

## SAFETY DATA SHEET

### 1. PRODUCT & COMPANY IDENTIFICATION

**Product Name:** Shield-Brite<sup>®</sup> TBZ 500D **EPA Reg. # 64864-66**  
**Product Code:** 10407  
**Product Use:** Thiabendazole Fungicide for Postharvest Drench and Dip Treatments.  
**Supplier:** Pace International, LLC  
**Address:** 5661 Branch Road, Wapato, WA 98951  
**Phone Number:** 800-936-6750 (Monday-Friday, 7:00 a.m. – 4:00 p.m.)  
**Medical Emergency Phone Number:** 888-271-4649 (PROSAR)  
**Transportation Emergency Phone Number:** 800-424-9300 (CHEMTREC)

### 2. HAZARDS IDENTIFICATION

**Classification:**  
Skin irritation, Category 2  
Eye irritation, Category 2B  
Aquatic Toxicity, Category 1

**Hazard Symbols:**



**Hazard Statements:**  
WARNING  
H315 Causes skin irritation.  
H320 Causes eye irritation.  
H400 Very toxic to aquatic life.

**Precautionary Statements:**

**Prevention Statements:**

P264 Wash hands thoroughly after handling.  
P280 Wear long sleeved shirt and pants, socks and shoes, chemical resistant gloves, and safety glasses.  
P273 Avoid release to the environment.

**Response Statements:**

P302/352 IF ON SKIN: Wash with plenty of soap and water.  
P321 Specific treatment See Section 4 First Aid Measures.  
P332/313 If skin irritation occurs: Get medical advice/attention.  
P362/364 Take off contaminated clothing and wash it before reuse.  
P305/351/338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P337/313 If eye irritation persists: Get medical advice/attention.  
P391 Collect spillage.

**Disposal Statements:**

P501 Dispose of contents/container should be made in accordance with applicable regional, national and local laws and regulations.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

<u>Ingredient</u>	<u>CAS #</u>	<u>Concentration (w/w %)</u>
Thiabendazole	148-79-8	42.3 %
Proprietary food grade ingredients		57.7 %

### 4. FIRST AID MEASURES

**General** Have the product container, label or Safety Data Sheet with you when calling a poison control center or physician, or going for treatment.  
**Advice:**  
**If on Skin:** Take off contaminated clothing. Wash skin with plenty of soap and water. If redness, burning, or irritation persists, get medical advice/attention. Wash contaminated clothing before reuse.  
**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 eye. Get medical advice/attention.  
**If Swallowed:** Call a poison control center or doctor for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give anything by mouth to an unconscious person.  
**If Inhaled:** Move person to fresh air. If person is not breathing, call 911 or an ambulance, and then give artificial respiration, preferably mouth-to-mouth, if possible.



## 5. FIRE FIGHTING MEASURES

<b>Extinguishing Media:</b>	Use foam, dry chemical, carbon dioxide, or water spray when fighting fires.
<b>Special Exposure Hazards:</b>	Can burn in fire, releasing irritating and toxic gases due to thermal decomposition or combustion.
<b>Hazardous Combustion Products:</b>	Hydrogen chloride, hydrogen cyanide, Oxides of nitrogen, carbon monoxide.
<b>Special Protective Equipment / Procedures for Firefighters:</b>	Wear self-contained breathing equipment with full face piece. Evacuate area and fight fire upwind from a safe distance to avoid hazardous vapors and decomposition products. Fire exposed containers can build up pressure and should be kept cool with water spray if possible. Dike and collect water used to fight fire to prevent environmental damage due to run off. Minimize use of water to prevent environmental contamination. Contact your State Pesticide or Environmental Control Agency, or nearest EPA Regional Office for guidance on disposal.

## 6. ACCIDENTAL RELEASE MEASURES

<b>Personal Precautions:</b>	Wear long sleeved shirt and pants, socks and shoes, chemical resistant gloves, and safety glasses.
<b>Environmental Precautions:</b>	In case of spill, clean up immediately, observing precautions in Section 8 of this document. Isolate area and deny entry to unnecessary personnel. Do not allow product to enter sewers, lakes, streams or other bodies of water.
<b>Containment / Clean-Up Methods:</b>	In case of spill, clean up immediately, observing precautions in Section 8 of this document. Absorb small spills with sand, vermiculite or other inert absorbent. Placing contaminated material in appropriate container for disposal. Dike large spills using absorbent or impervious material such as clay or sand. Recover and contain as much free liquid as possible for reuse. Allow absorbed material to solidify, and scrape up for disposal. After removal, clean contaminated area thoroughly with water. Pick up wash liquid with additional absorbent and place in a disposable container. Minimize use of water to prevent environmental contamination.

