

# MATERIAL SAFETY DATA SHEET

Date-Issued: 01/18/2001  
MSDS Ref. No: 95200  
Date-Revised: 01/23/2001  
Revision No: New MSDS

Banrot® 40% Wettable Powder

## 1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Banrot® 40% Wettable Powder  
PRODUCT DESCRIPTION: Fungicide

### MANUFACTURER

The Scotts Company  
Earthgro - Hyponex - Miracle Gro - Scotts  
Scotts Sierra - Swiss Farms  
14111 Scottslawn Road  
Marysville, OH 43041

### 24 HR. EMERGENCY TELEPHONE NUMBERS

CHEMTREC (U.S.): (800) 424-9300  
International: 1-703-527-3887  
Emergency Phone: 1-937-644-0011

EPA REG. NO.: 58185-10 PN: 95200

## 2. COMPOSITION / INFORMATION ON INGREDIENTS

<u>Chemical Name</u>	<u>CAS#</u>	<u>OSHA PEL</u>	<u>ACGIH TLV</u>
5-Ethoxy-3-trichloromethyl-1,2,4-triazole (Etridiazole)	2593-15-9	None	None
Dimethyl [(1,2-phenylene) bis (iminocarbonothioyl)] bis [carbamate] (Thiophanate-methyl)	23564-05-8	None	None

COMMENTS: The ACGIH Threshold Limit Values (TLV) for nuisance (inert) dusts containing < 1% crystalline silica and no asbestos are: 10 mg/m<sup>3</sup> inhalable particulates and 3 mg/m<sup>3</sup> respirable particulate. The OSHA TLV is 15 mg/m<sup>3</sup> total dust, 5 mg/m<sup>3</sup> respirable fraction.

## 3. HAZARDS IDENTIFICATION

### EMERGENCY OVERVIEW

IMMEDIATE CONCERNS: May cause skin and eye irritation.

### POTENTIAL HEALTH EFFECTS

EYES: May cause eye irritation.

SKIN: May cause skin irritation.

SKIN ABSORPTION: Absorption through intact skin may contribute to exposure.

INGESTION: Moderately toxic by ingestion. The degree of injury will depend on the amount absorbed from the gut. Ingestion of large amounts of product may cause throat irritation, nausea, and diarrhea.

INHALATION: Excessive inhalation of dust may cause irritation and coughing.

ACUTE TOXICITY: Prolonged or repeated skin contact may cause irritation and contact dermatitis (skin sensitization reactions) characterized by redness and pain. Nausea may develop in severe cases of inhalation overexposure.

CHRONIC: Excessive exposure to Etridiazole may cause liver damage.

MEDICAL CONDITIONS AGGRAVATED: Persons with pre-existing skin disorders or impaired respiratory function may be more susceptible to effects of the substance.

ROUTES OF ENTRY: Ingestion, skin, inhalation.

## 4. FIRST AID MEASURES

EYES: If in eyes, hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing. Call a poison control center or doctor for treatment advice.

**SKIN:** If on skin or clothing, take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.

**INGESTION:** If swallowed, call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to by the poison control center or doctor. Do not give anything by mouth to an unconscious person.

**INHALATION:** Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth, if possible. Call a poison control center or doctor for further treatment advice.

**NOTES TO PHYSICIAN:** Probable mucosal damage may contraindicate the use of gastric lavage. Measures against circulatory shock, respiratory depression, and convulsion may be needed.

---

## 5. FIRE FIGHTING MEASURES

**EXTINGUISHING MEDIA:** Water spray, dry chemical.

**FIRE FIGHTING PROCEDURES:** 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.

**AUTOIGNITION TEMPERATURE:** Not Applicable

**FLASHPOINT:** >200 degrees F.

**HAZARDOUS DECOMPOSITION PRODUCTS:** Toxic chlorine and oxides of sulfur and nitrogen.

---

## 6. ACCIDENTAL RELEASE MEASURES

**GENERAL PROCEDURES:** Ventilate area. Cleanup personnel require protective clothing and respiratory protection. Avoid dusting or misting condition during cleanup. If material is uncontaminated, collect and reuse as recommended for product. If contaminated, put in appropriate container and dispose according to local, state, or Federal regulations. Keep spills away from drinking water supplies. After spill cleanup, flush area with water.

---

## 7. HANDLING AND STORAGE

**HANDLING:** See label. Wash hands with soap and water after handling product. Avoid container breakage. Avoid inhalation or contact with skin, eyes, or clothing. Do not contaminate water sources when disposing of equipment wash waters. Keep out of lakes, streams, or ponds. KEEP OUT OF REACH OF CHILDREN.

**STORAGE:** See label. KEEP OUT OF REACH OF CHILDREN. Avoid container breakage. Store in cool, dry area in closed container or package. Keep away from feed or foodstuffs.

---

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

**ENGINEERING CONTROLS:** Use adequate ventilation to keep the airborne concentrations of this material below the recommended exposure standard.

