

FOR CHEMICAL EMERGENCY, SPILL, LEAK, FIRE, EXPOSURE OR ACCIDENT, CALL CHEMTREC - DAY OR NIGHT 1-800-424-9300

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

FORMULATED FOR:

LOVELAND PRODUCTS, INC.
P.O. Box 1286 • Greeley, CO 80632-1286

24-Hour Emergency Phone: 1-800-424-9300

Medical Emergencies: 1-866-944-8565

U.S. Coast Guard National Response Center: 1-800-424-8802

PRODUCT NAME: DYNA-SHIELD® FOOHOLD™

CHEMICAL NAME: Tebuconazole: Alpha-[2-4(chlorophenyl)ethyl]-alpha-(1,1-dimethyl-ethyl)-1H-1,2,4-triazole-1-ethanol
Metalaxyl: N-(2,6-dimethylphenyl)-N-(methoxyacetyl)alanine methyl ester]

CHEMICAL FAMILY: Fungicide

EPA REG. NO.: 34704-1049

MSDS Number: 001049-11-LPI

MSDS Revisions: Section 3

Date of Issue: 02/15/11

Supersedes: 02/11/10

2. HAZARDS IDENTIFICATION SUMMARY

KEEP OUT OF REACH OF CHILDREN – CAUTION / PRECAUCIÓN – Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand the label, find someone to explain it to you in detail.) Causes moderate eye irritation. Avoid contact with eyes, skin or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet.

This product is a light tan-colored liquid suspension with faint odor.

3. COMPOSITION, INFORMATION ON INGREDIENTS

<u>Chemical Ingredients:</u>	<u>Percentage by Weight:</u>	<u>CAS No.</u>	<u>TLV (Units)</u>
Tebuconazole	0.499	107534-96-3	not listed
Metalaxyl	0.668	57837-19-1	not listed
Other Ingredients, including Glycerin	98.833	56-81-5	10 mg/m ³

4. FIRST AID MEASURES

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. Call a poison control center or doctor for treatment advice.
If on skin or clothing:	Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.
If inhaled:	Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control center or doctor for further treatment advice.
If swallowed:	Call a poison control center or doctor immediately 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.

FOR A MEDICAL EMERGENCY INVOLVING THIS PRODUCT, CALL: **1-866-944-8565**. Have the product label or container with you when calling a poison control center or doctor, or going for treatment.

5. FIRE FIGHTING MEASURES

FLASH POINT (°F/Test Method):	>212°F / >100°C (this is an aqueous formulation)
FLAMMABLE LIMITS (LFL & UFL):	None established
EXTINGUISHING MEDIA:	Carbon dioxide (CO ₂), dry chemical, or foam.
HAZARDOUS COMBUSTION PRODUCTS:	Heating or fire can release toxic gases.
SPECIAL FIRE FIGHTING PROCEDURES:	Wear self-contained breathing apparatus with full protective clothing. Fight fire from upwind and keep all non-essential personnel out of area.
UNUSUAL FIRE AND EXPLOSION HAZARDS:	If water is used to fight fire and cool the containers, contain run-off by diking to prevent contamination of water supplies. Containers in fire may burst or explode from excessive heat.

6. ACCIDENTAL RELEASE MEASURES

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED:

Control the spill at its source. Contain the spill to prevent it from spreading, contaminating soil, or entering sewage and drainage systems or any body of water. Clean up spill immediately. Cover entire spill with absorbent material such as sand, diatomaceous earth, or other compatible absorbent material into compatible disposal containers. Scrub the spill area with water and detergent. Pick up wash liquid with additional absorbent and place into disposal container. Once all material is cleaned up and placed in a disposal container, seal the container(s) and handle in an approved manner. Check local, state and federal regulations for proper disposal.

CAUTION: Keep spills and cleaning runoff out of municipal sewers and open bodies of water.

7. HANDLING AND STORAGE

HANDLING: Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet. Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. 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.

STORAGE: Store in a cool, dry location. Do not store in direct hot sunlight. Do not store above 90°F for prolonged periods of time. After prolonged storage in intense cold, allow product to return to approximately 75°F before using. Do not contaminate water, food or feed by storage or disposal.

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

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

ENGINEERING CONTROLS: Maintain exposure levels below exposure limits through the use of general and local exhaust ventilation. Use product in accordance with product labeling and with the requirements listed in the Worker Protection Standard (WPS), 40CFR Part 170.

RESPIRATORY PROTECTION: Not normally required, if vapors or mists exceed acceptable levels, wear a NIOSH approved respirator.

EYE PROTECTION: Chemical splash goggles.

SKIN PROTECTION: Wear protective clothing: coveralls over short-sleeved shirt and short pants, socks and chemical-resistant footwear. Wear rubber or chemical-resistant gloves.

	OSHA PEL 8 hr TWA	ACGIH TLVs
Glycerin	15mg/m ³ / 5mg/m ³	10mg/m ³ (Mist)
	Total Dust / Respirable Fraction	

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE AND ODOR: Light tan-colored liquid suspension with faint odor. **SOLUBILITY:** Dispersible

SPECIFIC GRAVITY (Water = 1): 1.014 g/ml **BULK DENSITY:** 8.46 lbs/gal. **pH:** 6.0 – 7.0

VAPOR PRESSURE: Not established **BOILING POINT:** Not established

PERCENT VOLATILE (by volume): Not established **EVAPORATION RATE:** Not established

Note: These physical data are typical values based on material tested but may vary from sample to sample. Typical values should not be construed as a guaranteed analysis of any specific lot or as specification items.