## 7. HANDLING & STORAGE

<b>Handling:</b>	Avoid contact with skin and eyes. Good standards of hygiene should be maintained at all times. Smoking, eating, and drinking are prohibited in the work area. For personal protection wear long sleeved shirt and pants, socks and shoes, chemical resistant gloves, and safety glasses.
<b>Storage:</b>	Store in a cool, dry area at room temperature. Do not store below 32°F (0°C). Repeated product freezing and thawing should be avoided. Shake or stir product before use. Keep container tightly closed when not in use. Keep out of reach of children and livestock.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

<b>Occupational Exposure Limits:</b>	Thiabendazole CAS# 148-79-8 Not established.
<b>Engineering Controls:</b>	Local exhaust ventilation maybe necessary to control air contaminants to their exposure limits. The use of local ventilation is recommended to control emissions near the source. Provide mechanical ventilation for confined spaces. Facilities storing or utilizing this material should be equipped with an eyewash facility and safety shower.
<b>Personal Protective Equipment :</b>	<b>Clothing:</b> Wear long sleeved shirt and pants, socks and shoes, and chemical resistant gloves when handling. <b>Eye Protection:</b> Wear safety glasses. Eye fountain and washing facilities should be present at work area. <b>User Safety Recommendations:</b> Wash hands before eating, drinking, chewing gum, using tobacco or using toilet. Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. Remove PPE immediately after handling this product. Wash outside of gloves before removing. As soon as possible wash thoroughly and change into clean clothing.



**9. PHYSICAL & CHEMICAL PROPERTIES**

<b>Appearance:</b>	Off-white viscous liquid	<b>Upper/Lower flammability limits:</b>	Not available
<b>Odor:</b>	Paint-like odor	<b>Vapor pressure:</b>	5.3 x10 <sup>-4</sup> mPa @ (25°C)
<b>Odor threshold:</b>	Not available	<b>Vapor density: (air =1)</b>	Not applicable
<b>pH:</b>	4.5 – 5.5	<b>Specific Gravity: (H<sub>2</sub>O = 1)</b>	1.13 – 1.17 g/ml (9.43 – 9.79 lb/gl)*
<b>Melting/Freezing point:</b>	Not applicable	<b>Solubility:</b>	Emulsifies
<b>Boiling point:</b>	Not available	<b>Partition coefficient (n-octanol-water):</b>	Log Pow = 2.39 (pH 7, 25°C)
<b>Flash point:</b>	>100°C	<b>Auto-ignition temperature:</b>	Not available
<b>Evaporation rate:</b>	Not available	<b>Decomposition temperature:</b>	Not available
<b>Flammability (solid, gas):</b>	Not applicable	<b>Viscosity:</b>	145.2 cSt (20°C); 84.4 cSt (40°C)

\*Listed density is an approximate value and does not necessarily represent that of a specific batch.

**10. STABILITY & REACTIVITY**

<b>Reactivity hazards:</b>	None known
<b>Chemical stability:</b>	Stable at ambient conditions, however may decompose if heated. Product will not undergo polymerization.
<b>Conditions to avoid:</b>	Avoid temperatures above 115°F (46°C) and below 25°F (-6°C)
<b>Incompatible materials:</b>	Acidic and oxidizing materials
<b>Hazardous decomposition products:</b>	Hydrogen chloride, Oxides of nitrogen due to thermal decomposition.

