

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

# **THIRAGRANZ**

## **FUNGICIDE**

**ACTIVE CONSTITUENT: 800 g/kg THIRAM**

<b>GROUP</b>	<b>M3</b>	<b>FUNGICIDE</b>
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**Controls fungal diseases of Fruit Trees, Grapevines, Strawberries, Vegetables & Ornamentals; and for use as a seed treatment to control various fungal diseases of Chickpeas, Lupins and Sorghum as specified in the Directions for Use table.**

## **NET CONTENTS: 20kg**

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**DIRECTIONS FOR USE:**

**A: THIRAGRANZ APPLIED AS A FOLIAR SPRAY**

CROP	DISEASE	STATE	RATE/100 L	CRITICAL COMMENTS
<b>GRAPES</b>	Black Spot - Anthracnose ( <i>Elsinoe ampelina</i> )	All States	150g	Apply at bud swell, at bud burst and when shoots are 15-20 cm 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.
<b>POME FRUITS</b> Apples	Black Spot ( <i>Venturia inaequalis</i> ) Target Spot & Ripe Spot ( <i>Pezicula spp.</i> )			Apply after early green tip sprays. Apply at pink bud stage and at calyx stage. Follow by 4 cover sprays at 10-14 days intervals. Then apply every 14-21 days if required, until 7 days before harvest.
Pears	Black Spot ( <i>Venturia pirina</i> )	Qld, NSW, ACT, Vic., SA & Tas. only		Apply at spur burst after green tip copper spray. Apply again at white bud followed by 4 cover sprays at 10-14 days 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 days intervals or as required.
<b>STONE FRUITS</b> Apricots Cherries Nectarines Peaches Plums	Brown Rot (fruit) ( <i>Monilinia fructicola</i> )	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.
	Freckle (Apricot) ( <i>Venturia carpophila</i> ) Shot-Hole ( <i>Stigmia carpophila</i> )		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).	
<b>STRAWBERRIES</b>	Black Spot ( <i>Colletotrichum acutatum</i> ) Grey Mould ( <i>Botrytis cinerea</i> )	Qld, Vic., SA, Tas. & WA only		Apply as a protective spray at flowering and then at 10-14 day intervals until (if necessary) 7 days before harvest.
<b>VEGETABLES</b> Celery Lettuce	Septoria Leaf Spot ( <i>Septoria</i> species)	All States		Apply when disease first appears and at intervals of 7-10 days if weather favours disease development.
	Anthracnose ( <i>Colletotrichum/Microdochium</i> species) <i>Botrytis</i> ( <i>Botrytis cinerea</i> )	Qld, WA, SA, Vic., Tas. & NT only	200g	
<b>ORNAMENTALS</b> Rose	Black Spot ( <i>Diplocarpon rosae</i> )	WA, SA, Vic., Tas. & NT only	150g	Spray early spring and every 10-14 days until end of autumn if conditions favour disease.
Chrysanthemum Carnation Gladiolus	Septoria Spot ( <i>Septoria spp.</i> )			Apply when disease is first observed and repeat each 7-10 days.
Chysanthemum Carnation Geranium Iris Rose	Grey Mould ( <i>Botrytis cinerea</i> )			
Tulip Lily	Fire ( <i>Botrytis tulipae</i> )			

## B. THIRAGRANZ 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
<b>CHICKPEAS</b> Kabuli (Garbanzo) varieties	Damping off ( <i>Pythium</i> spp) and other soil-borne fungi that cause pre-emergence seed rot Seed-borne <i>Botrytis</i> Seed-borne <i>Ascochyta rabiei</i>	All States	150g	<p>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.</p> <p>Thiragranz 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.</p> <p>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.</p> <p>Treat seed with Thiragranz immediately prior to sowing. DO NOT store seed treated only with Thiragranz. <b>Thiragranz does not contain pigments/dyes normally found in seed treatments.</b> Treated seed may be difficult to distinguish from untreated seed. Seed treated with Thiragranz may only be stored if it has been treated with other pigmented seed treatments. <b>DO NOT feed treated seed to birds, animals or humans.</b></p> <p>Thiragranz may have adverse affects on <i>Rhizobium</i> – Avoid mixing <i>rhizobium</i> inoculum and Thiragranz. 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.</p>
Desi varieties	Seed-borne <i>Botrytis</i> Seed-borne <i>Ascochyta rabiei</i>		125 - 150g	
<b>LUPINS</b>	Seed-borne Anthracnose		190 – 260g	
<b>SORGHUM</b>	Seedling decay complex			

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

### WITHHOLDING PERIOD:

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

SEED DRESSING : NOT REQUIRED WHEN USED AS DIRECTED.

