

MERTECT 340-F

Syngenta Crop Protection, Inc.
Post Office Box 18300
Greensboro, NC 27419
In Case of Emergency, Call 1-800-888-8372

1. PRODUCT IDENTIFICATION

Product Name: MERTECT 340-F
Product No.: A10466A
EPA Signal Word: Caution
Active Ingredient(s): Thiabendazole (42.3%)
CAS No.: 148-79-8
Chemical Name: 2-(4-thiazolyl)benzimidazole
Chemical Class: Benzimidazole Fungicide
EPA Registration Number(s): 100-889
Section(s) Revised: All sections

2. COMPOSITION/INFORMATION ON INGREDIENTS

Material	OSHA PEL	ACGIH TLV	Other	NTP/ IARC/ OSHA Carcinogen
Propylene Glycol	Not Established	Not Established	50 ppm TWA AIHA WEEL****	No
Thiabendazole (42.3%)	Not Established	Not Established	5 mg/m ³ ***	No

*** Syngenta Occupational Exposure Limit (OEL)
**** Recommended by AIHA (American Industrial Hygiene Association)

Ingredients not precisely identified are proprietary or non-hazardous. Values are not product specifications.

3. HAZARDS IDENTIFICATIONSymptoms of Acute Exposure

May cause eye irritation.

Hazardous Decomposition Products

Can decompose at high temperatures forming toxic gases.

Physical Properties

Appearance: Light green suspension

Odor: Paint-like

Unusual Fire, Explosion and Reactivity Hazards

During a fire, irritating and possibly toxic gases may be generated by thermal decomposition or combustion.

4. FIRST AID MEASURES

Have the product container, label or Material Safety Data Sheet with you when calling Syngenta (800-888-8372), a poison control center or doctor, or going for treatment.

Ingestion: If swallowed: Call Syngenta (800-888-8372), a poison control center or doctor immediately for treatment advice. Have the person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so after calling 800-888-8372 or by a poison control center or doctor. Do not give anything by mouth to an unconscious person.

Eye Contact: If in eyes: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after 5 minutes, then continue rinsing eye. Call Syngenta (800-888-8372), a poison control center or doctor for treatment advice.

Skin Contact: If on skin or clothing: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call Syngenta (800-888-8372), a poison control center or doctor for treatment advice.

Inhalation: If inhaled: 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 Syngenta (800-888-8372), a poison control center or doctor for further treatment advice.

Notes to Physician

There is no specific antidote if this product is ingested. Treat symptomatically.

Medical Condition Likely to be Aggravated by Exposure

None known.

5. FIRE FIGHTING MEASURESFire and Explosion

Flash Point (Test Method): Not Applicable

Flammable Limits (% in Air):

Lower: % Not Applicable

Upper: % Not Applicable

Autoignition Temperature: Not Available

Flammability: Not Applicable

Unusual Fire, Explosion and Reactivity Hazards

During a fire, irritating and possibly toxic gases may be generated by thermal decomposition or combustion.

In Case of Fire

Use dry chemical, foam or CO₂ extinguishing media. Wear full protective clothing and self-contained breathing apparatus. Evacuate nonessential personnel from the area to prevent human exposure to fire, smoke, fumes or products of combustion. Prevent use of contaminated buildings, area, and equipment until decontaminated. Water runoff can cause environmental damage. If water is used to fight fire, dike and collect runoff.

6. ACCIDENTAL RELEASE MEASURESIn Case of Spill or Leak

Control the spill at its source. Contain the spill to prevent from spreading or contaminating soil or from entering sewage and drainage systems or any body of water. Clean up spills immediately, observing precautions in Protective Equipment Section. Cover entire spill with absorbing material and place into compatible disposal container. Scrub area with hard water detergent (e.g. commercial products such as Tide, Joy, Spic and Span). Pick up wash liquid with additional absorbent and place into compatible disposal container. Once all material is cleaned up and placed in a disposal container, seal container and arrange for disposition.

7. HANDLING AND STORAGE

Store the material in a well-ventilated, secure area out of reach of children and domestic animals. Do not store food, beverages or tobacco products in the storage area. Prevent eating, drinking, tobacco use, and cosmetic application in areas where there is a potential for exposure to the material. Wash thoroughly with soap and water after handling.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

THE FOLLOWING RECOMMENDATIONS FOR EXPOSURE CONTROLS/PERSONAL PROTECTION ARE INTENDED FOR THE MANUFACTURE, FORMULATION, PACKAGING AND USE OF THIS PRODUCT.

FOR COMMERCIAL APPLICATIONS AND/OR ON-FARM APPLICATIONS CONSULT THE PRODUCT LABEL.

Ingestion: Prevent eating, drinking, tobacco usage and cosmetic application in areas where there is a potential for exposure to the material. Wash thoroughly with soap and water after handling.

Eye Contact: Where eye contact is likely, use chemical splash goggles.

Skin Contact: Where contact is likely, wear chemical-resistant (such as nitrile or butyl) gloves, coveralls, socks and chemical-resistant footwear. For overhead exposure, wear chemical-resistant headgear.

