



Material Safety Data Sheet

Infosafe No. 3NU5V Issue Date : June 2006 ISSUED by NUFARM

Product Name : **Throttle Fungicide**

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product Name Throttle Fungicide
Product Code 5152
Product Type Group C Fungicide
Company Name NUFARM AUSTRALIA LIMITED. (ABN 80 004 377 780)
Address 103-105 Pipe Road Laverton North
Victoria 3026 Australia
Emergency Tel. 24hr 1800 033 498
Telephone/Fax Number Tel: (03) 9282-1000 Fax: (03) 9282-1001
Recommended Use For the control of certain fungal diseases of bananas, peanuts, pineapples, stone fruit, sugarcane, wheat and other crops as specified in the Directions for Use table on the label.
Other Information This MSDS describes, to the best of our knowledge, the properties of the concentrated product. The physical properties and some of the assessments do not apply to the properties of the product once it has been diluted for application. Acute health effects of the diluted product are likely to be much less severe.

2. HAZARDS IDENTIFICATION

Hazard Classification HAZARDOUS SUBSTANCE.
NON-DANGEROUS GOODS.
Hazard classification according to the criteria of NOHSC.
Dangerous goods classification according to the Australia Dangerous Goods Code.
Risk Phrase(s) R22 Harmful if swallowed.
R36 Irritating to eyes.
R65 Harmful: may cause lung damage if swallowed.
Safety Phrase(s) S13 Keep away from food, drink and animal feeding stuffs.
S2 Keep out of reach of children.
S25 Avoid contact with eyes.
Other Information Poisons Schedule S6

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Characterization Liquid

Ingredients	Name	CAS	Proportion
	Hydrocarbon Liquid	64742-94-5	654 g/L
	Propiconazole	60207-90-1	250 g/L
	Surfactant	9016-45-9	<10%

4. FIRST AID MEASURES

Inhalation Remove affected person to fresh air until recovered.
Obtain medical assistance.
Ingestion If swallowed DO NOT induce vomiting.
Give a glass of water.
Do not give anything by mouth to a semi-conscious or unconscious person.
Obtain medical advice.
Skin Wash affected areas thoroughly with soap and water.
Remove contaminated clothing and launder before re-use.
Eye If in eyes, hold eyelids open and wash with copious amounts of water for at least 15 minutes.
Seek medical advice if irritation develops or persists.



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Advice to Doctor Treat symptomatically.
If vomiting occurs, solvent present may cause pulmonary pneumonitis.
Pulmonary oedema is possible and may be delayed.

5. FIRE FIGHTING MEASURES

Suitable Extinguishing Media Water fog, foam, carbon dioxide or dry chemical.

Hazards from Combustion Products If involved in a fire, it will emit oxides of carbon, oxides of nitrogen and possibly toxic fumes of hydrogen chloride or phosgene.

Special Protective Equipment for fire fighters Breathable air apparatus may have to be worn in confined spaces.

Hazchem Code None Allocated

6. ACCIDENTAL RELEASE MEASURES

Spills & Disposal Contain spill and absorb with clay, sand, soil or proprietary absorbent (such as vermiculite).
Collect spilled material and waste in sealable open-top type containers for disposal.

Personal Protection For appropriate personal protective equipment (PPE), refer Section 8.

Environmental Precautions Use earthen bunds or absorbent bunding to prevent spreading of spillage.

7. HANDLING AND STORAGE

Precautions for Safe Handling For personal protective equipment (PPE) and hygiene advice, refer Section 8.

Conditions for Safe Storage 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.
Keep container tightly sealed and do not store with seed, fertilisers or foodstuffs.

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

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

National Exposure Standards No exposure standards have been set for this product or the active ingredients.
The manufacturer of the solvent has recommended an occupational exposure limit of 100 mg/m³; 17ppm TWA, as total hydrocarbon.

Engineering Controls Handle in well ventilated areas, generally natural ventilation is adequate.

Personal Protective Equipment When opening the container, preparing spray and using the prepared spray wear cotton overalls buttoned to the neck and wrist and a washable hat, elbow-length PVC, nitrile or neoprene gloves, goggles and disposable fume mask.
Re-entry period: Do not enter treated area until spray has dried.

Hygiene Measures 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.

9. PHYSICAL AND CHEMICAL PROPERTIES

Form Liquid

Appearance Clear yellow liquid

Odour Solvent odour

Boiling Point 180°C

Solubility in Water Disperses in water. Solubility is low, 100 mg/l.

Specific Gravity 0.99



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Vapour Pressure 2.7 x 10⁻² mPa @ 20°C (propiconazole)
Octanol/Water Partition Coefficient Kow Log P is 3.72 (propiconazole)
Flash Point >60.5°C
Flammability Combustible liquid C1.

