

## SAFETY DATA SHEET

### 1. PRODUCT & COMPANY IDENTIFICATION

**Product Name:** Shield-Brite® TBZ 500D **EPA Reg. # 64864-66**  
**Product Code:** 10456  
**Product Use:** Thiabendazole Fungicide for Postharvest Drench and Dip Treatments.  
**Product Restrictions:** For Agriculture Use Only  
**Manufacturer/Importer/Supplier/Distributor information**  
**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

GHS Classification in accordance with 29 CFR 1910 (2012 OSHA Hazard Communication Standard)  
 This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200).

**Classification:**

Physical Hazard, Not classified  
 Acute toxicity – Oral, Category 4  
 Skin corrosion/irritation, Category 2  
 Serious eye damage/eye irritation,  
 Category 2A  
 Environmental Hazards, Not classified

**Hazard Symbols:**



**Signal Word:**

WARNING

**Hazard Statements:**

H302 Harmful if swallowed.  
 H315 Causes skin irritation.  
 H319 Causes serious eye irritation.

**Hazard(s) not otherwise classified (HNOC):**

(HNOC):

**Supplemental information:**

**Precautionary Statements:**

**Prevention Statements:**

P264 Wash hands thoroughly after handling.  
 P270 Do not eat, drink, or smoke when using this product.  
 P280 Wear long sleeved shirt and pants, socks and shoes, chemical resistant gloves, and safety glasses.

**Response Statements:**

P301/312 IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.  
 P330 Rinse mouth.  
 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.

**Disposal Statements:**

P501 Dispose of contents/container should be made in accordance with applicable regional, national and local laws and regulations.  
 None known.

Exempt – Registered product – (EPA 64864-66)

This is a registered EPA product. The product labeling is in compliance with EPA regulations and guidelines  
 Refer to product label for further information.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Mixture

<u>Chemical name</u>	<u>CAS #</u>	<u>%</u>
Thiabendazole	148-79-8	42.3

**Composition comments:** Other Ingredients not identified are trade secrets and non-hazardous.



#### 4. FIRST AID MEASURES

**General Advice:**

If you feel unwell, seek medical advice (show the label where possible). Show this safety data sheet to the doctor in attendance. Avoid contact with eyes and skin. Keep out of reach of children.

**Skin Contact:**

IF ON SKIN (or clothing): Take off contaminated clothing. Wash skin with plenty of soap and water. If skin irritation occurs: Get medical advice/attention. Wash contaminated clothing before reuse.

**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 the first 5 minutes, then continue rinsing eye. If eye irritation persists: Get medical advice/attention.

**Ingestion:**

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.

**Inhalation:**

IF INHALED: If symptoms develop move victim to fresh air. If symptoms persist, obtain medical attention.

**Most important Symptoms / effects, acute and Delayed:  
Indication of any immediate medical attention and special treatment needed:**

Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Skin irritation. May cause redness and pain. Provide general supportive measures and treat symptomatically. Symptoms may be delayed. Have the product container or label with you when calling a poison control center, doctor, or going for treatment. For emergency information concerning this product, call the National Pesticides Information Center at 1-800-858-7378 Monday through Friday, 7:30 am to 3:30 pm Pacific Time. During other times, call the poison control center 1-800-222-1222.

#### 5. FIRE FIGHTING MEASURES

**Suitable extinguishing media:**

Water fog. Foam. Dry chemical powder. Carbon dioxide (CO<sub>2</sub>).

**Unsuitable extinguishing media:  
Specific hazards arising from the chemical:**

Do not use water jet as an extinguisher, as this will spread the fire. During fire, gases hazardous to health may be formed.

**Special protective equipment and precautions for firefighters:  
Firefighting equipment/instructions:**

Firefighters must wear full protective clothing including self-contained breathing apparatus. Move containers from fire area if you can do so without risk.

**Specific methods:**

Use standard firefighting procedures and consider the hazards of other involved materials.

**General fire hazards:**

No unusual fire or explosion hazards noted. Not a fire hazard.

#### 6. ACCIDENTAL RELEASE MEASURES

**Personal precautions, protective equipment and emergency procedures**

Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Do not breathe mist or vapor. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.

**Methods and Materials for Containment and Clean-Up:**

Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

**Environmental precautions**

Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS. Do not contaminate water. Avoid discharge into drains, water courses or onto the ground. Do not discharge into lakes, streams, ponds or public waters.



## 7. HANDLING & STORAGE

### Precautions for Safe Handling:

DO NOT get in eyes, on skin or clothing. Do not eat, drink or smoke when using this product. Wear appropriate personal protective equipment (see Section 8 of the SDS). Wash thoroughly after handling this product. Use good industrial hygiene practices in handling this material.

