



Material Safety Data Sheet

CS: 1.4.93

Page: 1 of 4

Infosafe No™ 3NULJ	Issue Date : June 2011	ISSUED by CRPCARE
--------------------	------------------------	-------------------

Product Name **Vivando® Fungicide**

Not classified as hazardous

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product Name Vivando® Fungicide
Product Code 5193
Product Type Group U8 Fungicide
Company Name Crop Care Australasia Pty Ltd (ABN 53 061 362 347)
Address Unit 15/16 Metroplex Avenue Murarrie
 Queensland 4172 Australia
Emergency Tel. 1800 033 498 (24hr Australia)
Telephone/Fax Number Tel: +61 7 3909 2000
 Fax: +61 7 3909 2010
Recommended Use For the control of powdery mildew in cucurbits and grapes as per 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 Not classified as hazardous
 NON-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) Not classified as hazardous
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 Liquid

Ingredients	<u>Name</u>	<u>CAS</u>	<u>Proportion</u>
	Metrafenone	220899-03-6	500 g/L
	Other ingredients		0-10 %

4. FIRST AID MEASURES

Inhalation Remove affected person to fresh air until recovered.
 If symptoms develop or persist, seek medical advice immediately.
 Over-exposure by inhalation is improbable. Check for other causes of observed symptoms and seek medical advice.

Ingestion Rinse mouth and then drink plenty of water.
 If swallowed do NOT induce vomiting; seek medical advice immediately and show this container or label or contact the Poisons Information Centre on 13 11 26 (Aust). Make every effort to prevent vomit from entering the lungs by careful placement of the patient.

Skin Do not give anything by mouth to a semi-conscious or unconscious person.
 Wash affected areas thoroughly with soap and water.
 Remove contaminated clothing and launder before re-use.

Eye If irritation persists, seek medical advice.
 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.



Material Safety Data Sheet

CS: 1.4.93

Page: 2 of 4

Infosafe No™ 3NULJ Issue Date : June 2011 ISSUED by CRPCARE

Product Name **Vivando® Fungicide**

Not classified as hazardous

Advice to Doctor Treat symptomatically.

5. FIRE FIGHTING MEASURES

Suitable Extinguishing Media If involved in a fire, the product will not burn. Choose extinguishing media to suit the burning material.

Hazards from Combustion If involved in a fire, the dehydrated components may emit oxides of carbon, oxides of nitrogen and hydrogen bromide.

Products

Other Information STOP FIRE WATER FROM ENTERING DRAINS OR WATER BODIES.

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. If product has dried out and the possibility of dust generation exists, wear a suitable respirator.

7. HANDLING AND STORAGE

Precautions for Safe Handling Do NOT contaminate dams, rivers or streams, or any other water bodies with chemical or used containers.

Conditions for Safe Storage Store in the closed, original container in a dry, cool well ventilated area out of direct sunlight. Do not store below -5 °C. Ideally, the product should be stored at temperatures below 35°C. Properties of the product may change if stored above this temperature for extended periods.

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.

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

Personal Protective Equipment It is good practice to wear suitable personal protective equipment (PPE). 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 gloves and goggles. 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.

Requirements Concerning Special Training 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

Form Liquid

Appearance Beige Liquid

Solubility in Water Disperses in water.

pH Value 5.5 - 9 (undiluted)

Vapour Pressure 0.153 (metrafenone)

Volatile Component ~50%

Octanol/Water Partition Coefficient Kow Log P is 4.3 (metrafenone)

Flammability Non combustible material.



Infosafe No™ 3NULJ Issue Date : June 2011 ISSUED by CRPCARE

Product Name **Vivando® Fungicide**

Not classified as hazardous

10. STABILITY AND REACTIVITY

Chemical Stability Stable under normal conditions.
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 Breathing in high concentrations of aerosols of this material may have the effects above for vapour and, in addition, may cause nausea and irritation of the nose, throat and respiratory tract.
Ingestion The concentrate is of low toxicity if swallowed.
Amounts swallowed incidental to normal handling procedures and use are not expected to cause injury.
Possible symptoms of exposure to the concentrate include: nausea, vomiting and abdominal pains.
Skin May irritate the skin.
Eye May irritate the eyes.
Chronic Effects Based on available data, repeated exposures are not anticipated to cause additional significant adverse effects.
Acute Toxicity - Oral LD50 (rat) 5,000 mg/kg for metrafenone
Acute Toxicity - Dermal LD50 (rat) 5,000 mg/kg for metrafenone
Acute Toxicity - Inhalation LC50 (rat) (4hr) >3.7 mg/l for metrafenone
Eye Irritation Mild eye irritant.
Skin Irritation Mild skin irritant.
Skin Sensitisation Product is not a skin sensitiser.