## GENERAL INSTRUCTIONS:

### Foliar

Apply when conditions favour disease development or at first sign of disease. Thiragranz is a protectorant 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 Thiragranz with other seed protectant formulations add the seed protectant only after the Thiragranz granules are fully dispersed. The mixture should be agitated before and during use to ensure even application.

**Thiragranz does not contain pigments/dyes normally found in seed treatments.** Treated seed may be difficult to distinguish from untreated seed. Seed treated with Thiragranz may only be stored if it has been treated with other pigmented seed treatments. If Thiragranz 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 'Shirwet' 600 Spray Activator Wetting and Spreading Agent or Nufarm Surfactant 600 at a rate of 16 mL/100 L of spray solution.

**Seed treatment** – Refer to Critical Comments in Table B above (Thiragranz 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.

### Fungicide Resistance Warning

GROUP	M3	FUNGICIDE
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For fungicide resistance management Thiragranz Fungicide is a Group M3 fungicide.

Some naturally occurring individual fungi resistant to Thiragranz 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 Thiragranz 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, Nufarm Australia Limited accepts no liability for any losses that may result from the failure of Thiragranz Fungicide to control resistant fungi.

### Compatibility:

Do not mix with lime sulphur or bordeaux spray.

### 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.

### PROTECTION OF LIVESTOCK:

**DO NOT** feed grass clippings from treated areas to poultry or animals. Seed treated with Thiragranz 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 Thiragranz 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 waterways with the chemical or used container or containers which have held treated seed.



[spraywisedecisions.com.au](http://spraywisedecisions.com.au) is an online weather forecasting program and is recommended for use when planning your pesticide application.

## STORAGE AND DISPOSAL:

Store in the closed, original container in a dry, cool, well-ventilated area out of direct sunlight. Store in a locked room or place away from children, animals, food, feedstuffs, seed and fertilizers. Do not allow product to become wet or overheated in storage.

Single rinse before disposal. Add rinsings to spray tank. Do not dispose of undiluted chemicals on site. Puncture and bury empty containers in a 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.

Seed treated with this product must not be used for human consumption or allowed to contaminate grain intended for human consumption. Containers which have held treated seed should not be used for any other purpose. Seed treated with Thiragranz may only be stored if it has been treated with other pigmented seed treatments. Any seed treated with Thiragranz alone not intended for immediate sowing should be destroyed by burying below 500mm in a disposal pit specifically marked and set up for this purpose clear of waterways, desirable vegetation and tree roots.

## SAFETY DIRECTIONS:

May irritate the eyes, nose, throat and skin. Avoid contact with eyes and skin. Do not inhale dust or spray mist. Wash hands after use.

## FIRST AID:

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

## ADDITIONAL STATEMENTS (WHS REGULATIONS 2011):

**Harmful if inhaled. Harmful if swallowed. May cause damage to the thyroid through prolonged or repeated exposure. Causes serious eye irritation. Causes skin irritation. May cause an allergic skin reaction.** Wash hands and exposed skin thoroughly after handling. Do not eat, drink or smoke when using this product. Wear protective gloves, clothing, eye and face protection. Contaminated work clothing should not be allowed out of the workplace. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. IF SWALLOWED: Rinse mouth. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. IF ON SKIN: Wash with plenty of soap and water. If skin irritation occurs or eye irritation persists: Get medical advice/attention. Take off contaminated clothing and wash before reuse.

## SAFETY DATA SHEET

For further information refer to the Safety Data Sheet (SDS), which can be obtained from your supplier or from the Nufarm website – [nufarm.com.au](http://nufarm.com.au)

**In case of emergency: Phone 1800 033 498** Ask for shift supervisor. Toll free 24 hours.

## CONDITIONS OF SALE:

“Any provisions or rights under the Competition and Consumer Act 2010 or relevant state legislation which cannot be excluded by those statutes or by law are not intended to be excluded by these conditions of sale. Subject to the foregoing, all warranties, conditions, rights and remedies, expressed or implied under common law, statute or otherwise, in relation to the sale, supply, use or application of this product, are excluded. Nufarm Australia Limited and/or its affiliates (“Nufarm”) shall not accept any liability whatsoever (including

consequential loss), or howsoever arising (including negligence) for any damage, injury or death connected with the sale, supply, use or application of this product except for liability which cannot be excluded by statute.”

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**APVMA Approval No.: 48621/0705**

**BN / DOM / Barcode**