### Conditions for Safe Storage, including any Incompatibilities:

PESTICIDE STORAGE: Store in cool, dry place away from food, drink and animal feed. 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 and upright to prevent leakage and contamination. Store away from incompatible materials (see Section 10 of the SDS). Keep out of reach of children and livestock.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Occupational Exposure Limits:

This mixture has no ingredients that have PEL, TLV, or other recommended exposure limit.

### Biological limit values:

No biological exposure limits noted for the ingredient(s).

### Appropriate engineering Controls:

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

### Individual protection measures, such as personal protective equipment

#### Eye/face protection:

Wear safety glasses with side shields, goggles or face shield. Eye wash station and washing facilities should be available.

#### Skin protection

##### Hand protection:

Impervious gloves. Confirm with reputable supplier first.

##### Other:

Wear appropriate chemical resistant clothing.

Mixers, loaders, applicators and other handlers must wear: long-sleeved shirt, long pants and shoes plus socks. Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

#### Respiratory protection:

Respirator should be selected by and used under the direction of a trained health and safety professional following requirements found in OSHA's respirator standard (29 CFR 1910.134)

#### Thermal hazards:

Not applicable.

#### General hygiene considerations:

Use good industrial hygiene practices in handling this material. Do not eat, drink or smoke when using this product. Routinely wash work clothing and protective equipment to remove contaminants.

Users should wash hands before eating, drinking, chewing gum, using tobacco or using the toilet. Users should remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. Users should remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

## 9. PHYSICAL & CHEMICAL PROPERTIES

<b>Physical state:</b>	Liquid	<b>Upper/Lower flammability limits:</b>	Not available
<b>Appearance / Color:</b>	Off-white viscous liquid	<b>Vapor pressure:</b>	5.3 x10 <sup>-4</sup> mPa @ (25°C)
<b>Odor:</b>	Paint-like odor	<b>Vapor density: (air =1)</b>	Not applicable
<b>Odor threshold:</b>	Not available	<b>Specific Gravity: (H<sub>2</sub>O = 1)</b>	1.13 – 1.17 g/ml (9.43 – 9.79 lb/gl)*
<b>pH:</b>	4.5 – 5.5	<b>Solubility:</b>	Emulsifies
<b>Melting/Freezing point:</b>	Not applicable	<b>Partition coefficient (n-octanol-water):</b>	Log Pow = 2.39 (pH 7, 25°C)
<b>Pour Point:</b>	Not available	<b>Auto-ignition temperature:</b>	Not available
<b>Initial boiling point and boiling range:</b>	Not available	<b>Decomposition temperature:</b>	Not available



<b>Flash point:</b>	>100°C	<b>Viscosity:</b>	145.2 cSt (20°C); 84.4 cSt (40°C)
<b>Evaporation rate:</b>	Not available	<b>Explosive properties:</b>	Not explosive
<b>Flammability (solid, gas):</b>	Not applicable	<b>Oxidizing properties:</b>	Not oxidizing

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

## 10. STABILITY & REACTIVITY

<b>Reactivity hazards:</b>	This product may react with strong oxidizing agents.
<b>Possibility of Hazardous Reactions:</b>	No dangerous reaction known under conditions of normal use.
<b>Chemical stability:</b>	Stable under recommended storage conditions.
<b>Conditions to avoid:</b>	Avoid temperatures above 115°F (46°C) and below 25°F (-6°C). Do not mix with other chemicals.
<b>Incompatible materials:</b>	Alkaline metals, isocyanates, acids and oxidizers.
<b>Hazardous decomposition products:</b>	May include and are not limited to: Oxides of nitrogen, oxides of sulfur, oxides of carbon, hydrogen chloride.

