## POISON

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

# THIRAGRANZ FUNGICIDE

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



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** 

Crop Care Australasia Pty Ltd, 77 Tingira Street, Pinkenba Qld 4008

Thiragranz Approved: 14 July 2005 Page 1 of 5

#### **DIRECTIONS FOR USE:**

#### A: THIRAGRANZ APPLIED AS A FOLIAR SPRAY

CROP	DISEASE	STATE	RATE/100 L	CRITICAL COMMENTS
GRAPES	Black Spot - Anthracnose (Elsinoe ampelina)	All States		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.
POME FRUITS Apples	Black Spot (Venturia inaequalis) Target Spot & Ripe Spot (Pezicula spp.)			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 (Venturia pirina)	Qld, NSW, ACT, Vic., SA & Tas. only	150g	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.
Apricots Cherries Nectarines	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.
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 (Colletotrichum acutatum) Grey Mould (Botrytis cinerea)	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.
VEGETABLES Celery	Septoria Leaf Spot (Septoria species)	All States		Apply when disease first appears and at intervals of 7-10 days if weather favours disease development.
Lettuce	Anthracnose (Colletotrichum/Microdochium species) Botrytis (Botrytis cinerea)	Qld, WA, SA, Vic., Tas. & NT only	200g	
ORNAMENTALS Rose	Black Spot (Diplocarpon rosae)	WA, SA, Vic., Tas. & NT	150g	Spray early spring and every 10-14 days until end of autumn if conditions favour disease.
Chrysanthemum Carnation Gladiolus	Septoria Spot (Septoria spp.)	only		Apply when disease is first observed and repeat each 7-10 days.
Chysanthemum Carnation Geranium Iris Rose	Grey Mould (Botrytis cinerea)			
Tulip Lily	Fire (Botrytis tulipae)			

Thiragranz Approved: 14 July 2005 Page 2 of 5

#### 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
CHICKPEAS 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	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>			
LUPINS	Seed-borne Anthracnose		125 - 150g	
SORGHUM	Seedling decay complex		190 – 260g	
				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.
				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.
				Treat seed with Thiragranz immediately prior to sowing. DO NOT store seed treated only with Thiragranz. 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. DO NOT feed treated seed to birds, animals or humans.
				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.

## 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.

Thiragranz Approved: 14 July 2005 Page 3 of 5

#### **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.

#### **Fungicide Resistance Warning**

GROUP Y FUNGICIDE

For fungicide resistance management Thiragranz Fungicide is a Group Y fungicide.

Some naturally occurring individual fungi resistant to Thiragranz Fungicide and other Group Y 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 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, Crop Care Australasia Pty Ltd accepts no liability for any losses that may result from the failure of Thiragranz Fungicide to control resistant fungi.

#### Mixina:

**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 Crop Care '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.

#### 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

Thiragranz Approved: 14 July 2005 Page 4 of 5

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.

#### 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 information is listed in the Material Safety Data Sheet.

#### Conditions of sale:

Crop Care Australasia Pty Ltd will not accept any responsibility whatsoever and howsoever arising and whether for consequential loss or otherwise in connection with the supply of these goods other than responsibility for the merchantable quality of the goods and such responsibilities mandatorily imposed by Statutes applicable to the sale or supply of these goods. To the extent allowed by such Statutes the liability of Crop Care Australasia Pty Ltd is limited to the replacement of the goods or (at the option of Crop Care Australasia Pty Ltd) the refund of the price paid and is conditional upon a claim being made in writing and where possible sufficient part of the goods to enable proper examination being returned to Crop Care Australasia Pty Ltd within thirty days of delivery.

In a Transport
Emergency Dial
000
Policy or Fire Brigade

SPECIALIST ADVICE IN
EMERGENCY ONLY
1800 033 498
ALL HOURS - AUSTRALIA-WIDE

'Shirwet' is a Registered Trademark of Nufarm Technologies USA Pty Ltd.



Crop Care Australasia Pty Ltd A.C.N. 061 362 347 77 Tingira Street PINKENBA Qld 4008.

Bar code to be inserted here

APVMA Approval No.: 48621/20K/0705

BN

DOM

Thiragranz Approved : 14 July 2005 Page 5 of 5