

**METALAXYL FLUDIOXONIL**  **GROUP GROUP**  4

**FUNGICIDE FUNGICIDE** 



For use as a seed treatment for protection of seed and seedlings against listed diseases. ACTIVE INGREDIENT:

Fludioxonil

Contains 1.34 lbs metalaxyl and 0.21 lbs fludioxonil per gallon.

# **KEEP OUT OF REACH OF CHILDREN**

#### CAUTION/PRECAUCIÓN FIRST AID 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 by a poison control center or doctor.
- DO NOT give anything by mouth to an unconscious person.

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

See inside label booklet for additional Precautionary Statements, and Directions for Use including Storage and Disposal instructions.

> For Chemical Emergency: Spill, Leak, Fire, Exposure, or Accident, Call CHEMTREC Day or Night

Within USA and Canada: 1-800-424-9300 or +1 703-527-3887 (collect calls accepted)

EPA REG. NO. 34704-1085 EPA EST. NO. 228-IL-002 NET CONTENTS: 15 GAL (56.7 L) 053019 V2D 06G23

## PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS CAUTION/PRECAUCIÓN

Harmful if swallowed. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet.

## PERSONAL PROTECTIVE EQUIPMENT (PPE) 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 exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

#### **Engineering Controls Statement**

When handlers use closed systems in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(d) (4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

#### USER SAFETY RECOMMENDATIONS

#### Users Should:

- 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 clothing.

#### ENVIRONMENTAL HAZARDS

This product is toxic to fish and aquatic invertebrates. For terrestrial use, **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 when disposing of equipment wash water or rinsate. Cover or incorporate spilled treated seeds.

Groundwater Advisory: Metalaxyl is known to leach through soil into groundwater under certain conditions as a result of agricultural use. Use of this chemical where soils are permeable, particularly where the water table is shallow, may result in groundwater contamination.

#### 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 Tribe, consult the agency responsible for nesticide regulation.

The Dyna-Shield FM in this container has been manufactured for use in this use season. Use the entire contents of Dyna-Shield FM in this container in the use season immediately following purchase from Loveland Products, Inc. Store at temperatures above 40° F but below 80° F. Remaining product is non-returnable.

#### AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE) and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

DO NOT enter or allow worker entry into treated areas during the restricted-entry interval (REI) of 48 hours.

Exception: If the seed is treated with the product and the treated seed is soil-injected or soil-incorporated, the Worker Protection Standard, under certain circumstances, allows workers to enter the treated area if there will be no contact with anything that has been treated. PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water, is:

- Coveralls
- · Shoes plus socks

#### PRODUCT INFORMATION

Dyna-Shield® FM is a seed treatment fungicide for use on soybeans, legumes, rice, and cotton to protect against damping-off and seed rots due to *Pythium, Phytophthora, Fusarium, Rhizoctonia* spp., and *Phytophthora* root rot. Dyna-Shield FM also suppresses seed-borne *Sclerotinia* and *Phomopsis* spp. particularly in soybeans.

Mix thoroughly before use or use entire container at one time.

Dyna-Shield FM contains an EPA approved dye/colorant that imparts an unnatural color to the seed.

Dyna-Shield FM is formulated for on-farm or commercial seed treatment.

Resistance Management Recommendations: Dyna-Shield FM contains metalaxyl, a Group 4 fungicide, and fludioxonil, a Group 12 fungicide. Metalaxyl belongs to the phenylamide class of chemistry which interferes with fungal RNA synthesis. Fludioxonil belongs to the phenylpyrrole class of chemistry which interferes with osmotic sional transduction.

Fungal populations may contain individuals naturally resistant to Group 4 and 12 fungicides and if used repeatedly in the same fields, then resistant members may eventually dominate the population. Because resistance development cannot be predicted, the use of this product should conform to sound resistance management strategies such as an alternation with fungicides of a different mode of action and/or tank mixes established for the crop and use area.

Use should be based on an IPM program that includes field sanitation, scouting, historical information related to pesticide use, and crop rotation. The IPM program should also consider cultural, biological, and other chemical control practices.

Loveland Products, Inc. encourages responsible product stewardship to ensure effective long term control of the fungal diseases on this label.

- For additional information on Fungicide Resistance Management:
- Contact Loveland Products, Inc. representatives at 1-888-574-2878
- Contact your local extension specialist or certified crop advisor.

   Contact your local extension specialist or certified crop advisor.
- · Visit the Fungicide Resistance Action Committee (FRAC) at http://www.frac.info

Planter Box Treatment: Apply at the specified rate and premix with the seed directly in the planter box at planting. Place half the amount of seed into the planter box and apply half the required amount of pesticide to the seed. Stir the seed thoroughly with a paddle until the seed is uniformly coated. Place the remaining half of the seed into the planter box and add the remaining half of the pesticide. Again, stir the seed with the paddle until all seed is throughly coated.

