



Material Safety Data Sheet

CS: 1.4.21

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Infosafe No™ 3NUGA	Issue Date :March 2008	ISSUED by NUFARM	CS: 1.4.21
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Product Name **PRISTINE ® Fungicide**

Classified as hazardous according to criteria of NOHSC

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product Name	PRISTINE ® Fungicide
Product Code	5172
Product Type	Group G K Fungicide
Company Name	NUFARM AUSTRALIA LIMITED. (ABN 80 004 377 780)
Address	103-105 Pipe Road Laverton North Victoria 3026 Australia
Emergency Tel.	1800 033 498 (24hr Australia)
Telephone/Fax Number	Tel: +61 3 9282-1000 Fax: +61 3 9282-1001
Recommended Use	For the control of blackspot (scab) and powdery mildew in apples 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	Classified as hazardous according to criteria of NOHSC 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)	Classified as hazardous according to criteria of NOHSC R22 Harmful if swallowed.
Safety Phrase(s)	S13 Keep away from food, drink and animal feeding stuffs. S2 Keep out of reach of children. S46 If swallowed, seek medical advice immediately and show this container or label.
Other Information	Poisons Schedule S5

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Characterization	Solid		
Ingredients	<u>Name</u>	<u>CAS</u>	<u>Proportion</u>
	Boscalid	188425-85-6	252 g/kg
	Pyraclostrobin	175013-18-0	128 g/kg
	Dispersants		10-30 %
	Other ingredients (considered non-hazardous)		Balance

4. FIRST AID MEASURES

Inhalation	Remove affected person to fresh air until recovered.
Ingestion	Rinse mouth and then drink plenty of water.
Skin	If skin contact occurs, remove contaminated clothing and wash skin thoroughly with water.
Eye	If in eyes, hold eyelids open and wash with copious amounts of water for at least 15 minutes. Seek medical advice.
First Aid Facilities	If poisoning occurs, contact a doctor or the Poisons Information Centre (Australia) on 13 11 26.
Advice to Doctor	Treat according to symptoms.



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5. FIRE FIGHTING MEASURES

Suitable Extinguishing Media	Water fog, foam, carbon dioxide or dry chemical.
Hazards from Combustion	Avoid strong water jets - airborne dusts may be an explosion hazard.
Products	If involved in a fire, it will emit hydrogen chloride, oxides of nitrogen, oxides of sulphur and possibly carbon monoxide.
Special Protective Equipment for fire fighters	Breathable air apparatus may have to be worn if material is involved in fires especially in confined spaces.
Other Information	STOP FIRE WATER FROM ENTERING DRAINS OR WATER BODIES.

6. ACCIDENTAL RELEASE MEASURES

Spills & Disposal	Recover the product by sweeping up or vacuuming without raising dust. Collect in sealed open top containers for disposal.
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7. HANDLING AND STORAGE

Precautions for Safe Handling	Avoid generating dusts while handling the product and mixing.
Conditions for Safe Storage	Store in the closed, original container in a dry, cool well ventilated area out of direct sunlight.
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 established for this product by Worksafe Australia, however, the TWA exposure standard for dusts not otherwise specified is 10 mg/m ³ .
Engineering Controls	Avoid generating and inhaling dusts. No special requirements.
Personal Protective Equipment	It is good practice to wear suitable personal protective equipment (PPE). 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. Wash contaminated clothing before re-use.
Requirements Concerning Special Training	NSW regulations require that people who use pesticides in their job or business must have training in the application of the materials.

9. PHYSICAL AND CHEMICAL PROPERTIES

Form	Solid
Appearance	Brown granules
Odour	Almost odourless
Solubility in Water	Disperses in water.
pH Value	~6.5 (typical value)
Vapour Pressure	0.00072 mPa (boscalid) 0.000026 mPa (pyraclostrobin)
Octanol/Water Partition Coefficient	Kow Log P is 2.96 for boscalid; 3.99 for pyraclostrobin
Density	464 kg/m ³
Flash Point	Not applicable.

10. STABILITY AND REACTIVITY

Chemical Stability	Stable under normal conditions.
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Hazardous Decomposition Products	None expected under normal use conditions
Hazardous Reactions	Degrades at >122°C; Thermal Decomposition at 172°C.
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	Inhalation of dust may cause discomfort, but health effects are unlikely.
Ingestion	The concentrate is of low toxicity if swallowed.
Skin	Not a skin irritant and not harmful by dermal exposure.
Eye	May cause some discomfort if contact is prolonged.
Acute Toxicity - Oral	LD50 (rat) >2000 mg/kg for a similar formulation
Acute Toxicity - Dermal	LD50 (rat) >2000 mg/kg for a similar formulation
Acute Toxicity - Inhalation	LC50 (rat) (4hr) >4.0 mg/l
Eye Irritation	May be slightly irritant.
Skin Irritation	Not a skin irritant.
Skin Sensitisation	Not a skin sensitizer.
Other Information	The Australian Acceptable Daily Intake (ADI) for boscalid for a human is 0.06 mg/kg/day, set for the public for daily, lifetime exposure. This is based on the NOEL of 6 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', September 2007).

12. ECOLOGICAL INFORMATION

Persistence / Degradability	Half life in soil is typically 108 - 365 days. Not readily biodegradable.
Other Precautions	Do not contaminate dams, waterways or sewers with this product. Do not spray in high winds.
Environ. Protection	Severe marine pollutant.
Acute Toxicity - Fish	LC50 (96 hr) for rainbow trout is 2.7 mg/l for boscalid LC50 (96 hr) for rainbow trout is 0.006 mg/l for pyraclostrobin
Acute Toxicity - Daphnia	LC50 (48 hr) for daphnia magna is 5.33 mg/l for boscalid. LC50 (48 hr) for daphnia magna is 0.016 mg/l for pyraclostrobin.
Acute Toxicity - Other Organisms	Not toxic to birds. LD50 for bobwhite quail is >2000 mg/kg Not toxic to bees.

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 (ChemClear®).
Container Disposal	Thoroughly wash out the inner and add washings to the spray tank. Dispose of washed inner and cardboard box in 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.



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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.
Storage and Transport	Considered non dangerous for transport by the Australian Code for the Transport of Dangerous Goods by Road and Rail.
UN Number (Sea Transport)	3077
IMO Class/Packing Group	Class 9; Packing Group III.
IMO Marine Pollutant	Marine Pollutant
IMO Proper Shipping Name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (contains Pyraclostrobin)

15. REGULATORY INFORMATION

Poisons Schedule	S5
Packaging & Labelling	CAUTION KEEP OUT OF REACH OF CHILDREN READ SAFETY DIRECTIONS BEFORE OPENING OR USING
Hazard Category	Harmful
AICS (Australia)	All of the components in this product are listed on the Australian Inventory of Chemical Substances.

16. OTHER INFORMATION

Contact	Normal Hours: Mr Volker Maier	Phone: +61 3 9282 1000
Person/Point	After Hours: Shift Supervisor	Phone: 1800 033 498
Revisions	First Issue	
Highlighted		
Other Information	© Registered trademark of BASF ...End Of MSDS...	

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