10. STABILITY AND REACTIVITY

STABILITY: Stable. **CONDITIONS TO AVOID:** Extreme heat. Do not store near heat or open flame.

INCOMPATIBILITY: Strong acids, strong bases, and oxidizing agents.

HAZARDOUS DECOMPOSITION PRODUCTS: Can decompose at high temperatures forming oxides of nitrogen and oxides of carbon.

HAZARDOUS POLYMERIZATION: Will not occur.

11. TOXICOLOGICAL INFORMATION

Acute Oral LD₅₀ (rat): > 5,000 mg/kg **Acute Dermal LD₅₀ (rat):** > 5,000 mg/kg

Eye Irritation (rabbit): Mildly irritating **Skin Irritation (rabbit):** Slightly irritating

Inhalation LC₅₀ (rat): > 2.07 mg/L (4 hr). **Skin Sensitization (guinea pig):** Not a sensitizer

Carcinogenic Potential: None listed in OSHA, NTP, IARC, or ACGIH.

12. ECOLOGICAL INFORMATION

This pesticide is highly toxic to fish, estuarine and marine 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. Treated seeds exposed on soil surface may be hazardous to wildlife. Cover or collect treated seed spilled during loading and planting. Dispose of all excess treated seed by burying seed away from bodies of water. Do not contaminate bodies of water when disposing of planting equipment wash water.

Ecotoxicity:

Data on Metalaxyl Technical:

96-hour LC ₅₀ Bluegill:	139 mg/l	Bobwhite Quail 8-day Dietary LC ₅₀ :	>10,000 ppm
96-hour LC ₅₀ Rainbow Trout:	132 mg/l	Mallard Duck Oral LD ₅₀ :	1,466 mg/kg
48-hour EC ₅₀ Daphnia:	29 mg/l		

Data on Tebuconazole Technical:

96-hour LC ₅₀ Bluegill Sunfish:	5.7 ppm	Bobwhite Quail 8-day Dietary LC ₅₀ :	1,988 mg/kg
96-hour LC ₅₀ Rainbow Trout:	4.4 ppm	Mallard Duck 8-day Dietary LC ₅₀ :	>4,816 ppm
48-hour LC ₅₀ Daphnia Magna:	4.0 ppm		

13. DISPOSAL CONSIDERATIONS

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: Non-refillable container.** Do not reuse this container to hold materials other than pesticides or dilute pesticides (rinsate). After emptying and cleaning, it may be allowable to temporarily hold rinsate or other pesticide-related materials in the container. Contact your state regulatory agency to determine allowable practices in your state. Once cleaned, some agricultural plastic pesticide containers can be taken to a container collection site or picked up for recycling. To find the nearest site, contact your chemical dealer or manufacturer, or contact The Agricultural Container Recycling Council (ACRC) at www.acrecycle.org. Triple rinse or pressure rinse container (or equivalent) promptly after emptying. **For packages up to 5 gallons: 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 ¼ 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. **Pressure rinse as follows:** Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 PSI for at least 30 seconds. **For packages greater than 5 gallons and less than 56 gallons: Triple rinse as follows:** Empty the remaining contents into application equipment or a mix tank. Fill the container ¼ full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. Drain for 10 seconds after the flow begins to drip. **For packages greater than 56 gallons:** To clean the container before final disposal, empty the remaining contents from the container into application equipment or mix tank. Fill the container about 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times. **For refillable containers:** Refill the container with pesticide only. Do not reuse the container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To clean the container before final disposal, empty the remaining contents from the container into application equipment or mix tank. Fill the container about 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times. Do not contaminate water, food or feed by storage or disposal.

14. TRANSPORT INFORMATION

DOT Shipping Description: NOT REGULATED BY USDOT
U.S. Surface Freight Classification: INSECTICIDES OR FUNGICIDES, INSECT OR ANIMAL REPELLENTS; NOI; OTHER THAN POISON (NMFC 102120; CLASS: 60)
Consult appropriate ICAO/IATA and IMDG regulations for shipment requirements in the Air and Maritime shipping modes.

15. REGULATORY INFORMATION

NFPA & HMIS Hazard Ratings:	NFPA		HMIS
	1 Health	0 Least	1 Health
	1 Flammability	1 Slight	1 Flammability
	0 Instability	2 Moderate	0 Reactivity
		3 High	H PPE
		4 Severe	

SARA Hazard Notification/Reporting
SARA Title III Hazard Category: Immediate Y Fire N Sudden Release of Pressure N
 Delayed Y Reactive N

Reportable Quantity (RQ) under U.S. CERCLA: Not listed
SARA, Title III, Section 313: Not listed
RCRA Waste Code: Not listed
CA Proposition 65: Not listed.

16. OTHER INFORMATION

MSDS STATUS: Section 3 revised

PREPARED BY: Registrations and Regulatory Affairs

REVIEWED BY: Environmental/ Regulatory Services

This is a seed treatment product and contains 0.056 pounds Metalaxyl per gallon and 0.042 pounds Tebuconazole per gallon.

®Dyna-Shield is a registered trademark and Foothold is a trademark of Loveland Products, Inc.

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