10. STABILITY AND REACTIVITY

Chemical Stability Stable under normal conditions.
Hazardous Reactions Keep away from strong oxidising agents.
Hazardous Polymerization Hazardous polymerisation is not possible.

11. TOXICOLOGICAL INFORMATION

Toxicology Information No harmful effects are expected if the precautions on the label and this MSDS are followed.

Inhalation The components of the product are of low volatility and no adverse effects are expected from handling the concentrate. However, care should be taken to avoid the inhalation of excessive amounts of spray mist during field spraying, respiratory irritation may occur. Breathing vapour can result in headaches, dizziness and possible nausea.

Ingestion Amounts swallowed incidental to normal handling procedures and use are not expected to cause injury. If aspirated into the lung, e.g. from vomiting, the presence of solvent may result in chemical pneumonitis or other lung damage.

Skin Prolonged contact with the concentrate may cause irritation. Prolonged contact with the concentrate can cause defatting of the skin and may result in dermatitis.

Eye The concentrate may cause irritation of the eyes.

Reproductive Toxicity Data indicates no reproductive effects.
Data indicates no teratogenic effects.

Mutagenicity Data indicates no mutagenic effects.

Carcinogenicity An incidence of liver tumours was noted in long-term studies with propiconazole in rodents. As the mechanism involved is not relevant to humans, and the dose levels were very high, the potential carcinogenic risk to humans is considered negligible.

Acute Toxicity - Oral LD50 (rat) >2000 mg/kg for the product
LD50 (rat) 1517 mg/kg for propiconazole

Acute Toxicity - Dermal LD50 (rat) >4000 mg/kg for propiconazole

Acute Toxicity - Inhalation LC50 (rat) (4hr) 9.46 mg/l for propiconazole

Eye Irritation Mild eye irritant.

Skin Irritation Mild skin irritant.

Other Information The Australian Acceptable Daily Intake (ADI) for propiconazole for a human is 0.04 mg/kg/day, set for the public for daily, lifetime exposure. This is based on the NOEL of 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, 'ADI List', TGA, September 2005).

12. ECOLOGICAL INFORMATION

Persistence / Degradability Average field half life of propiconazole is 40 - 70 days. Propiconazole will slowly degrade in soil and aquatic systems.

Known Harmful Effects on the Environment Harmful to fish and other aquatic organisms.



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Other Precautions Do not spray in high winds.
Do not contaminate dams, waterways or sewers with this product.

Environ. Protection Spray drift should be avoided, read the label for more information.

Acute Toxicity - Fish The following is data for the active ingredient, propiconazole.
LC50 (96 hr) for rainbow trout is 5.3 mg/l.
LC50 (96 hr) for carp is 6.8 mg/l.

Acute Toxicity - Daphnia LC50 (96 hr) for daphnia is 4.8 mg/l.

Acute Toxicity - Other Organisms Birds: Not toxic to birds. LD50 for japanese quail is 2223 mg/kg
LD50 for bobwhite quail is 2825 mg/kg
LD50 for mallard duck is >2510 mg/kg
Bees: Not toxic to bees. LD50 >100 µg/bee.

13. DISPOSAL CONSIDERATIONS

Product Disposal 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 (ChemCollect).

Container Disposal Do not use this container for any other purpose.
Triple rinse containers, add rinsate to the spray tank, then offer the container for recycling/reconditioning, or puncture top, sides and bottom and dispose of in landfill in accordance with local regulations.
drumMUSTER is the national program for the collection and recycling of empty, cleaned, non returnable crop production and on-farm animal health chemical containers. If the label on your container carries the drumMuster symbol, triple rinse the container, ring your local Council, and offer the container for collection in the program.
If recycling, replace cap and return clean containers to recycler or designated collection point.
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.
Returnable containers: empty contents fully into application equipment. Replace cap, close all valves and return to the point of supply for refill or storage.

14. TRANSPORT INFORMATION

Transport Information It is good practice to separate this product from food, food related materials, animal feedstuffs, seed or fertilisers during transport.

U.N. Number None Allocated

Proper Shipping Name None Allocated

DG Class None Allocated

Hazchem Code None Allocated

Packing Group None Allocated

Storage and Transport Considered non dangerous for transport by the Australian Code for the Transport of Dangerous Goods by Road and Rail.

15. REGULATORY INFORMATION

Poisons Schedule S6

Packaging & Labelling POISON
KEEP OUT OF REACH OF CHILDREN
READ SAFETY DIRECTIONS BEFORE OPENING OR USING

Hazard Category Harmful, Irritant

AICS (Australia) All of the components in this product are listed on the Australian Inventory of Chemical Substances.



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16. OTHER INFORMATION

Contact Person/Point Normal Hours: Mr Volker Maier Phone: (03) 9282 1000
After Hours: Shift Supervisor Phone: 1800 033 498

Revisions Highlighted The MSDS was reviewed. Minor changes were made to the information.
...End Of MSDS...