



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, DC 20460

OFFICE OF CHEMICAL SAFETY  
AND POLLUTION PREVENTION

March 15, 2017

Audrey Sehn  
Regulatory Affairs Manager  
Pace International, LLC  
5661 Branch Road  
Wapato, Washington 98951

Subject: Label Amendment: Page 1: Revises "If Swallowed" wording; Page 2: Revises and reformats PPE respirator wording; Page 7: Revises exit temperature setting; other minor revisions throughout label.

Product Name: Shield-Brite TBZ 99WP  
EPA Registration Number: 64864-68  
Application Date: August 31, 2016  
Decision Number: 521086

Dear Ms. Sehn:

The amended label referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide and Rodenticide Act, as amended, is acceptable. This approval does not affect any conditions that were previously imposed on this registration. You continue to be subject to existing conditions on your registration and any deadlines connected with them.

A stamped copy of your labeling is enclosed for your records. This labeling supersedes all previously accepted labeling. You must submit one copy of the final printed labeling before you release the product for shipment with the new labeling. In accordance with 40 CFR 152.130(c), you may distribute or sell this product under the previously approved labeling for 18 months from the date of this letter. After 18 months, you may only distribute or sell this product if it bears this new revised labeling or subsequently approved labeling. "To distribute or sell" is defined under FIFRA section 2(gg) and its implementing regulation at 40 CFR 152.3.

Should you wish to add/retain a reference to the company's website on your label, then please be aware that the website becomes labeling under the Federal Insecticide Fungicide and Rodenticide Act and is subject to review by the Agency. If the website is false or misleading, the product would be misbranded and unlawful to sell or distribute under FIFRA section 12(a)(1)(E). 40 CFR 156.10(a)(5) list examples of statements EPA may consider false or misleading. In addition, regardless of whether a website is referenced on your product's label, claims made on the website may not substantially differ from those claims approved through the registration process. Therefore, should the Agency find or if it is brought to our attention that a website contains false or misleading statements or claims substantially differing from the EPA approved registration, the website will be referred to the EPA's Office of Enforcement and Compliance.

Page 2 of 2  
EPA Reg. No. 64864-68  
Decision No. 521086

Your release for shipment of the product constitutes acceptance of these conditions. If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA section 6.

If you have any questions, please contact Tony Kish by phone at 703 308-9443, or via email at [kish.tony@epa.gov](mailto:kish.tony@epa.gov); or Craig Reeves by phone at 703 347-0486, or via email at [reeves.craig@epa.gov](mailto:reeves.craig@epa.gov).

Sincerely,

A handwritten signature in black ink that reads "Tony Kish". The signature is written in a cursive style with a large, sweeping initial "T".

Tony Kish, Product Manager 22 Fungicide Branch  
Registration Division (7505P)  
Office of Pesticide Programs

Enclosure: Stamped Attachment

**Shield-Brite® TBZ 99WP**

Wettable Powder Fungicide for Post-harvest Treatment of Listed Pome Fruits, Citrus, Carrots and Potatoes

Active Ingredient:

2-(4-thiazolyl)-benzimidazole (thiabendazole - TBZ) .....98.75%

Inert Ingredients: .....1.25%

Total ..... 100.0%

EPA Reg. No. 64864-68

EPA Est. No. 64864-WA-01

**Keep Out of Reach of Children**

CAUTION

**FIRST AID**

<b>If swallowed</b>	<ul style="list-style-type: none"> <li>• Call a poison control center or doctor immediately for treatment advice.</li> <li>• Have a 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.</li> <li>• Do not give anything by mouth to an unconscious person.</li> </ul>
<b>If on skin or clothing</b>	<ul style="list-style-type: none"> <li>• Take off contaminated clothing.</li> <li>• Rinse skin immediately with plenty of water for 15 – 20 minutes.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>
<b>If in eyes</b>	<ul style="list-style-type: none"> <li>• Hold eye open and rinse slowly and gently with water for 15 – 20 minutes.</li> <li>• Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>
<b>If inhaled</b>	<ul style="list-style-type: none"> <li>• Move person to fresh air.</li> <li>• If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible.</li> <li>• Call a poison control center or doctor for further treatment advice.</li> </ul>
Have the product container or label with you when calling a poison control center or doctor, or going for treatment.	
<b>HOT LINE NUMBER</b>	
Medical Emergency Phone Number 888-271-4649 (PROSAR) Transportation Emergency Phone Number 800-424-9300 (CHEMTREC)	