Inhalation: Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below exposure limits. A NIOSH-certified combination air-purifying respirator with an N, P or R 95 or HE class filter and an organic vapor cartridge may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits. Protection provided by air-purifying respirators is limited. Use a pressure demand atmosphere-supplying respirator if there is any potential for uncontrolled release, exposure levels are not known, or under any other circumstances where air-purifying respirators may not provide adequate protection.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Light green suspension

Odor: Paint-like

Melting Point: Not Available

Boiling Point: Not Available

Specific Gravity/Density: 1.14 - 1.17 g/cm³ @ 68°F - 77°F (20°C - 25°C)

pH: 5.5 - 7.5 (1% in deionized water)

Solubility in H₂O

Thiabendazole: 30mg/l (pH 7, pH 10) @ 68°F in water

Vapor Pressure

Thiabendazole: 4.0 x 10⁻⁹ mmHg @ 77°F (25°C)

10. STABILITY AND REACTIVITY

Stability: Stable under normal use and storage conditions.

Hazardous Polymerization: Will not occur.

Conditions to Avoid: None known.

Materials to Avoid: None known.

Hazardous Decomposition Products: Can decompose at high temperatures forming toxic gases.

11. TOXICOLOGICAL INFORMATIONAcute Toxicity/Irritation Studies (Finished Product)

Ingestion: Practically Non-Toxic

Oral (LD50 Rat): > 5,000 mg/kg body weight

Dermal: Slightly Toxic

Dermal (LD50 Rabbit): > 2,000 mg/kg body weight

Inhalation: Not Available

Inhalation (LC50 Rat): Not Available

Eye Contact: Mildly Irritating (Rabbit)

Skin Contact: Non-Irritating (Rabbit)

Skin Sensitization: Not a Sensitizer (Guinea Pig)

Reproductive/Developmental Effects

Thiabendazole: Decreased fetal weights and increased incidence of resorptions observed in dose levels that were maternally toxic. An increase in skeletal defects and cleft palate was observed in fetuses of mice.

Chronic/Subchronic Toxicity Studies

Thiabendazole: Increased incidence of anemia and changes in the thyroid, liver, spleen, kidney and gall bladder in rats and dogs.

Carcinogenicity

Thiabendazole: None observed.

Other Toxicity Information

None

Toxicity of Other Components

Propylene Glycol

Reported to cause central nervous system depression (anesthesia, dizziness, confusion), headache and nausea. Chronic dietary exposure caused kidney and liver injury in experimental animals.

Target OrgansActive Ingredients

Thiabendazole: Thyroid, liver, spleen, kidney, gall bladder, blood

Inert Ingredients

Propylene Glycol: CNS, kidney, liver

12. ECOLOGICAL INFORMATIONSummary of Effects

Thiabendazole: Very toxic to aquatic organisms. The aquatic toxicity is not increased significantly by chronic exposure. Does not bioaccumulate in fish and is rapidly metabolized.

Eco-Acute Toxicity

Thiabendazole:

Invertebrates (Water Flea) LC50/EC50 0.81 ppm

Fish (Trout) LC50/EC50 0.55 ppm

Fish (Bluegill) LC50/EC50 19 ppm

Birds (8-day dietary - Bobwhite Quail) LC50/EC50 > 5,620 ppm

Birds (8-day dietary - Mallard Duck) LC50/EC50 > 5,620 ppm

Eco-Chronic Toxicity

Thiabendazole: Not Available

Environmental Fate

Thiabendazole:

No data available for the formulation. The information presented here is for the active ingredient, thiabendazole. A thorough review of environmental information is not possible in this document.

Low bioaccumulation potential. Stable in soil and water. Stable in soil and water. Sinks in water (after 24 h).

13. DISPOSAL CONSIDERATIONS

Disposal

Do not reuse product containers. Dispose of product containers, waste containers, and residues according to local, state, and federal health and environmental regulations.

Characteristic Waste: Not Applicable

Listed Waste: Not Applicable

14. TRANSPORT INFORMATION

DOT Classification

Not regulated by DOT.

B/L Freight Classification

Fungicides, NOI, O/T poison

Comments

International Transportation

Environmentally Hazardous Substance, Liquid, N.O.S. (Thiabendazole), Class 9, UN3082, PGIII, Marine Pollutant

15. REGULATORY INFORMATION

EPCRA SARA Title III Classification

Section 311/312 Hazard Classes:

Acute Health Hazard

Chronic Health Hazard

Section 313 Toxic Chemicals: Thiabendazole (42.3%)

(CAS No. 148-79-8)

California Proposition 65

Not Applicable

CERCLA/SARA 302 Reportable Quantity (RQ)

None

RCRA Hazardous Waste Classification (40 CFR 261)

Not Applicable

TSCA Status

Exempt from TSCA, subject to FIFRA

16. OTHER INFORMATION

<u>NFPA Hazard Ratings</u>	<u>HMS Hazard Ratings</u>	
Health: 1	Health: 1	0 Minimal
Flammability: 1	Flammability: 1	1 Slight
Instability: 0	Reactivity: 0	2 Moderate
		3 Serious
		4 Extreme

For non-emergency questions about this product call: 1-800-334-9481

Original Issued Date: 6-5-89

Revision Date: 6-30-03

Replaces: 11-5-01

The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind, expressed or implied, is made with respect to the information contained herein.

RSVP#: SCP-955-889A-00130g VID 7.2.03