**11. TOXICOLOGICAL INFORMATION**

<b>Acute toxicity:</b>	<b>Acute Oral:</b>	LD <sub>50</sub> (estimate): > 5000 mg/kg	Based on Ingredients
	<b>Acute Dermal:</b>	LD <sub>50</sub> (estimate): > 5000 mg/kg	Based on Ingredients
	<b>Inhalation:</b>	LC <sub>50</sub> (estimate): > 2.1 mg/L	Based on Ingredients
<b>Skin corrosion/irritation:</b>	Causes skin irritation.		
<b>Eye damage/irritation:</b>	Causes eye irritation		
<b>Respiratory/Skin sensitization:</b>	No evidence of sensitization.		
<b>Germ cell mutagenicity:</b>	Not available		
<b>Carcinogenicity:</b>	No carcinogenic effects are expected due to product being comprised of FDA-approved food-grade ingredients.		
<b>Reproductive toxicity:</b>	Limited evidence of developmental effects in animal studies.		
<b>Target organ effects:</b>	No known target organ effects.		
<b>Aspiration hazard:</b>	Material does not present an aspiration hazard.		
<b>Potential health effects:</b>	May cause eye and skin irritation.		

**12. ECOLOGICAL INFORMATION**

<b>Fish Toxicity:</b>	96 hour LC50 Rainbow trout	.56 ppm
	96 hour LC50 Bluegill	unknown
<b>Avian Toxicity:</b>	Dietary LC50 Bobwhite quail	>10,000 ppm
	Oral LD50 Mallard duck	>5,000 ppm
<b>Bee Toxicity:</b>	Non-toxic	
<b>Persistence/ degradability:</b>	Thiabendazole is highly persistent with a soil half life of >365 days depending on soil type and weather conditions. Relatively immobile in soil depending on organic content.	
<b>Bioaccumulative potential:</b>	Not available	
<b>Mobility in soil:</b>	Not available	
<b>Other adverse effects:</b>	Very toxic to aquatic life.	



### 13. DISPOSAL CONSIDERATIONS

<b>Disposal methods:</b>	Recover or recycle if possible. Do not discharge into sewers, lakes, streams, or other bodies of water. Disposal should be made in accordance with applicable regional, national and local laws and regulations. Consult appropriate regulatory officials for information on disposal, keeping in mind that local regulations may be more stringent than regional or national requirements.
<b>Non-refillable containers:</b>	Do not reuse or refill this container. Triple rinse or pressure rinse container (or equivalent) promptly after emptying. Then offer for recycling if available or puncture and dispose of in a sanitary landfill or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.
<b>Refillable Container:</b>	Refill this container with pesticide only. Do not reuse this container for any other purpose.

### 14. TRANSPORT INFORMATION

	<u>DOT</u>	<u>IMDG</u>	<u>IATA</u>
<b>UN number:</b>	Not applicable	Not applicable	Not applicable
<b>Proper shipping name:</b>	Not regulated	Not regulated	Not regulated
<b>Hazard class(es):</b>	Not applicable	Not applicable	Not applicable
<b>Packing group:</b>	III		
<b>Special precautions:</b>	None		

### 15. REGULATORY INFORMATION

<b>FIFRA:</b>	Shield-Brite TBZ 500D is registered with the U.S. EPA under registration number 64864-66
<b>SARA 313:</b>	Contains thiabendazole (CAS # 148-79-8), which is subject to SARA Title III Section 313 reporting requirements.
<b>TSCA:</b>	All components of this product are included or exempt from inclusion in EPA's Toxic Substances Control Act (TSCA) Chemical Substance Inventory.

### 16. OTHER INFORMATION

<b>HMIS Ratings:</b>	Health – 2	Flammability – 2	Reactivity – 1
<b>NFPA Ratings:</b>			

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This Safety Data Sheet (SDS) serves different purposes than and DOES NOT REPLACE OR MODIFY THE EPA-APPROVED PRODUCT LABEL (attached to and accompanying the product container). This SDS provides important health, safety, and environmental information for employers, employees, emergency responders and others handling large quantities of the product in activities generally other than product use as required by the Occupational Health and Safety Act (29 CFR 1910.1200, "Hazcom"). The product label provides information specifically for product use in the ordinary course. Use, storage and disposal of pesticide products is regulated by the EPA under the authority of FIFRA through the product label. All necessary hazard classification and appropriate precautionary use, storage, and disposal information is set forth on that label or labeling accompanying the pesticide or to which reference is made on the label. It is a violation of federal law to use an EPA-registered pesticide product in any manner inconsistent with its labeling.

<b>SDS preparation date:</b>	October 2, 2015	<b>Replaces MSDS dated:</b>	December 12, 2012
<b>Changes since last revision:</b>	New format to SDS		