Net Weight: 7.5 oz. (212 grams) / 11.25 oz. (318 grams) /20.25 oz. (575 grams) /26 oz. (742 grams)/67.36 oz. (1908 grams)

Distributed By:  
Pace International LLC  
5661 Branch Road  
Wapato, WA 98951  
800-936-6750

## PRECAUTIONARY STATEMENTS

### Hazards 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 and wash contaminated clothing before reuse.

### Personal Protective Equipment (PPE)

Mixers, loaders, applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Chemical resistant gloves
- Shoes plus socks
- Protective eyewear (such as goggles, safety glasses or a face shield)

A NIOSH approved particulate respirator with any N, R or P filter with NIOSH approval number prefix TC-84A; or a NIOSH approved powered air purifying respirator with HE filter with NIOSH approval number prefix TC-21C.

In addition, fogging applicators must keep a respirator with an organic-vapor removing cartridge readily available in case of rare instances where fog may be blown back to the applicator, such as an equipment malfunction or insufficient room seal.

### User Safety Requirements

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.

### USER SAFETY RECOMMENDATIONS

Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
- Remove clothing/PPE 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.

### ENVIRONMENTAL HAZARDS

Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans or other waters unless in accordance with the requirements of National Pollutant Discharge Elimination Systems (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.

### 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.

**FAILURE TO FOLLOW THE DIRECTIONS FOR USE AND PRECAUTIONS ON THIS LABEL MAY RESULT IN POOR DISEASE CONTROL.****PRODUCT INFORMATION**

Shield-Brite TBZ 99 WP is a postharvest fungicide which aids in the control of many important plant diseases such as Blue Mold Rot, Bull's Eye Rot, Gray Mold (Nest Rot, Cluster Rot), Stem End and Neck Rot. If treatment is not effective following use of Shield-Brite TBZ 99 WP as recommended, a tolerant strain of fungus may be present. Consideration should be given to prompt use of other suitable non-benzimidazole fungicides. Use of Shield-Brite TBZ 99 WP should be integrated into an overall disease management program within each packinghouse.

**(212 gram package directions)**

Completely empty foil bag into application equipment by shaking and tapping sides and bottom to loosen clinging particles.

**APPLES & PEARS:** Post-harvest control of *Botrytis* and *Penicillium* Rots.

Spray or drench: Dilute 7.5 oz. (212 g) of Shield-Brite TBZ 99WP in 55 gallons of water to yield 1000 ppm TBZ. Keep suspension under constant gentle agitation. Do not treat fruit for more than 3 minutes. Treat only once, either before or after storage. Drain fruit thoroughly after treatment and do not rinse.

In wax: Dilute 7.5 oz. (212 g) Shield-Brite TBZ 99WP in 27.5 gallons of apple wax to yield 2000 ppm TBZ. Spray suspension full strength at a rate of 1 gallon per 8,000-10,000 pounds of fruit. Agitate wax suspension during application.

**CARROTS:** Post-harvest control of *Botrytis* Gray Mold and *Sclerotinia* Rot.

Dilute 7.5 oz. (212 g) Shield-Brite TBZ 99WP in 37 gallons of water (1500 ppm) and apply before storage as an aqueous dip for up to 10 minutes. Replenish dip suspension when volume is too low or when it becomes dirty.

**CITRUS FRUITS:** Post-harvest control of *Penicillium* Molds and Stem End Rot.

In AZ and CA, dilute up to 7.5 oz. (212 g) Shield-Brite TBZ 99WP in 11 gallons of citrus wax (5000 ppm) and apply a single application of 1 gallon of wax suspension per 3500 lbs fruit. Agitate wax suspension during application.

In FL and TX, 2 sequential applications may be applied: First, dilute up to 7.5 oz. (212 g) Shield-Brite TBZ 99WP in 55 gallons of water (1000 ppm) and apply as an aqueous dip for up to 3 minutes before de-greening. Replenish dip suspension when volume is too low or when it becomes dirty. After de-greening and washing, mix 7.5 oz. (212 g) Shield-Brite TBZ 99WP in 16 to 55 gallons of citrus wax (1000-3500 ppm) and apply 1 gallon of wax suspension per 3500 lbs fruit.

**(318 gram package label directions)**

Completely empty foil bag into application equipment by shaking and tapping sides and bottom to loosen clinging particles.