12. ECOLOGICAL INFORMATION

Persistence / Degradability Not readily biodegradable.
Bioaccumulative Potential Bioconcentration Factor (BCF) for metrafenone is 530.
Known Harmful Effects on the Environment The product is a marine pollutant for sea transport.
Other Precautions Do not contaminate dams, waterways or sewers with this product or the containers which have held this product.
Environ. Protection Spray drift can cause damage, read the label for more information.
Acute Toxicity - Fish Not toxic to fish.
LC50 (96hr) for rainbow trout is >104 mg/l for the formulated product
LC50 (48hr) for the formulated product is >1.98 mg/l.
Acute Toxicity - Daphnia EC50 (72hr) for Raphidocelis subcapitata is 0.71 mg/l for metrafenone.
Acute Toxicity - Algae EC50 (72hr) for Raphidocelis subcapitata is 0.71 mg/l for metrafenone.
Acute Toxicity - Other Organisms Not toxic to bees.
Birds: Not toxic to birds. LD50 for northern bobwhite quail is >2,025 mg/kg

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 Do not use this container for any other purpose. Thoroughly wash out the inner and add washings to the spray tank. Dispose of washed inner and cardboard box in landfill.



Material Safety Data Sheet

CS: 1.4.93

Page: 4 of 4

Infosafe No™ 3NULJ Issue Date : June 2011 ISSUED by CRPCARE

Product Name **Vivando® Fungicide**

Not classified as hazardous

If recycling, replace cap and return clean containers to recycler or designated collection point.
If not recycling, break, crush or puncture and deliver empty packaging for appropriate disposal at an approved waste management facility.
If an approved waste management facility is not available, bury the empty packaging 500mm below the surface in a disposal pit specifically marked and set up for this purpose clear of waterways, desirable vegetation and tree roots, in compliance with relevant local, state or territory government regulations.
Empty containers and product should not be burnt.

14. TRANSPORT INFORMATION

Transport Information Storage and Transport It is good practice not to transport agricultural chemical products with food, food related materials and animal feedstuffs.
Considered non dangerous for road and rail transport (in packaging, including IBCs not greater than 3000 Lt each) 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 3082, HazChem code 2Z.

UN Number (Sea Transport) 3082

IMO Class/Packing Group Class 9; Packing Group III

IMO Marine Pollutant Marine Pollutant

IMO Proper Shipping Name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
(contains metrafenone 42%)

15. REGULATORY INFORMATION

Poisons Schedule S5

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

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

16. OTHER INFORMATION

Date of preparation or last revision of MSDS Revised 27/06/2011

Contact Person/Point Normal Hours: Mrs Kathleen Marsh Phone: +61 3 9282 1000
After Hours: Shift Supervisor Phone: 1800 033 498

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

Other Information ® Registered Trademark of BASF
...End Of MSDS...

© Copyright ACOHS Pty Ltd

Copyright in the source code of the HTML, PDF, XML, XFO and any other electronic files rendered by an Infosafe system for Infosafe MSDS displayed is the intellectual property of Acohs Pty Ltd.

Copyright in the layout, presentation and appearance of each Infosafe MSDS displayed is the intellectual property of Acohs Pty Ltd.
The compilation of MSDS's displayed is the intellectual property of Acohs Pty Ltd.

Copying of any MSDS displayed is permitted for personal use only and otherwise is not permitted. In particular the MSDS's displayed cannot be copied for the purpose of sale or licence or for inclusion as part of a collection of MSDS without the express written consent of Acohs Pty Ltd.