

MATERIAL SAFETY DATA SHEET



95023

Banrot® 40% Wettable Powder

Scotts-Sierra Crop Protection Company
The Scotts Company
14111 Scottslawn Road
Marysville, Ohio 43041

In Case of Emergency call:
CHEMTREC 1-800-424-9300
International Emergency Telephone Number:
1-703-527-3887 (USA)
For non-Emergency calls:
1-937-644-0011(USA)

I. MATERIAL IDENTIFICATION

Product Name: Banrot® 40% Wettable Powder
EPA Reg. #: 58185-10
Stock Number: 95023

NFPA Hazard Ratings	
Health	3
Flammability	0
Reactivity	1

0 Least
1 Slight
2 Moderate
3 High
4 Severe

II. HAZARDOUS INGREDIENTS

MATERIAL	CAS #	OSHA PEL	ACGIH TLV
Thiophanate-methyl, (Dimethyl [(1,2-phenylene) bis (iminocarbonothioyl)] bis [carbamate])	23564-05-8	None	None
5-Ethoxy-3-trichloromethyl-1,2,4-thiadiazole (Etridiazole)	2593-15-9	None	None

The ACGIH Threshold Limit Values for nuisance (inert) dusts containing <1% crystalline silica and no asbestos are:
10 mg/m³ total, 5 mg/m³ respirable.

III. FIRST AID PROCEDURES

Eyes: If in eyes, flush with water for 15 minutes holding eyelids open. **Get medical attention immediately!**
Ingestion: Promptly drink a large quantity of milk, egg white, gelatin solution or if these are not available, drink large quantities of water. Avoid alcohol. **CALL A PHYSICIAN IMMEDIATELY.**
Skin: Remove contaminated clothing. Wash with soap and water. Get medical attention if irritation develops or persists.

Inhalation: Remove to fresh air. Induce coughing immediately. Treat symptomatically.

Note to Physician: Probable mucosal damage may contraindicate the use of gastral lavage. Measures against circulatory shock, respiratory depression and convulsion may be needed.

IV. HEALTH HAZARD INFORMATION

Summary of Risks

Active ingredients are moderately toxic by ingestion and skin contact. Excessive exposure to Etridiazole may cause liver damage. Absorption through the intact skin may contribute to exposure.

Ingestion of large amounts of product may cause throat irritation, nausea, and diarrhea. Inhalation of high dust levels may cause irritation and coughing. Nausea may develop in severe cases. Prolonged or repeated skin contact can cause irritation. Corrosive! Causes eye damage and skin irritation.

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 tumors was found at a dosage level of 100 ppm.

Mutagenic and reproductive effects are reported in the NIOSH Registry of Toxic Effects.

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

Target Organs: Liver, eyes, respiratory tract, and gastrointestinal tract.

Primary Entry Route(s): Ingestion, inhalation and skin absorption.

Chronic Effect(s): See summary.

Acute Effects: See summary.

Toxicological Data

for Active Ingredients

Thiophanate-methyl:

Oral LD50 (rat): 6640 mg/kg

Oral LD50 (mouse): 3400 mg/kg

Oral LD50 (rabbit): 2270 mg/kg

Etridiazol:

Oral LD50 (rat): 1077 mg/kg

Oral LD50 (rabbit): 779 mg/kg

Dermal LD50 (rabbit): 1370 mg/kg

Inhalation LC50 (rat, 1 hr.): > 200 mg/1.

Ingredients Listed as a Carcinogen

IARC Monographs: No

NTP: No

OSHA: No

V. PERSONAL PROTECTION AND PRECAUTIONS

Applicators and other handlers must wear:

Long-sleeved shirt and long pants

Waterproof gloves

Protective eyewear

For exposures in enclosed areas, a respirator with either an organic vapor-removing cartridge with a prefilter approved for pesticides (MSHA/NIOSH approval prefix TC-23C), or a canister approved for pesticides (MSHA/NIOSH approval prefix TC-21C).

For exposures outdoors, dust/mist filtering respirator (MSHA/NIOSH approval number prefix TC-21C).

Workplace Considerations

Avoid personal contact. Wear protective clothing.

Ventilation: Ventilation and personal protection are recommended whenever dust levels are high or product does not remain intact.

Safety Stations: Running water should be available in case material gets in eyes.

VI. PHYSICAL HAZARD INFORMATION

Flammable Limits (% in Air):	Not known	Color:	Tan powder
Extinguishing Media:	Water spray, dry chemical	Odor:	Musty
Auto Ignition Temperature:	N/A	Melting Point:	Not known
Flash Point (method):	> 200°F	Boiling Point:	AI decomposes on heating
		Solubility in H ₂ O	50 ppm @ 25C for AI
		Specific Gravity:	(H ₂ O = 1) 40 lbs/ft ³
		Vapor Pressure:	< 0.1mm Hg at 68°F
		Evaporation Rate:	Not known
		Specific gravity:	40 lbs/ft ³

Reactivity

Stability: Stable
Hazardous Polymerization: Will Not Occur
Conditions to Avoid: Extreme heat. Contact with strong oxidizers, acids, bases, and salt suspensions.
Hazardous Decomposition
Products: Toxic chlorine and oxides of sulfur and nitrogen.
Chemical Incompatibilities: Strong oxidizers, acids, bases, and salt suspensions.
Unusual Fire, Explosion and Reactivity Hazards: When heated to decomposition it emits toxic chlorine and oxides of sulfur and nitrogen.
In Case of Fire: Evacuate area. Flood with water. To fight large fires, wear full protective clothing and NIOSH approved self-contained breathing apparatus with full facepiece operated in the pressure/demand mode.

VII. REGULATORY INFORMATION

DOT Classification: Corrosive Solid NOS, 8, UN 1759, PG III (Thiophanate-Methyl, Etridazole), Limited Quantity.

VIII. STORAGE AND SPECIAL PRECAUTIONS

Storage Segregation

Store in a cool, dry area away from incompatible materials and heat sources. Store away from feed and foodstuffs, as well as household cleaning products. Wash hands with soap and water after handling product.

Precautions to be taken in handling and storage

KEEP OUT OF REACH OF CHILDREN. Dispose of container in an approved waste facility.

In case of spills

Ventilate area. Cleanup personnel require protective clothing and respiratory protection.

Avoid dusting or misting conditions during cleanup. If material is uncontaminated, collect and reuse as recommended for product. If contaminated, put in appropriate container and dispose. Keep spills away from drinking water supplies. After cleaning up spill, flush area with water.

Waste Management/Disposal

If product is not contaminated, collect and reuse as recommended for product. If product is contaminated, dispose of in an approved landfill disposal facility, in accordance with applicable federal, state, and local regulations. Dispose of container in an approved waste facility.

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