**APPLES & PEARS:** Post-harvest control of *Botrytis* and *Penicillium* Rots.

Spray or drench: Dilute 11.25 oz. (318 g) of Shield-Brite TBZ 99WP in 83 gallons of water to yield 1000 ppm TBZ. Keep suspension under constant gentle agitation. Do not treat fruit for more than 3 minutes. Treat only once, either before or after storage. Drain fruit thoroughly after treatment and do not rinse.

In wax: Dilute 11.25 oz. (318 g) Shield-Brite TBZ 99WP in 41.5 gallons of apple wax to yield 2000 ppm TBZ. Spray suspension full strength at a rate of 1 gallon per 8,000-10,000 pounds of fruit. Agitate wax suspension during application.

**CARROTS:** Post-harvest control of *Botrytis* Gray Mold and *Sclerotinia* Rot.

Dilute 11.25 oz. (318 g) Shield-Brite TBZ 99WP in 55 gallons of water (1500 ppm) and apply before storage as an aqueous dip for up to 10 minutes. Replenish dip suspension when volume is too low or when it becomes dirty.

**CITRUS FRUITS:** Post-harvest control of *Penicillium* Molds and Stem End Rot.

In AZ and CA, dilute up to 11.25 oz. (318 g) Shield-Brite TBZ 99WP in 16.5 gallons of citrus wax (5000 ppm) and apply a single application of 1 gallon of wax suspension per 3500 lbs fruit. Agitate wax suspension during application.

In FL and TX, 2 sequential applications may be applied: First, dilute up to 11.25 oz. (318 g) Shield-Brite TBZ 99WP in 83 gallons of water (1000 ppm) and apply as an aqueous dip for up to 3 minutes before de-greening. Replenish dip suspension when volume is too low or when it becomes dirty. After de-greening and washing, mix 11.25 oz. (318 g) Shield-Brite TBZ 99WP in 23.75 to 83 gallons of citrus wax (1000-3500 ppm) and apply 1 gallon of wax suspension per 3500 lbs fruit.

#### **(575 gram package label directions)**

Completely empty foil bag into application equipment by shaking and tapping sides and bottom to loosen clinging particles.

**APPLES & PEARS:** Post-harvest control of *Botrytis* and *Penicillium* Rots.

Spray or drench: Dilute 20.25 oz. (575 g) of Shield-Brite TBZ 99WP in 150 gallons of water to yield 1000 ppm TBZ. Keep suspension under constant gentle agitation. Do not treat fruit for more than 3 minutes. Treat only once, either before or after storage. Drain fruit thoroughly after treatment and do not rinse.

In wax: Dilute 20.25 oz. (575 g) Shield-Brite TBZ 99WP in 75 gallons of apple wax to yield 2000 ppm TBZ. Spray suspension full strength at a rate of 1 gallon per 8,000-10,000 pounds of fruit. Agitate wax suspension during application.

**CARROTS:** Post-harvest control of *Botrytis* Gray Mold and *Sclerotinia* Rot.

Dilute 20.25 oz. (575 g) Shield-Brite TBZ 99WP in 100 gallons of water (1500 ppm) and apply before storage as an aqueous dip for up to 10 minutes. Replenish dip suspension when volume is too low or when it becomes dirty.

**CITRUS FRUITS:** Post-harvest control of *Penicillium* Molds and Stem End Rot.

In AZ and CA, dilute up to 20.25 oz. (575 g) Shield-Brite TBZ 99WP in 30 gallons of citrus wax (5000 ppm) and apply a single application of 1 gallon of wax suspension per 3500 lbs fruit. Agitate wax suspension during application.

In FL and TX, 2 sequential applications may be applied: First, dilute up to 20.25 oz. (575 g) Shield-Brite TBZ 99WP in 150 gallons of water (1000 ppm) and apply as an aqueous dip for up to 3 minutes before de-greening. Replenish dip suspension when volume is too low or when it becomes dirty. After de-greening and washing, mix 20.25 oz. (575 g) Shield-Brite TBZ 99WP in 43 to 150 gallons of citrus wax (1000-3500 ppm) and apply 1 gallon of wax suspension per 3500 lbs fruit.

#### **(742 gram package label directions)**

Completely empty foil bag into application equipment by shaking and tapping sides and bottom to loosen clinging particles.

