

SAFETY DATA SHEET

1. PRODUCT & COMPANY IDENTIFICATION

Product Name: eFOG[®]-99 TBZ **EPA Reg. # 64864-68**
Product Code: 10484
Product Use: Wettable Powder Fungicide for Post Harvest Treatment of Listed Pome Fruits
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:
 Acute Oral, Category 5
 Acute Inhalation, Category 5
 Skin irritation, Category 2
 Eye irritation, Category 2B
 Aquatic Toxicity, Category 1

Hazard Symbols:



Hazard Statements:
 WARNING
 H303 May be harmful if swallowed.
 H333 May be harmful if inhaled.
 H315 Causes skin irritation.
 H320 Causes eye irritation.
 H410 Very toxic to aquatic life with long lasting effects.

Precautionary Statements:

Prevention Statements:

P264 Wash hands thoroughly after handling.
 P280 Wear protective clothing, chemical resistant gloves, safety glasses, goggles or face shield and 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.
 P273 Avoid release to the environment.

Response Statements:

P304/312 IF INHALED: Call a POISON CENTER/doctor if you feel unwell.
 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	98.75 %
Proprietary food grade ingredients		balance

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. 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

Extinguishing Media:	Use foam, dry chemical, carbon dioxide, or water spray when fighting fires.
Special Exposure Hazards:	Can burn in fire, releasing irritating and toxic gases due to thermal decomposition or combustion. Combustion products are Carbon and Nitrogen oxides. Can form explosive mixture with air in dusty conditions.
Special Protective Equipment / Procedures for Firefighters:	Wear self-contained breathing equipment.




6. ACCIDENTAL RELEASE MEASURES

Personal Precautions:	Wear protective clothing, chemical resistant gloves, safety glasses, and a dust/mist filtering respirator (MSHA/NIOSH approval number prefix TC-21C) or a NIOSH-approved respirator with any N, R, P or HE filter.
Environmental Precautions:	In case of spill isolate area and deny entry to unnecessary personnel. Do not allow product to enter sewers, lakes, streams or other bodies of water.
Containment / Clean-Up Methods:	Stop spill at the source. Cover powder spill with plastic sheet or tarp to minimize spreading and keep powder dry. Take up mechanically, placing in appropriate container for disposal.

7. HANDLING & STORAGE

Handling:	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 protective clothing, chemical resistant gloves, safety glasses, and a dust/mist filtering respirator (MSHA/NIOSH approval number prefix TC-21C) or a NIOSH-approved respirator with any N, R, P or HE filter.
Storage:	Store in a cool, dry area at room temperature, and away from direct sunlight. Keep container tightly closed when not in use. Keep out of reach of children and livestock.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational Exposure Limits:	Thiabendazole CAS# 148-79-8 Not established.
Engineering Controls:	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.
Personal Protective Equipment :	Clothing: Wear protective clothing and chemical resistant gloves when handling.
 	Eye Protection: Wear safety glasses, goggles or face shield. Eye fountain and washing facilities should be present at work area.
	Respiratory Protection: Applicators and other handlers must wear 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



9. PHYSICAL & CHEMICAL PROPERTIES

Appearance:	Fine white powder	Upper/Lower flammability limits:	Not available
Odor:	Odorless	Vapor pressure:	4.6 x10 ⁻⁶ mPa @ (25°C)
Odor threshold:	Not available	Vapor density: (air =1)	Not available
pH:	6.0 – 7.0	Specific Gravity: (H₂O = 1)	1.34 g/ml
Melting/Freezing point:	568 - 576°F (298 – 302°C)	Solubility:	22.7 mg/L @ 77°F (25°C)
Boiling point:	Not applicable	Partition coefficient (n-octanol-water):	Not available
Flash point:	Not flammable	Auto-ignition temperature:	Not available
Evaporation rate:	Not available	Decomposition temperature:	Not available
Flammability (solid, gas):	Not applicable	Viscosity:	Not available

10. STABILITY & REACTIVITY

Reactivity hazards:	None known
Chemical stability:	Stable at ambient conditions
Conditions to avoid:	Temperatures above 115°F (46°C)
Incompatible materials:	Acidic and oxidizing materials
Hazardous decomposition products:	Thermal decomposition may produce hydrogen chloride and oxides of nitrogen.

11. TOXICOLOGICAL INFORMATION

Acute toxicity:	Acute Oral:	LD ₅₀ (estimate): > 3100 mg/kg	Based on Ingredients
	Acute Dermal:	LD ₅₀ (estimate): > 5000 mg/kg	Based on Ingredients
	Inhalation:	LC ₅₀ (estimate): > 0.5 mg/L	Based on Ingredients
Skin corrosion/irritation:	Causes skin irritation, may be harmful if absorbed through skin.		
Eye damage/irritation:	Causes eye irritation		
Respiratory/Skin sensitization:	May be harmful if inhaled, can cause respiratory irritation.		
Germ cell mutagenicity:	Not available		
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:	May cause eye and skin irritation. May be harmful if swallowed.		

12. ECOLOGICAL INFORMATION

Toxicity:	LC50 - <i>Oncorhynchus mykiss</i> (rainbow trout)	0.39 mg/l – 96.0 h
	EC50 – <i>Daphnia magna</i> (Water flea)	0.31 mg/l – 48.0 h
Persistence/ degradability:	Not available	
Bioaccumulative potential:	Not available	
Mobility in soil:	Not available	
Other adverse effects:	Very toxic to aquatic life with long lasting effects.	



13. DISPOSAL CONSIDERATIONS

Disposal methods: 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.

14. TRANSPORT INFORMATION

	<u>DOT</u>	<u>IMDG</u>	<u>IATA</u>
UN number:	Not applicable	UN 3077	UN 3077
Proper shipping name:	Not regulated	Environmentally Hazardous Substance, solid, n.o.s. (2-(Thiazole- 4-yl)benzimidazole)	Environmentally Hazardous Substance, solid, n.o.s. (2-(Thiazole-4- yl)benzimidazole)
Hazard class(es):	Not applicable	9	9
Packing group:	Not applicable	III	III
Special precautions:	None		

15. REGULATORY INFORMATION

FIFRA: Shield-Brite TBZ 99WP is registered with the U.S. EPA under registration number 64864-68
SARA 313: Contains thiabendazole (CAS # 148-79-8), which is subject to SARA Title III Section 313 reporting requirements.
TSCA: All components of this product are included or exempt from inclusion in EPA's Toxic Substances Control Act (TSCA) Chemical Substance Inventory.
WHMIS: This product has been classified in accordance with the hazard criteria of the CPR and the SDS contains all of the information required by the CPR.

16. OTHER INFORMATION

HMIS Ratings: Health – 2 Flammability – 0 Reactivity – 0
NFPA Ratings:



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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.

SDS preparation date: May 26, 2015 **Replaces MSDS dated:** December 12, 2012
Changes since last revision: New format to SDS

