

Infosafe No™ 3NV0Q Issue Date : July 2017 ISSUED by NUFARM

Product Name **Thiragranz Fungicide**

Classified as hazardous

## 1. Identification

<b>GHS Product Identifier</b>	Thiragranz Fungicide
<b>Product Code</b>	5114
<b>Product Type</b>	Group Y Fungicide
<b>Company Name</b>	NUFARM AUSTRALIA LIMITED. (ABN 80 004 377 780)
<b>Address</b>	103-105 Pipe Road Laverton North Victoria 3026 Australia
<b>Telephone/Fax Number</b>	Tel: +61 3 9282-1000 Fax: +61 3 9282-1001
<b>Emergency phone number</b>	1800 033 498 (24hr Australia)
<b>Recommended use of the chemical and restrictions on use</b>	Product 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.
<b>Other Information</b>	This Safety Data Sheet describes the properties of the concentrated product. The physical properties and the assessments may not apply to the properties of the product once it has been diluted for application.

## 2. Hazard Identification

<b>GHS classification of the substance/mixture</b>	IT4 Acute Toxicity - Inhalation: Category 4 OT4 Acute Toxicity - Oral: Category 4 RE2 STOT Repeated Exposure Category 2 ED2A Eye Damage/Irritation: Category 2A SC-2 Skin Corrosion/Irritation: Category 2 SS-1 Sensitization - Skin: Category 1 AC1 Hazardous to the Aquatic Environment - Long-Term Hazard: Category 1
<b>Signal Word (s)</b>	WARNING
<b>Hazard Statement (s)</b>	H332 Harmful if inhaled. H302 Harmful if swallowed. H373 May cause damage to the thyroid through prolonged or repeated exposure. H319 Causes serious eye irritation. H315 Causes skin irritation. H317 May cause an allergic skin reaction. H400 Very toxic to aquatic life. H410 Very toxic to aquatic life with long lasting effects.
<b>General Precautionary Statement (s)</b>	P101 If medical advice is needed, have product container or label at hand. P102 Keep out of reach of children. P103 Read label before use.
<b>Pictogram (s)</b>	Exclamation mark, Health hazard, Environment, The below pictograms are GHS Hazard symbols for workplace use only. See SECTION 14 for Dangerous Goods information.



<b>Precautionary statement – Prevention</b>	P264 Wash hands and exposed skin thoroughly after handling. P270 Do not eat, drink or smoke when using this product. P260 Do not breathe dusts or spray. P280 Wear protective gloves, clothing, eye and face protection. P272 Contaminated work clothing should not be allowed out of the workplace.
<b>Precautionary statement – Response</b>	P314 Get medical advice/attention if you feel unwell. P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. P311 Call a POISON CENTER or doctor/physician. P301+P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. P330 Rinse mouth.

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P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
 P337+P313 If eye irritation persists: Get medical advice/attention.  
 P302+P352 IF ON SKIN: Wash with plenty of soap and water.  
 P332+P313 If skin irritation occurs: Get medical advice/attention.  
 P362 Take off contaminated clothing and wash before reuse.

Other Information Poisons Schedule S6

### 3. Composition/information on ingredients

<b>Chemical Characterization</b>	Solid		
<b>Ingredients</b>	<u>Name</u>	<u>CAS</u>	<u>Proportion</u>
	Thiram	137-26-8	800 g/kg
	Dispersant	-	200 g/kg

### 4. First-aid measures

<b>Inhalation</b>	Over-exposure by inhalation is improbable. Check for other causes of observed symptoms and seek medical advice.
<b>Ingestion</b>	Give a glass of water. Rinse mouth thoroughly with water. Seek medical advice immediately.
<b>Skin</b>	Wash affected areas thoroughly with soap and water. Remove contaminated clothing and launder before re-use. If irritation persists, seek medical advice.
<b>Eye contact</b>	If in eyes, hold eyelids open and wash with copious amounts of water for at least 15 minutes. If irritation persists consult a doctor.
<b>First Aid Facilities</b>	If poisoning occurs, contact a doctor or the Poisons Information Centre (Australia) on 13 11 26.
<b>Advice to Doctor</b>	Treat symptomatically. Avoid giving alcohol - may cause vomiting and shock.