**APPLES & PEARS:** Post-harvest control of *Botrytis* and *Penicillium* Rots.

Spray or drench: Dilute 26 oz. (742 g) of Shield-Brite TBZ 99WP in 194 gallons of water to yield 1000 ppm TBZ. Keep suspension under constant gentle agitation. Do not treat fruit for more than 3 minutes. Treat only once, either before or after storage. Drain fruit thoroughly after treatment and do not rinse.

In wax: Dilute 26 oz. (742 g) Shield-Brite TBZ 99WP in 97 gallons of apple wax to yield 2000 ppm TBZ. Spray suspension full strength at a rate of 1 gallon per 8,000-10,000 pounds of fruit. Agitate wax suspension during application.

**CARROTS:** Post-harvest control of *Botrytis* Gray Mold and *Sclerotinia* Rot.

Dilute 26 oz. (742 g) Shield-Brite TBZ 99WP in 130 gallons of water (1500 ppm) and apply before storage as an aqueous dip for up to 10 minutes. Replenish dip suspension when volume is too low or when it becomes dirty.

**CITRUS FRUITS:** Post-harvest control of *Penicillium* Molds and Stem End Rot.

In AZ and CA, dilute up to 26 oz. (742 g) Shield-Brite TBZ 99WP in 38.75 gallons of citrus wax (5000 ppm) and apply a single application of 1 gallon of wax suspension per 3500 lbs fruit. Agitate wax suspension during application.

In FL and TX, 2 sequential applications may be applied: First, dilute up to 26 oz. (742 g) Shield-Brite TBZ in 194 gallons of water (1000 ppm) and apply as an aqueous dip for up to 3 minutes before de-greening. Replenish dip suspension when volume is too low or when it becomes dirty. After de-greening and washing, mix 26 oz. (742 g) Shield-Brite TBZ 99WP in 55.5 to 194 gallons of citrus wax (1000 - 3500 ppm) and apply 1 gallon of wax suspension per 3500 lbs fruit.

#### **(212, 318, 575, 742 gram package directions)**

Completely empty foil bag into application equipment by shaking and tapping sides and bottom to loosen clinging particles.

**POTATOES:** Post-harvest control of *Fusarium* Tuber Rot. Before storage, mist unwashed tubers on a conveyor line with tumbling action, using 0.2 oz. (5.7 g) Shield-Brite TBZ 99WP per

2000 lbs tubers in sufficient water for complete coverage. If needed before shipping, tubers may be retreated after at least 30 days storage, using either a 2nd mist as described above or a 20 second dip of 0.2 oz. (5.7 g) Shield-Brite TBZ 99WP per gallon of water. Replenish dip suspension when volume is too low or when it becomes dirty.

For Seedpiece Potatoes, mist unwashed tubers before storage as described above. DO NOT retreat. DO NOT treat after cutting.

Shield-Brite TBZ 99WP should be used as part of an Integrated Management Program for potatoes, which includes prevention of bruising during harvest and maintaining proper storage temperatures and relative humidity. Neither cultural practices nor TBZ treatment will prevent *Fusarium* infection if potatoes are damaged or improperly stored.

### **(1908 grams package directions)**

Completely empty foil bag into application equipment by shaking and tapping sides and bottom to loosen clinging particles.

**APPLES & PEARS:** Post-harvest control of *Botrytis* and Bull's-eye and *Penicillium* Rots by thermal fogging.

### **APPLICATION RESTRICTIONS**

- Apply only one application of Shield-Brite TBZ 99 WP postharvest on any variety of apple or pear by electrofog machine. Do not apply to fruit that has been previously treated with thiabendazole via drench or dip/wash application.

### **APPLICATION INSTRUCTIONS**

- Apply Shield-Brite TBZ 99 WP at rates and timings as described in this label.
- Use of propylene glycol with Shield-Brite TBZ 99WP is required for thermofogging application.

### **Preparation for Thermofogging**

- Fruit must be completely dry before treatment
- Apply to fruit as close to harvest as possible and no more than 7 days after harvesting, prior to placing in storage.
- When treating rooms that are less than 75% full, calculate the dosage of Shield-Brite® TBZ 99WP by adding a tonnage value of 20% of the empty volume to the real tonnage of the fruit.
- Before treatment, protect fruit directly in front of the fogging equipment with liners or sheets 4 bins high in front of the door plus 2 bin stacks wide on either side of the door.
- For best results, run non-perforated tubing from the corners of the room up to the man door for venting outside the room.

