

SAFETY DATA SHEET

1. PRODUCT & COMPANY IDENTIFICATION

Product Name:	Shield-Brite® TBZ 99WP	EPA Reg. # 64864-68
Product Code:	10401	
Product Use:	Wettable Powder Fungicide for Post-harvest Treatment of Listed Pome Fruits, Citrus, Carrots and Potatoes	
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 (PROPHARMA)	
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 Hazards, Not Classified

Health Hazards

Acute Toxicity, inhalation - Category 3

Environmental Hazards

Aquatic Toxicity, Short-term (acute) hazard
Category 1

Hazard Symbols:



Signal Word:

DANGER

Hazard Statements:

WARNING

H331 Toxic if inhaled.

H400 Very toxic to aquatic life.

Other Hazards:

Hazard(s) not otherwise classified
(HNO):

Supplemental information

Precautionary Statements:

Prevention Statements:

P261 Avoid breathing dust, mist, vapor or spray.

P264 Wash hands thoroughly after handling. Avoid contact with eyes, skin, or clothing.

P270 Do not eat, drink, or smoke when using this product.

P271 Use only outdoors or in a well-ventilated area.

P272 Contaminated work clothing should not be allowed out of the workplace.

P280 Wear protective clothing, chemical resistant gloves, and safety glasses.

P273 Avoid release to the environment.

Response Statements:

P304/340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P316 Get emergency medical help immediately.

P321 Specific treatment See Section 4 First Aid Measures.

P301/330/331 IF SWALLOWED: Rinse mouth. Do not induce vomiting.

P310 Immediately call a POISON CENTER or doctor for medical advice.

P302/352 IF ON SKIN: Wash with plenty of soap and water.

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.

Storage Statements:

P403/233 Store in a well-ventilated place. Keep container tightly closed.

P405 Store locked up.

Disposal Statements:

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

None known.

None known.

This product is an EPA FIFRA registered pesticide. Some classifications on this SDS are not the same as the FIFRA label. Certain sections of this SDS are superseded by federal law governed by US EPA for a registered pesticide. Please see Section 15. REGULATORY INFORMATION for explanation.

US: Exempt - EPA Reg. # 64864-68

3. COMPOSITION/INFORMATION ON INGREDIENTS

<u>Ingredient</u>	<u>CAS #</u>	<u>Concentration (w/w %)</u>
2-(4-thiazolyl)-benzimidazole (thiabendazole – TBZ)	148-79-8	98.75 %
Inert ingredients:	N/A	1.25%

4. FIRST AID MEASURES

General Advice:	Have the product container, label or Safety Data Sheet with you when calling a poison control center or physician or going for treatment. You may also contact PROPHARMA 1-888-271-4649 for emergency medical treatment information.
Skin contact:	IF ON SKIN OR CLOTHING: Take off immediately all contaminated clothing. Wash skin with plenty of soap and water/shower. If skin irritation occurs: Get medical advice/attention. Wash contaminated clothing before reuse.
Eye contact:	IF IN EYES: Hold eye open and cautiously rinse slowly and gently with water for 15 – 20 minutes. Remove contact lenses if present and easy to do after the first 5 minutes, then continue rinsing eye.
Ingestion:	IF SWALLOWED: Immediately call a POISON CENTER or doctor for medical advice. Rinse mouth. 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: 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. Call a poison control center or doctor for treatment advice.
Most important Symptoms / effects, acute and Delayed:	Maybe harmful if swallowed. May be harmful in contact with skin. Toxic if inhaled.
Indication of any immediate medical attention and special treatment needed:	Provide general supportive measures and treat symptomatically. Symptoms may be delayed. No specific antidote. This compound does not cause any definite symptoms that would be diagnostic. Contact with the eyes may cause irritation.
	Have the product container, label or Safety Data Sheet with you when calling a poison control center or physician or going for treatment.

5. FIRE FIGHTING MEASURES

Suitable Extinguishing Media:	Water fog. Foam. Dry chemical powder. Carbon dioxide or water spray when fighting fires.
Unsuitable Extinguishing Media:	None known.
Special Hazards Arising from the Chemical:	During fire, gases hazardous to health may be formed due to thermal decomposition or combustion. .
Special protective equipment and precautions for firefighters:	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
Firefighting equipment/instructions:	In case of fire and/or explosion do not breathe fumes. Fire exposed containers can build up pressure and should be kept cool with water spray if possible. Move containers from fire area if you can do so without risk. Dike and collect water used to fight fire to prevent environmental damage due to run off.
Specific methods:	Use standard firefighting procedures and consider the hazards of other involved materials.
General fire hazards:	Can form explosive mixture with air in dusty conditions.
Hazardous combustion products:	May include and are not limited to: Oxides of carbon. Oxides of nitrogen.