### 5. Fire-fighting measures

<b>Suitable extinguishing media</b>	Water fog, foam, carbon dioxide or dry chemical.
<b>Hazards from Combustion</b>	If involved in a fire, it will emit oxides of sulphur, oxides of carbon and possibly oxides of nitrogen.
<b>Products</b>	Combustible liquid at high temperatures.
<b>Special Protective Equipment for fire fighters</b>	Breathable air apparatus should be worn when fighting a fire in which thiram is involved.
<b>Specific hazards arising from the chemical</b>	This product contains a high proportion of an organic solid. Large accumulations of dust and fines associated with industrial processing of bulk material may be a dust explosion hazard.
<b>Other Information</b>	STOP FIRE WATER FROM ENTERING DRAINS OR WATER BODIES. Large accumulations of dust and fines associated with industrial processing of bulk material may be a dust explosion hazard.

### 6. Accidental release measures

<b>Spills &amp; Disposal</b>	Pick up with a shovel and broom. Collect in sealed open top containers for disposal. On-site disposal of concentrate is not acceptable. Do NOT flush with water.
<b>Personal Protection</b>	For appropriate personal protective equipment (PPE), refer Section 8.
<b>Environmental Precautions</b>	Prevent from entering drains, waterways or sewers.

### 7. Handling and storage

<b>Precautions for Safe Handling</b>	Avoid generating dusts while handling the product and mixing. If dusts are generated, it is advisable to wear a dust mask, refer Section 8.
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**Conditions for safe storage, including any incompatibilities** Seed treated with this product must not be used for animal or human consumption or be allowed to contaminate seed intended for animal or human consumption. Store in the closed, original container in a dry, well ventilated area, as cool as possible. Do not store for prolonged periods in direct sunlight. Do not store in the same area as acids. Treated seed, when stored, should be kept apart from other seed. The containers should be clearly marked to indicate the contents have been treated with this product.

**Other Information** Always read the label and any attached leaflet before use.

## 8. Exposure controls/personal protection

Occupational exposure limit values	Name	STEL		TWA		Footnote
		mg/m3	ppm	mg/m3	ppm	
<b>Appropriate engineering controls</b>	Thiram			1		
<b>Respiratory Protection</b>	Handle in well ventilated areas, generally natural ventilation is adequate. Avoid generating and inhaling dusts.					
<b>Eye Protection</b>	If dusts are present, wear a class P2 dust mask.					
<b>Personal Protective Equipment</b>	Wear a faceshield or chemical goggles.					
<b>Hygiene Measures</b>	When opening the container and preparing the spray wear cotton overalls buttoned to the neck and wrist and a washable hat, elbow-length PVC gloves and face shield or goggles.					
<b>Requirements Concerning Special Training</b>	After use and before eating, drinking or smoking, wash hands, arms and face thoroughly with soap and water. After each day's use, wash contaminated clothing and safety equipment. Check State or Territory regulations that require people who use pesticides in their job or business to have training in the application of the materials.					

## 9. Physical and chemical properties

<b>Form</b>	Solid
<b>Appearance</b>	White Granules
<b>Solubility in Water</b>	Disperses in water. 18 mg/l thiram
<b>Specific Gravity</b>	1.29
<b>pH</b>	8 in 1% dispersion
<b>Vapour Pressure</b>	2.3 mPa @ 25°C for thiram
<b>Partition Coefficient: n-octanol/water</b>	Kow Log P is 1.73 for thiram

## 10. Stability and reactivity

<b>Chemical Stability</b>	Stable under normal conditions.
<b>Incompatible Materials</b>	The addition of a strong acid will cause release of carbon disulfide vapour. Carbon disulphide is a volatile liquid, toxic. TLC/TWA 31 mg/m3, autoignition temperature ~100°C.
<b>Possibility of hazardous reactions</b>	Keep away from strong oxidising agents.
<b>Hazardous Polymerization</b>	Hazardous polymerisation is not possible.

