, Vic, Tas, SA, WA & NT only	200 g/100 L of water	
Carrots, beans, cabbage, celery	Damping off	Qld only	150 g/100 L of water	Drench affected patches using 2.5 to 5 L/m ² . As a preventative drench with 0.6 L/m ² every 5-7 days.
Carrots, beans, cabbage	Septoria Leaf Spot (Septoria spp.)	All States		Apply when disease first appears and at intervals of 7- 10 days if weather favours disease development.
ORNAMENTALS Roses	Black Spot (<i>Diplocarpon</i> rosae)	Vic, Tas, SA, WA & NT only	150 g/100 L of water	Spray early spring and every 10 to 14 days until end of autumn if conditions favour disease.
Chrysanthemum Carnation Gladiolus	Septoria Spot (<i>Septoria</i> spp.)	,		Apply when disease is first observed and repeat each 7-10 days.
Chrysanthemum Carnation Geranium Iris Rose	Grey Mould (<i>Botrytis cinerea</i>)			
Tulip Lily	Tulip Fire (<i>Botrytis tulipae</i>)			

Table B: Grochem Thiram 800 WG applied as a Seed Dressing

RESTRAINTS:

DO NOT mix this product in a slurry with chickpea or lupin rhizobial inoculant.

DO NOT treat machine damaged or poor quality seed as this may result in reduced germination and/or reduced seedling vigour and emergence.

CROP	DISEASE	STATE	RATE/100kg seed	CRITICAL COMMENTS
CHICKPEAS Kabuli (Garbanzo) varieties	Damping off (Pythium spp.) and other soil-borne fungi that cause pre- emergence seed rot; Seed-borne Botrytis; Seed-borne Ascochyta rabiei	All States	150g	Make up into a water slurry to achieve optimum coverage of seed. Use the lowest application volume necessary to obtain full coverage of seed with the equipment to be used. The total volume of slurry applied/tonne should be minimized to approximately 5 litres. Apply only to good quality graded chickpea, lupin and sorghum seed. Move the seed up a grain auger or apply in a suitable mixer. The mixing of seed after application is essential to obtain good seed coverage. Handle seed carefully after application and avoid excess wetting to prevent damage to the seed coat.
Desi varieties	Seed-borne <i>Botrytis;</i> Seed-borne <i>Ascochyta rabiei</i>			Grochem Thiram 800 WG will reduce the incidence of seed- borne Ascochyta and Botrytis infection, but follow up foliar fungicide sprays registered for this purpose will be required to control field infection.
LUPINS	Seed-borne Anthracnose		125-150g	Sorghum: Ensure uniform coverage. Use the lower rate when disease pressure is expected to be diminished. Secondary mixing in an auger is important to ensure good seed coverage.
SORGHUM	Seedling decay complex		190-260g	Treat seed with Grochem Thiram 800 WG immediately prior to sowing. DO NOT store seed treated only with Grochem Thiram 800 WG. Grochem Thiram 800 WG does not contain pigments/dyes normally found in seed treatments. Treated seed may be difficult to distinguish from untreated seed. Seed treated with Grochem Thiram 800 WG may only be stored if it has been treated with other pigmented seed treatments. Do not feed treated seed to birds, animals or humans.
				Grochem Thiram 800 WG may have adverse affects on <i>Rhizobium</i> – Avoid mixing <i>Rhizobium</i> inoculum and Grochem Thiram 800 WG. Apply inoculum directly into the seeding furrow if possible (this method is not recommended in WA). If inoculum must be applied directly to seed, ensure that the treated seed is dry before <i>Rhizobium</i> application.

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