### PERSONAL PROTECTIVE EQUIPMENT

**EYES AND FACE:** Use of chemical safety goggles and/or full face shield where dusting or splashing of solutions is possible is recommended. Contact lenses should not be worn when working with this material. Running water/cycowash station should be available in case material get in eyes.

**SKIN:** Applicators and other handlers must wear long-sleeved shirt and long pants, waterproof gloves, and chemical-resistant footwear plus socks. See label for additional precautions and user safety recommendations.

**RESPIRATORY:** For application outdoors, wear a dust/mist filtering respirator (MSHA/NIOSH approval number prefix TC-21C). For application in enclosed areas, a respirator with either an organic vapor-removing cartridge with a prefilter approved for pesticides (MSHA/NIOSH approval number prefix TC-23C), or a canister approved for pesticides (MSHA/NIOSH approval number TC-14G).

**Ventilation:** None required for routine outdoor use. For indoor use, a local exhaust system which captures contaminants at its source is recommended to prevent dispersion into the workroom air. If this is not feasible, general dilution ventilation is recommended.

---

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**PHYSICAL STATE:** Powder  
**COLOR:** Tan  
**VAPOR PRESSURE:** <0.1 mm Hg at 68F  
**SOLUBILITY IN WATER:** 50 ppm Al @ 25C  
**DENSITY:** 40 lbs/fl3

---

## 10. STABILITY AND REACTIVITY

**STABLE:** YES  
**HAZARDOUS POLYMERIZATION:** NO  
**CONDITIONS TO AVOID:** Extreme heat. Contact with strong oxidizers, acids, and bases.  
**POLYMERIZATION:** Will not occur  
**INCOMPATIBLE MATERIALS:** Strong oxidizers, acids, bases, and salt suspensions.

---

## 11. TOXICOLOGICAL INFORMATION

### ACUTE

**DERMAL LD<sub>50</sub>:** Dermal LD50 (rabbit): 1370 mg Etridiazole/kg.  
**ORAL LD<sub>50</sub>:** Oral LD50 (rat): 1077 mg Etridiazole/kg; Oral LD50 (rat): 6640 mg Thiophanate-methyl.  
**INHALATION LC<sub>50</sub>:** Inhalation LC50 (rat, 1 hr.) >200 mg Etridiazole/L air.

**SENSITIZATION:** Sensitizer

**TARGET ORGANS:** Skin, eyes, respiratory tract, liver, and gastrointestinal tract.

### CARCINOGENICITY:

**IARC:** No  
**NTP:** No  
**OSHA:** Yes (Etridiazole)

---

## 12. ECOLOGICAL INFORMATION

**ECOTOXICOLOGICAL INFORMATION:** This product is toxic to fish. Keep out of lakes, streams, and ponds. Do not contaminate water sources by cleaning of equipment or disposal of wastes.

---

## 13. DISPOSAL CONSIDERATIONS

**DISPOSAL METHOD:** Disposal must be in accordance with Federal, state, and local regulations. Dispose of container in an approved waste facility.

---

## 14. TRANSPORT INFORMATION

### DOT (DEPARTMENT OF TRANSPORTATION)

**PROPER SHIPPING NAME:** This product is not DOT regulated when transported over land in non-bulk packaging.  
**OTHER SHIPPING INFORMATION:** Shipping Description - Environmentally Hazardous Substance, (Etridiazole), Solid, n.o.s., 9, UN3077, PGIII, Marine Pollutant (Etridiazole) - only when transported in bulk or transported by vessel over water.

**SPECIAL SHIPPING NOTES:** The description shown may not apply to all shipping situations. Consult 49CFR, or appropriate Dangerous Goods Regulations, for additional description requirements (e.g., technical name) and mode-specific or quantity-specific shipping requirements.

---

## 15. REGULATORY INFORMATION

### UNITED STATES

SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)

### 311/312 HAZARD CATEGORIES:

FIRE: NO PRESSURE GENERATING: NO REACTIVITY: NO ACUTE: YES CHRONIC: YES

---

## 16. OTHER INFORMATION

### REVISION SUMMARY New MSDS

### NFPA CODES

HEALTH: 3 FIRE: 0 REACTIVITY: 1

### HMIS CODES

HEALTH: 3 FIRE: 0 REACTIVITY: 1

**MANUFACTURER DISCLAIMER:** The information contained herein is, to the best of the Manufacturer's (see Section 1) knowledge and belief, accurate and reliable as of the date of preparation of this document. However, no warranty or guarantee, express or implied, is made as to the accuracy or reliability, and the Manufacturer shall not be liable for any loss or damage arising out of the use thereof. No authorization is given or implied to use any patented invention without a license. In addition, the Manufacturer shall not be liable for any damage or injury resulting from abnormal use, from any failure to adhere to recommended practices or from any hazards inherent in the nature of the product.