## 11. Toxicological Information

<b>Acute Toxicity - Oral</b>	LD50 (rat) >1800 mg/kg for thiram
<b>Acute Toxicity - Dermal</b>	LD50 (rat) >2000mg/kg

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<b>Acute Toxicity - Inhalation</b>	LC50 (rat) (4hr) 3.46 mg/l for thiram
<b>Ingestion</b>	Possible symptoms of exposure of the concentrate include: headache, arrhythmia, shortness of breath and nausea. Consumption of alcohol increases the toxic effects.
<b>Inhalation</b>	May cause irritation to mucous membranes.
<b>Skin</b>	Prolonged contact with the concentrate may cause irritation. Prolonged or repeated exposure may cause skin sensitisation.
<b>Eye</b>	The concentrate will cause irritation of the eyes.
<b>Skin Sensitisation</b>	Prolonged and repeated skin contact may result in skin sensitisation.
<b>Chronic Effects</b>	Evidence from animal studies indicate that repeated or prolonged exposure to thiram can result in effects on the thyroid.
<b>Serious eye damage/irritation</b>	Moderate eye irritant.
<b>Skin corrosion/irritation</b>	Moderate skin irritant.
<b>Other Information</b>	The Australian Acceptable Daily Intake (ADI) for thiram for a human is 0.004 mg/kg/day, set for the public for daily, lifetime exposure. This is based on the NOEL of 0.4 mg/kg/day, the level determined to show no effects during long term exposure for the most sensitive indicators and the most sensitive species. (Ref: Comm. Dept. of Health and Ageing, Office of Chemical Safety, 'ADI List', March 2016).

## 12. Ecological information

<b>Persistence and degradability</b>	Average field half life of thiram is 15 days.
<b>Mobility</b>	Rapid degradation in soil prevents significant downward movement under normal conditions.
<b>Known Harmful Effects on the Environment</b>	The product is a marine pollutant for sea transport.
<b>Other Precautions</b>	Do not contaminate dams, waterways or sewers with this product. Do not feed treated seed, or otherwise expose, to wildlife and domestic animals, particularly birds.
<b>Acute Toxicity - Fish</b>	The following data is for thiram LC50 (96hr) for rainbow trout is 0.046 mg/l
<b>Acute Toxicity - Daphnia</b>	LC50 (48hr) for daphnia is 0.011 mg/l.
<b>Acute Toxicity - Other Organisms</b>	LD50 for mallard ducks is >2000 mg/kg for thiram Bees: Not toxic to bees. LD50 >100 µg/bee.

## 13. Disposal considerations

<b>Product Disposal</b>	On site disposal of the concentrated product is not acceptable. Ideally, the product should be used for its intended purpose. If there is a need to dispose of the product, approach local authorities who hold periodic collections of unwanted chemicals (ChemClear®). 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.
<b>Container Disposal</b>	Thoroughly wash out the inner and add washings to the spray tank. Dispose of washed inner and cardboard box in landfill. If not recycling, puncture or shred and bury containers in 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.

## 14. Transport information

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<b>Storage and Transport</b>	Considered non dangerous for road and rail transport (in packaging) by the Australian Code for the Transport of Dangerous Goods by Road and Rail. Ref: ADG7; SP No. AU01. For bulk shipments as Class 9, use UN 3077, HazChem code 2Z.
<b>UN Number (Sea Transport)</b>	3077
<b>IMO Class/Packing Group</b>	Class 9; Packing Group III.
<b>IMO Marine Pollutant</b>	Marine Pollutant
<b>IMO Proper Shipping Name</b>	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (contains Thiram)

## 15. Regulatory information

<b>Regulatory Information</b>	Australia: WHS regulations (2011) - Schedule 11: classification not listed.
<b>Poisons Schedule</b>	S6
<b>Packaging &amp; Labelling</b>	POISON KEEP OUT OF REACH OF CHILDREN READ SAFETY DIRECTIONS BEFORE OPENING OR USING
<b>Other Information</b>	This product is registered with the Australian Pesticides and Veterinary Medicines Authority (APVMA). APVMA product number: 48621.

## 16. Other Information

<b>Date of preparation or last revision of SDS</b>	12/07/2017
<b>Contact Person/Point</b>	Normal Hours: Mrs Kathleen Marsh Phone: +61 3 9282 1000 After Hours: Shift Supervisor Phone: 1800 033 498
<b>Revisions Highlighted</b>	The SDS was reviewed. Minor changes were made to the information and product has been rebranded. ...End Of MSDS...

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