



MATERIAL SAFETY DATA SHEET

Page 1 of 4
Date of Issue 16/10/01
MSDS No. 3003

STATEMENT OF HAZARDOUS NATURE

Hazardous according to the criteria of Worksafe Australia.

COMPANY DETAILS

Company Scotts Australia Pty. Ltd.
Address 11 Columbia Way,
Baulkham Hills, NSW, 2153
Telephone Number (02) 8853 7300
Fax (02) 8853 7310
Emergency Telephone Number Australia: 1800 033 111
New Zealand: 0800 734 607

IDENTIFICATION

Product Name **BANROT 400WP BROAD SPECTRUM FUNGICIDE FOR ORNAMENTAL PLANTS**
Other Names Banrot 40% Wettable Powder
Manufacturers Product Code 95200
UN Number UN 1759
Dangerous Goods Class Class 8 - Corrosive Solid NOS (II)
Hazchem Code 2X
Packaging Group I,II or III
Poisons Schedule 5
Uses A broad-spectrum fungicide for the control of soil borne diseases of ornamental plants.

Physical Description /Properties

Appearance & Odour Tan powder; musty
Melting point/softening point Not known
Boiling point
Vapour Pressure <0.1 mm Hg at 68°F
Flashpoint >200 °F
Flammability Limits Not known
Solubility in Water 50 ppm at 25°C for active; product disperses in water; typical suspensibility is 40%.
pH
Incompatibility Strong oxidisers, acids, bases and salt suspensions.
Specific Gravity
Bulk density 640 kg per cubic metre
Volatile Proportion Non volatile
Corrosiveness

**BANROT 400WP BROAD SPECTRUM FUNGICIDE FOR
ORNAMENTAL PLANTS**

Page 2 of 4
Date of Issue October 2001
MSDS No 3003

Ingredients

Ingredient	Chemical Name	CAS Number	Proportion g/kg
Active ingredients	Thiophanate-methyl	23564-05-8	250 g
	Etridiazole	2593-15-9	150 g
Inerts	Clay diluents Surfactants and dispersants	61790-53-2, 7631-86-9, 1332-58-7 64742-95-6, 71-36-3, 91-20-3, 73296-89-6, 9084-06-4, 7757-82-6, 50-00-0, 7732-18-5	450-550g <75g

HEALTH HAZARD INFORMATION

Health Effects

Acute

Swallowed Moderately toxic. Excessive exposure to etridiazole may cause liver damage. Ingestion of large amounts of product may cause throat irritation, nausea, and diarrhea.

Eye Can cause eye damage.

Skin Moderately toxic. Excessive exposure to etridiazole may cause liver damage. Absorption through the intact skin may contribute to exposure. Prolonged or repeated skin contact can cause irritation.

Inhaled Inhalation of high dust levels may cause irritation and coughing. Nausea may develop in severe cases.

Chronic Results of a lifetime feeding study indicate that etridiazole is carcinogenic to rats at levels of 640 ppm and 1280 ppm in the diet. No increase in tumours was found at a dosage level of 100 ppm. Mutagenic and reproductive effects are reported in the NIOSH Registry of Toxic Effects [USA].

Medical conditions Persons with pre-existing skin disorders or impaired respiratory function may which may be aggravated be more susceptible to effects of substance.
by contact

First Aid

Swallowed If more than 15 minutes from an hospital, induce vomiting preferably using Ipecac Syrup APF.

Eye Hold eyes open and flush with plenty of water for at least 15 minutes and see a doctor.

Skin Remove any contaminated clothing. Wash affected area with soap and water. If irritation persists, see a doctor.

Inhaled Remove affected person to fresh air and monitor airways and breathing. Get medical aid if condition persists.

First Aid Facilities Eye wash, hand wash, Ipecac Syrup APF.

Advice to Doctor Treat symptomatically.

**BANROT 400WP BROAD SPECTRUM FUNGICIDE FOR
ORNAMENTAL PLANTS**

Page	3 of 4
Date of Issue	October 2001
MSDS No	3003

PRECAUTIONS FOR USE

Exposure Standards Exposure limit standards for some of the constituents of this preparation are as follows:

<u>Constituent:</u>	<u>OSHA</u>	<u>ACGIH</u>
Thiophanate-methyl	None	None
Etridiazole	None	None

Engineering Controls Ventilation is recommended whenever dust levels are high or product does not remain intact.

Personal Protection After eating and before eating, drinking or smoking, wash hands arms and face thoroughly with soap and water. Applicators and handlers should wear long-sleeved shirt and long pants, waterproof gloves and protective eyewear. If working in enclosed areas, a respirator with either an organic vapour-removing cartridge with a pre-filter approved for pesticides, or a canister approved for pesticides.

SAFE HANDLING INFORMATION

Storage and Transport Store in the closed original container, in a dry, cool well ventilated area out of direct sunlight. Do not store with seed, feed, foodstuffs, insecticides, herbicides or fertilisers.

Spills and Disposal Sweep up spilled material and return to the original container or to a well marked drum. Clean-up personnel require protective clothing and respiratory protection. Avoid dusting or misting conditions during clean-up. After cleaning up spill, flush area with water taking care that washings do not enter sewers, drains or other waterways. Triple or preferably pressure rinse containers before disposal. Add rinsings to spray tank. Do not dispose of undiluted chemicals on site. Break, crush or puncture and bury empty containers in a local authority land-fill. If no land-fill is available bury the container below 500 mm 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. Wash contaminated equipment taking care that washings do not enter sewers, drains and other waterways.

Fire/Explosion Hazard Not flammable. Toxic chlorine and oxides of sulphur and nitrogen may be emitted when heated to decomposition. Flood with water.

**BANROT 400WP BROAD SPECTRUM FUNGICIDE FOR
ORNAMENTAL PLANTS**

Page 4 of 4
Date of Issue October 2001
MSDS No 3003

OTHER INFORMATION

Environmental Protection Fish: The product is slightly toxic to some fish (rainbow trout) and highly toxic to other fish (catfish). Birds: The product has low toxicity to birds. Moderately toxic to earthworms.

Animal Toxicity Data	Thiophanate-methyl	Etridiazole
LD50 oral, rat	6,640 mg/kg	1077 mg/kg
LD50 oral, mouse	3,400 mg/kg	
LD50 oral, rabbit	2,270 mg/kg	1370 mg/kg
LD50 dermal, rabbit		>5000 mg/kg
Inhalation LC50, rat - 1 hour		>200 mg/L
Rainbow trout LC50		>4.0 mg/L
Bluegill LC50		>7.5 mg/L

NRA Registration No. 52741

CONTACT POINT

Emergency Response for Transport and Exposure	Scotts Australia Pty Ltd
Australia: 1800 033 011	11 Columbia Way
New Zealand: 0800 734 607	Baulkham Hills NSW 2153
	Phone (02) 8853 7300
	Fax (02) 8853 7310