## 11. TOXICOLOGICAL INFORMATION

<b>Routes of exposure:</b>	Eye, Skin contact, Inhalation, Ingestion.	
<b>Information on likely routes of exposure</b>		
<b>Inhalation</b>	Not a likely route of exposure.	
<b>Skin contact</b>	Causes skin irritation.	
<b>Eye contact</b>	Causes serious eye irritation.	
<b>Ingestion</b>	Harmful if swallowed. May cause stomach distress, nausea or vomiting.	
<b>Symptoms related to the physical, chemical and toxicological characteristics:</b>	Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Skin irritation may cause redness and pain.	
<b>Information on toxicological effects</b>		
<b>Acute toxicity</b>		
<b>Components</b>	<b>Species</b>	<b>Test Results</b>
Thiabendazole (CAS 148-79-8)		
<b>Acute</b>		
<b>Dermal</b>		
LD50	Rat	>5000 mg/kg, Albaugh, LLC
<b>Inhalation</b>		
LC50	Rat	>2.1 mg/kg, Albaugh, LLC
<b>Oral</b>		
LD50	Rat	>5000 mg/kg, Albaugh, LLC 2080 mg/kg, HSDB
<b>Skin corrosion/irritation:</b>	Causes skin irritation.	
<b>Exposure minutes</b>	Not available	
<b>Erythema value</b>	Not available	
<b>Oedema value</b>	Not available	
<b>Serious eye damage/eye irritation:</b>	Causes serious eye irritation.	
<b>Corneal opacity value</b>	Not available	
<b>Iris lesion value</b>	Not available	
<b>Conjunctival reddening value</b>	Not available	
<b>Conjunctival oedema value</b>	Not available	
<b>Recover days</b>	Not available	
<b>Respiratory or Skin sensitization:</b>		
<b>Respiratory sensitization:</b>	Not a respiratory sensitizer.	
<b>Skin sensitization:</b>	This product is not expected to cause skin sensitization.	
<b>Germ cell mutagenicity:</b>	Non-hazardous by OSHA criteria.	
<b>Carcinogenicity:</b>	Non-hazardous by OSHA criteria. See below.	
<b>IARC Monographs. Overall Evaluation of Carcinogenicity:</b>	Not listed.	
<b>US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1052):</b>	Not regulated.	
<b>US National Toxicology Program (NTP) Report on Carcinogens</b>	Not listed.	
<b>Reproductive toxicity:</b>	Non-hazardous by OSHA criteria.	
<b>Specific target organ toxicity -single exposure:</b>	Not classified.	
<b>Specific target organ toxicity -repeated exposure:</b>	Not classified.	



<b>Aspiration hazard:</b>	Not an aspiration hazard.
<b>Chronic effects:</b>	Non-hazardous by OSHA criteria.
<b>Further information:</b>	Not available

## 12. ECOLOGICAL INFORMATION

<b>Ecotoxicity</b>	This pesticide is toxic to fish. Do not apply when weather conditions favor runoff or drift from the target area. Do not apply directly to water, to areas where surface water is present, or to intertidal areas below the mean high water mark. Do not contaminate water by cleaning of equipment or disposal of waste.	
	For minor spills, leaks, etc., follow all precautions indicated on this label and clean up immediately. Take special care to avoid contamination of equipment and facilities during clean-up procedures and disposal of wastes.	
<b>Persistence/ degradability:</b>	No data is available on the degradability of any ingredients in the mixture.	
<b>Bioaccumulative potential:</b>		
	<b>Partition coefficient n-octanol / water (log Kow)</b>	
	Thiabendazole	2.47
<b>Mobility in soil:</b>	No data available	
<b>Mobility in general:</b>	Not available.	
<b>Other adverse effects:</b>	No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.	

## 13. DISPOSAL CONSIDERATIONS

<b>Disposal instructions:</b>	<b>PESTICIDE DISPOSAL:</b> Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility in accordance with Federal, State or local procedures under the Resource Conservation and Recovery Act.
	<b>CONTAINER DISPOSAL:</b> Non-refillable container. Do not reuse or refill this container. Offer for recycling, if available. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling if available or reconditioning if appropriate, or puncture and dispose of in a sanitary landfill, or by incineration.
<b>Local disposal Regulations:</b>	Dispose in accordance with all applicable regulations.
<b>Hazardous waste code:</b>	The waste code should be assigned in discussion between the user, the producer and the waste disposal company.
<b>Waste from residues / unused products:</b>	Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).
<b>Contaminated packaging:</b>	Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

## 14. TRANSPORT INFORMATION

<b>U.S. Department of Transportation (DOT)</b>	
<b>UN number:</b>	UN3082
<b>Proper shipping name:</b>	Environmentally hazardous substances, liquid, n.o.s.
<b>Technical name:</b>	Thiabendazole
<b>Hazard class(es):</b>	9
<b>Packing group:</b>	III
<b>Marine pollutant:</b>	Yes
<b>Packaging non bulk</b>	203
<b>Packaging bulk</b>	241



**15. REGULATORY INFORMATION**

**US FEDERAL REGULATIONS**

This chemical is a pesticide product registered by the United States Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets (SDS), and for workplace labels of non-pesticide chemicals. The hazard information required on the pesticide label is reproduced below. The pesticide label also includes other important information, including directions for use. This is a registered EPA product. The product labeling is in compliance with EPA regulations and guidelines.  
 EPA 64864-66  
 EPA Est. # 42750-MO-01

KEEP OUT OF THE REACH OF CHILDREN.

**PRECAUTIONARY STATEMENTS:**

**HAZARDS TO HUMANS AND DOMESTIC ANIMALS**

**CAUTION:** Harmful if swallowed. Causes eye and skin irritation. Avoid contact with eyes, skin, and clothing. Wash thoroughly with soap and water after handling.