Tank Mixing: All tank mixes should be pre-tested to determine physical compatibility between formulations. When tank mixing, follow the most restrictive label instructions for any tank mix partner. DO NOT tank mix with any product that bears a label prohibition against tank mixing. It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.

#### MIXING INSTRUCTIONS FOR SOYBEANS

Dyna-Shield FM may be used with liquid rhizobia products that are resistant to fungicides; using standard mechanical slurry or mist-type seed treatment equipment which accurately measures and mixes a flowable seed treatment. The equipment must provide uniform coverage of Dyna-Shield FM on the seed. Uneven seed coverage may not give the desired level of disease control. Dyna-Shield FM must be diluted with either water or liquid inoculants prior to application to soybeans. Consult the manufacturer of the application equipment you plan to use for suitability for this application and for instructions on operation and calibration of the equipment.

In a clean container large enough to contain the entire mixture add the desired amount of Dyna-Shield FM. Add half of the required water or liquid inoculant and mix thorough. Add the remaining amount of water or liquid inoculant and mix again. The slurry is ready for application to the soybeans. Mix as needed and do not store diluted mixture.

Additional or continuous agitation or mixing of the slurry mixture may be necessary to prevent the Dyna-Shield FM from settling out of solution when using water or liquid inoculants. Dyna-Shield FM has been found to be compatible with some liquid inoculant products. Dyna-Shield FM may be mixed or applied sequentially with approved liquid inoculants. Consult the maker of the liquid inoculants and a Loveland Products, inc. representative for directions before applying Dyna-Shield FM with liquid inoculants.

Precaution: Dyna-Shield FM is specially formulated to be compatible with some liquid inoculants. If water is used to further dilute Dyna-Shield FM when rhizobia are present, use only nonchlorinated water. Chlorinated water will kill the live rhizobia contained in the inoculant.

## MIXING INSTRUCTIONS FOR SEED AND POD VEGETABLES, RICE, AND COTTON

Apply Dyna-Shield FM as a water based slurry utilizing standard slurry seed treatment equipment which provides uniform seed coverage. Uneven or incomplete seed coverage may not give the desired level of disease protection. Thoroughly mix the labeled amount of Dyna-Shield FM into the required amount of water for the slurry treater and dilution rate to be used.

Follow the manufacturer application instructions for the seed treatment equipment being used. Maintain constant agitation of the slurry during the treatment. Allow seed to dry before bagging.

#### RESTRICTIONS

DO NOT use treated seed for feed, food, or oil.

#### USE SPECIFICATIONS

#### SOYBEANS

OUIDEANO				
DISEASE	USE RATE (based on 3,000 seeds/lb)			
Protection against damping-off and seed	fl oz/100 lb of seed**	fl oz/1,000 seed	fl oz/140,000 seed	mg Al/seed
rots caused by Pythium, Phytophthora, Fusarium, Rhizoctonia spp., and Phytophthora root rot. Suppresses seed-borne	1.5	0.005	0.7	0.0037 (fludioxonil) 0.0237 (metalaxyl)
Scierotinia and Phomopsis spp.	**Contains 15.6 g of metalaxyl and 2.5 g of fludioxonil /100 kg of seed.			

Apply Dyna-Shield FM at the rate specified in the rate table, plus water at 3.5 fl oz per 100 lbs seed to obtain adequate coverage. Alternatively, approved liquid rhizobia inoculants at rates specified by manufacturer to achieve proper total slurry volumes can be used

The addition of an application of another approved metalaxyl or mefenoxam containing seed treatment product may be used if targeting fields with high Phytophthora pressure. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.

SEED AND POD VEGETABLES: Black-Eyed Peas, Chickpeas, Cowpeas, Field Beans, Field Peas, Garbanzos, Garden Peas, Green Beans, Kidney Beans, Lentils, Lima Beans, Lupines, Navy Beans, Okra, Peas, Pole Beans, Snap Beans, String Beans, and Wax Beans

DISEASE	USE RATE (fl oz/cwt seed)
Protection against damping-off and seed rots caused by <i>Pythium, Phytophthora, Fusarium, Rhizoctonia</i> spp., and <i>Phytophthora</i> root rot. Suppresses seed-borne <i>Sclerotinia</i> and <i>Phomopsis</i> spp.	1.5

#### RICE

	III OE			
	DISEASE	USE RATE (based on 21,00	00 seeds/lb)	
		fl oz/100 lb of seed**	mg Al/seed	
	season soil and seed-borne fungi which cause decay, damping off, and seedling blights including <i>Pythium, Rhizoctonia, Fusarium</i> .		0.00053 (fludioxonil) 0.00338 (metalaxyl)	
			0.00106 (fludioxonil) 0.00677 (metalaxyl)	

 $<sup>^{\</sup>star\star}$  Dyna-Shield FM contains 0.74 grams fludioxonil and 4.72 grams metalaxyl per fl oz.