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. Avoid breathing dust, mist or vapor. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Ventilate closed spaces before entering them. 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	Large Spills: Vacuum or sweep up spilled material and transfer to

and cleaning up:

containers for later disposal. After removal, clean contaminated area thoroughly with water. Pick up wash liquid with additional absorbent and place in a disposable container.

Small Spills: Vacuum or sweep up spilled material and transfer to containers for later disposal. Clean surface area thoroughly to remove residual contamination.

Minimize use of water to prevent environmental contamination.

Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS.

Environmental Precautions:

DO NOT contaminate irrigation or drinking water supplies or aquatic habitats by cleaning of equipment or disposal of wastes. DO NOT discharge effluent containing this product into sewer systems, lakes, streams, ponds, estuaries, oceans or other waters. Avoid release to the environment. Very toxic to aquatic life.

7. HANDLING & STORAGE

Precautions for Safe Handling:

Use good industrial hygiene practices in handling this material. Do not get in eyes, on skin or clothing. Wear appropriate personal protective equipment (see Section 8). Avoid breathing dust, mist, or vapor. Use only with adequate ventilation. Wash thoroughly after handling. Do not eat, drink or smoke when using this product.

Conditions for Safe Storage, including any Incompatibilities:

Store locked up. Store in a cool, dry, well-ventilated area away from direct sunlight. Store in original tightly closed container. Store away from incompatible materials (see Section 10 of the SDS). Keep out of reach of children. Do not contaminate water, food, or feed by storage or disposal.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational Exposure Limits

No exposure limits noted for the ingredient(s).

Biological limit values

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

Exposure guidelines

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 chemical goggles, safety glasses or face shield.

Skin protection

Hand protection

Chemical-resistant gloves made of any waterproof material such as barrier laminate, butyl rubber, nitrile rubber, neoprene rubber, polyvinyl chloride, or viton.

Other

Mixers, loaders, applicators and other handlers must wear: long-sleeved shirt and long pants, shoes and socks.

Respiratory protection

Where exposure guideline levels may be exceeded, use an approved NIOSH respirator. 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

When using do not smoke. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Contaminated work clothing should not be allowed out of the workplace. When using do not eat or drink.

9. PHYSICAL & CHEMICAL PROPERTIES

Appearance:

White
powder

Upper/Lower flammability limits:

Not available

Odor:	Odorless	Vapor pressure:	5.3 x10 ⁻⁴ mPa @ (25°C)
Odor threshold:	Not available	Vapor density: (air =1)	Not available
pH:	6.4 – 7.4	Specific Gravity: (H₂O = 1)	1.32 – 1.36 g/ml
Melting/Freezing point:	297 – 298°C	Solubility:	22.7 mg/L @ 77°F (25°C)
Pour Point:	Not available	Partition coefficient (n-octanol-water):	Log Pow = 2.39 (pH 9, 25°C)
Initial boiling point and boiling range:	Not applicable	Auto-ignition temperature:	Not available
Flash point:	Not applicable	Decomposition temperature:	Not available
Evaporation rate:	Not available	Viscosity:	Not available
Flammability (solid, gas):	Not applicable		

10. STABILITY & REACTIVITY

Reactivity hazards:	None known.
Possibility of Hazardous Reactions:	No dangerous reaction known under conditions of normal use.
Chemical stability:	Material is stable under normal conditions. Product will not undergo polymerization.
Conditions to avoid:	Avoid temperatures above (115°F, 46°C)
Incompatible materials:	Acidic and oxidizing materials
Hazardous decomposition products:	May include and are not limited to: Hydrogen chloride. Oxides of nitrogen.

11. TOXICOLOGICAL INFORMATION

Routes of exposure	Eye, Skin contact, Inhalation, Ingestion.
Information on likely routes of exposure	
Ingestion	May cause stomach distress, nausea or vomiting.
Inhalation	Toxic if inhaled.
Skin contact	No adverse effects due to skin contact are expected.
Eye contact	Direct contact with eyes may cause temporary irritation.

Symptoms related to the physical, chemical and toxicological characteristics
Information on toxicological effects

Acute toxicity

Product	Species	Test Results
2-(4-thiazolyl)-benzimidazole (thiabendazole – TBZ) (CAS# 148-79-8)		
Acute		
Dermal		
LD50	Rat	>2000 mg/kg
Inhalation		
LC50	Rat	>0.5 mg/L
Oral		
LD50	Rat	3100 mg/kg

Skin corrosion/irritation:	Non-irritating based on testing.
Exposure minutes	Not available
Erythema value	Not available
Oedema value	Not available
Eye damage/irritation:	Non-irritating based on testing.
Corneal opacity value	Not available
Iris lesion value	Not available
Conjunctival reddening value	Not available
Conjunctival oedema value	Not available
Recover days	Not available
Respiratory sensitization:	Not a respiratory sensitizer.
Skin sensitization:	This product is not expected to cause skin sensitization,
Germ cell mutagenicity:	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic
Carcinogenicity:	No carcinogenic effects are expected due to product being comprised of FDA-approved food-grade ingredients.
Reproductive toxicity:	Occasional workplace exposure is not expected to present a hazard.
Target organ effects:	No known target organ effects.
Aspiration hazard:	Material does not present an aspiration hazard.
Potential health effects:	Toxic if inhaled.