**ENVIRONMENTAL HAZARDS:**

This pesticide is toxic to fish. Do not apply when weather conditions favor runoff or drift from the target area. Do not apply directly to water, to areas where surface water is present, or to intertidal areas below the mean high water mark. Do not contaminate water by cleaning of equipment or disposal of waste. For minor spills, leaks, etc., follow all precautions indicated on this label and clean up immediately. Take special care to avoid contamination of equipment and facilities during clean-up procedures and disposal of wastes.  
**NOT FOR USE IN FORMULATING AGRICULTURAL PESTICIDES.**

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.  
**DIRECTIONS FOR USE.** It is a violation of federal law to use this product in a manner inconsistent with its labeling. Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or local Tribe, consult the State or Tribal Agency responsible for pesticide regulation.

**FAILURE TO FOLLOW THE DIRECTIONS FOR USE AND PRECAUTIONS ON THIS LABEL MAY RESULT IN CROP INJURY, POOR DISEASE CONTROL, AND/OR ILLEGAL RESIDUES.**

**STORAGE AND DISPOSAL:** Do not contaminate water, food or feed by storage or disposal. Open dumping is prohibited.

**PESTICIDE STORAGE:** Store in a cool, dry place away from food, drink and animal feeding stuffs. Do not store below 32°F (0°C). Repeated product freezing and thawing should be avoided. Shake or stir product before use.

**PESTICIDE DISPOSAL:** Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility in accordance with Federal, State or local procedures under the Resource Conservation and Recovery Act.

**CONTAINER DISPOSAL:** Non-refillable container. Do not reuse or refill this container. Offer for recycling, if available. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling if available or reconditioning if appropriate, or puncture and dispose of in a sanitary landfill, or by incineration.

CONTAINER IS NOT SAFE FOR FOOD, FEED OR DRINKING WATER.

**TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)**

Not regulated.

**CERCLA Hazardous Substance List (40 CFR 302.4)**

Not listed.

**SARA 304 Emergency release notification**

Not regulated.

**US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1052)**

Not regulated.

**Superfund Amendments and Reauthorization Act of 1986 (SARA)**

**SARA 302 Extremely hazardous substance Classified hazard categories**

No  
 Acute toxicity (any route of exposure)  
 Skin corrosion / irritation  
 Serious eye damage / eye irritation

**SARA 313 (TRI reporting)**

<u>Chemical name</u>	<u>CAS number</u>	<u>% by wt.</u>
Thiabendazole	148-79-8	42.3



**OTHER FEDERAL REGULATIONS**

**Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List**

Not regulated.

**Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)**

Not regulated.

**Safe Drinking Water Act (SDWA)**

Not regulated.

**Food and Drug Administration (FDA)**

Not regulated.

**US STATE REGULATIONS**

**US. California Controlled Substances. CA Department of Justice (California Health and Safety Code Section 11100)**

Not listed

**US. New Jersey Worker and Community Right-to-Know Act**

Thiabendazole (CAS 148-79-8)

**Inventory status**

**Country(s) or region**

United States & Puerto Rico

**Inventory name**

Toxic Substances Control Act (TSCA) Inventory

**On inventory (yes/no) \***

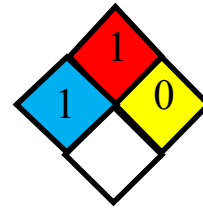
Yes

\*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

**16. OTHER INFORMATION**

LEGEND	
Severe	4
Serious	3
Moderate	2
Slight	1
Minimal	0

<b>HEALTH</b>	<b>1</b>
<b>FLAMMABILITY</b>	<b>1</b>
<b>PHYSICAL HAZARD</b>	<b>0</b>
<b>PERSONAL PROTECTION</b>	<b>X</b>



The information provided in this Safety Data Sheet (SDS) is provided in good faith and believed to be accurate at the time of preparation of the SDS. However, to the extent consistent with applicable law, Pace International, LLC and its subsidiaries or affiliates extend no warranties, make no representations, and assume no responsibility as to the accuracy, suitability, or completeness of such information. Additionally, to the extent consistent with applicable law, neither Pace International, LLC nor any of its subsidiaries or affiliates represents or guarantees that this information or product may be used without infringing the intellectual property rights of others. Except to the extent a particular use and particular information are expressly stated on the product label, it is the users' own responsibility to determine the suitability of this information for their own particular use of this product. If necessary, contact Pace International, LLC to confirm that you have the most current product label and SDS.

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.

**SDS preparation date:** June 22, 2020

**Replaces SDS dated:** October 2, 2015

**Version:** 2