### **Mixing Procedure and Application rate**

Dilute 67.38 oz. (1908 g) of Shield-Brite® TBZ 99WP in 4.98 gallons (18.84 liters) of propylene glycol to yield a 10% (w/w) thiabendazole-TBZ active ingredient concentration. Apply 40 grams (38 ml) of 10% (w/w) thiabendazole-TBZ suspension per metric ton (2200 lb.) of fruit. Use periodic agitation of the suspension during application.



**Electrofogger Operation**

- Place the electrofog machine horizontally outside the treatment room at a height of about 3 feet from the floor. Cover the door or window to the treatment room with a man door cover or plastic sheet and insert the fogging pipe through the nozzle opening or a hole in the plastic.
- Place a bucket under the nozzle to catch any drops.
- Seal the opening around the nozzle with an elastic sleeve or duct tape so no fog can escape during treatment.
- Turn on Exit Temperature Toggle Switch. Set Exit Temperature to 400°C.
- Insert suction tube into the suspension and start pump.
- Wait for Exit Temperature to stabilize and monitor the temperature during operation.

**Application Procedures**

- Do not breathe fog.
- Turn off room cooling systems and humidifiers at least 2 hours prior to and during treatment.
- Defrost coils immediately after refrigeration is shut off.
- Turn off room circulation fans immediately prior to and during treatment.
- Allow the fog to stay overnight or until the fog has totally disappeared (about 5 hours post-treatment) before restarting fans and cooling systems.
- DO NOT rinse fruit after treatment.

**Posting**

Notify workers of the application by warning them orally and by posting warning signs at entrances to treated areas.

**Re-Entry**

Entry into the treatment area by any person other than properly trained and equipped handlers is prohibited from the start of application until the treated area is ventilated as follows:

- 8 hours with no ventilation followed by 1 hour of mechanical ventilation
- 24 hours with no ventilation

In case it is necessary to enter the treatment area during treatment or before ventilation requirements have been met, handlers must wear chemical resistant headgear and a self-contained breathing apparatus (SCBA), NIOSH approval number prefix TC-13F) in addition to PPE listed under PRECAUTIONARY STATEMENTS except for a dust/mist filtering respirator (NIOSH approval number prefix TC-21C), or a NIOSH approved respirator with any N, R, P or HE filter.

**STORAGE AND DISPOSAL**

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

**PESTICIDE STORAGE:** Store in a cool dry place.

**PESTICIDE DISPOSAL:** Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

**CONTAINER DISPOSAL:**

Completely empty foil bag into application equipment by shaking and tapping sides and bottom to loosen clinging particles. Dispose of foil bags and outer case in a sanitary landfill or by incineration, or, if allowed by State and local Authorities, by burning. If burned, stay out of smoke.

Shield-Brite is a registered trademark of Pace International, LLC

**NOTICE TO BUYER**

**IMPORTANT:** Read the information below before using this product. If the terms are not acceptable, you should return the unopened product container immediately for a complete refund.

**LIMITED WARRANTY, TERMS OF SALE, AND LIMITATION OF LIABILITY**

Upon purchase of this product, purchaser and user agree to the following terms:

Warranty: Pace International, LLC (the Company) warrants that this product conforms to the chemical description on the label in all material respects. To the extent consistent with applicable law, except as expressly stated in the foregoing sentence, the Company makes no further warranties and expressly disclaims any implied warranties of merchantability or fitness for a particular purpose and any representation or warranty.

Terms of Sale: The Company's directions for use of this product must be followed carefully. It is impossible to eliminate all risks inherently associated with use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as weather conditions, presence of other materials, and the manner of use or application (including failure to adhere to label directions), all of which are beyond the Company's control. To the extent consistent with applicable law, all such risks are assumed by the user.

Limitations of Liability: To the extent consistent with applicable law, the exclusive remedy against the Company for any cause of action relating to the handling or use of this product is a claim for damages, and in no event shall damages or any other recovery of any kind exceed the price of the product which caused the alleged loss, damage, injury, or other claim. To the extent consistent with the applicable law, under no circumstances shall the company be liable for any special, indirect, incidental, or consequential damages of any kind, including loss of profits or income.

To the extent consistent with applicable law, the Company and the seller offer this product, and the purchaser and user accept this product, subject to the foregoing warranty, terms of sale, and limitation of liability, which may be varied or modified only by an agreement in writing signed on behalf of the Company by an authorized representative.

MADE IN USA