12. ECOLOGICAL INFORMATION

Ecotoxicity

This pesticide is toxic to fish and aquatic invertebrates.

Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans, or other waters unless in accordance with the requirements of a National Pollutant Discharge Elimination System (NPDES) permit and the permitting authority has been notified in writing prior to discharge. Do not discharge effluent containing this product to sewer systems without previously notifying the local sewage treatment plant authority. For guidance, contact your State Water Board or Regional Office of the EPA.

Ecotoxicological data

Components

2-(4-thiazolyl)-benzimidazole (thiabendazole – TBZ) (CAS# 148-79-8)

Aquatic

Fish LC50

Rainbow trout

0.56 ppm, 96 hrs

Avian Toxicity

Dietary LC50

Bobwhite quail

>10,000 ppm

Oral LD50

Mallard duck

>5,000 ppm

Bee Toxicity

Non-toxic

Persistence/ degradability:

Highly persistent with a soil half life of >365 days depending on soil type and weather conditions.

Bioaccumulative potential:

Not available

Mobility in soil:

Relatively immobile in soil depending on organic content.

Mobility in general:

Not available

Other adverse effects:

Very toxic to aquatic life with long lasting effects.

13. DISPOSAL CONSIDERATIONS

Disposal instructions:

Do not contaminate water, food, or feed by storage or disposal.

PESTICIDE DISPOSAL: Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility. Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose of contents/container in accordance with local/regional/national/international regulations. Dispose in accordance with all applicable regulations.

Local disposal regulations

Hazardous waste code:

This product, in its original form and concentration, would not designate as a US federal hazardous waste when disposed. 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).

Waste from residues / unused products:

Contaminated packaging:

Since emptied containers may retain product residue, empty liner by shaking and tapping sides and bottom to loosen clinging particles. Empty residue into processing equipment. Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. TRANSPORT INFORMATION

UN number:

DOT

Not applicable

IMDG

UN 3077

IATA

UN 3077

Proper shipping name:

Not regulated

Environmentally

Environmentally

Hazardous

Hazardous

Substance, solid,
n.o.s. (2-(Thiazole-4-yl) benzimidazole)

Substance, solid,
n.o.s. (2-(Thiazole-4-yl) benzimidazole)

Hazard class(es):

Not applicable

9

9

Packing group:

Not applicable

III

III

Marine Pollutant:

Yes

15. REGULATORY INFORMATION

US FEDERAL REGULATIONS

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

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.

EPA Reg. # 64864-68

KEEP OUT OF THE REACH OF CHILDREN.

CAUTION:

PRECAUTIONARY STATEMENTS:

Hazard to humans and domestic animals.

CAUTION: Harmful if swallowed, inhaled or absorbed through the skin. Causes moderate eye irritation. Avoid contact with skin, eyes or clothing. Avoid breathing dust. Wear chemical resistant gloves and protective clothing when handling. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Remove contaminated clothing and wash before reuse.

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

All components of this product are included or exempt from inclusion in EPA's Toxic Substances Control Act (TSCA) Chemical Substance Inventory.

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 listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

SARA 302 Extremely hazardous substance

No

SARA 311/312 Hazardous chemical

Immediate, delayed

Classified hazard

Acute toxicity (any route of exposure)

Categories

Toxic if inhaled.

SARA 313:

Contains thiabendazole (CAS # 148-79-8), which is subject to SARA Title III Section 313 reporting requirements.

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.

US STATE REGULATIONS

US. Pennsylvania Worker and Community Right-to-Know Law

2-(4-thiazolyl)-benzimidazole (thiabendazole – TBZ) (CAS# 148-79-8)

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

2-(4-thiazolyl)-benzimidazole (thiabendazole – TBZ) (CAS# 148-79-8)

US. California Proposition 65

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

Inventory status

Country(s) or region	Inventory name	On inventory (yes/no)*
Canada	Domestic Substances List (DSL)	No
Canada	Non-Domestic Substances List (NDSL)	No
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	No

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

16. OTHER INFORMATION

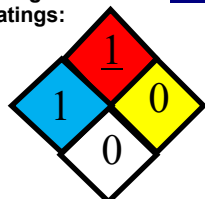
HMIS Ratings:

Health – 1

Flammability – 1

Reactivity – 0

NFPA Ratings:



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: September 23, 2025
Changes since last revision: Rebranding

Replaces MSDS dated: January 21, 2020
Version: 3