#### RESTRICTIONS

#### Not registered for use on rice in California

**DO NOT** use treated seed for feed, food, or oil.

Forage must not be grazed until 30 days after planting.

Bags or containers of Dyna-Shield FM treated rice must be labeled with the restriction: "**DO NOT** use metalaxyl or mefenoxam to control *Pythium* in water-seeded rice."

#### COTTON

Disease	Use Rate (fl oz/100 lb of seed)
Protection against seed and soil borne fungi such as <i>Pythium</i> , <i>Rhizoctonia</i> , <i>and Fusarium</i> that cause decay, damping-off, and seedling blights.	1.5 to 3.0

For protection against black rot, use Dyna-Shield FM in combination with Spera<sup>®</sup> 240 FS (myclobutanil) or other seed treatment fungicide containing myclobutanil that is labeled for use on cotton seed.

#### RESTRICTIONS

DO NOT use treated seed for feed, food, or oil.

#### SEED BAG LABELING REQUIREMENTS

Seed commercially treated with this product must be labeled in accordance with all applicable requirements of the Federal Seed Act. The user of this product is responsible for ensuring that the seed bag meets all requirements under the Federal Seed Act.

THE FEDERAL SEED ACT FEDERAL LAW REQUIRES THAT BAGS OF TREATED SEEDS SHALL BE LABELED WITH THE FOLLOWING INFORMATION:

- This seed has been treated with (metalaxyl and fludioxonil) seed treatment.
- DO NOT use for food feed, or oil purposes. Store away from feeds and other foodstuffs.

U.S. ENVIRONMENTAL PROTECTION AGENCY REQUIRES THAT BAGS OF TREATED RICE SHALL BE LABELED WITH THE FOLLOWING INFORMATION:

"Forage must not be grazed until 30 days after planting"

THE U.S. ENVIRONMENTAL PROTECTION AGENCY REQUIRES THE FOLLOWING STATEMENTS ON CONTAINERS CONTAINING TREATED SEED:

- · Store treated seed away from food and feedstuffs.
- Wear long pants, long-sleeved shirt, and protective gloves when handling treated
- Cover or collect treated seeds spilled during loading and planting.
- Treated seed exposed on soil surface may be hazardous to wildlife.
- 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.
- DO NOT contaminate water bodies when disposing of planting equipment wash
- DO NOT allow children, pets, or livestock to have access to treated seed.
- DO NOT graze or feed livestock on treated areas for 30 days after planting.
- Excess treated seed may be used for ethanol production only if (1) by-products are not used for livestock feed and (2) no measurable residues remain in the ethanol by-products that are used in agronomic practice.
- . Groundwater Advisory: Metalaxyl is known to leach through soil into groundwater under certain conditions as a result of agricultural use. Use of the chemical where soils are permeable, particularly where the water table is shallow, may result in groundwater contamination.
- After the seeds have been planted, do not enter or allow worker entry into treated areas during the restricted-entry interval (REI) of 48 hours. Exception: If the treated seed is soil-injected or soil-incorporated, the Worker Protection Standard, under certain circumstances, allows workers to enter the treated area if there will be no contact with anything that has been treated. PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil or water is: coveralls, chemical-resistant gloves made of any waterproof material, and chemical-resistant

### STORAGE AND DISPOSAL

Do not contaminate water, food or feed by storage or disposal. Do not store near oxidizing agents.

PESTICIDE STORAGE: Store only in original container in locked storage areas. If a

spill occurs, visible puddles or drops should be covered with a dry absorbent such as clay, sawdust, lime or soda ash. Sweep up and dispose of in a permitted disposal facility. Avoid cross-contamination with other pesticides and fertilizers during handling and storage. Do not store near heat or open flame. Protect from temperatures below O degrees F. Not for use or storage in or around the home.

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

CONTAINER HANDLING: Nonrefillable 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. If not recycled, then puncture and dispose of in a sanitary landfill, or incineration, or if allowed by state and local authorities, by burning. If burned, stay out of smoke. Triple rinse or pressure rinse container (or equivalent) promptly after emptying

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. Turn the container over onto its other 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. 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. Drain for 10 seconds after the flow begins to drip

For help with any spill, leak, fire or exposure involving this material, call day or night CHEMTREC - 1-800-424-9300

#### CONDITIONS OF SALE AND LIMITATION OF WARRANTY AND LIABILITY

BEFORE BUYING OR USING THIS PRODUCT, read the entire Directions for Use and the following Conditions of Sale and Limitation of Warranty and Liability. By buying or using this product, the buyer or user accepts the following Conditions of Sale and Limitation of Warranty and Liability, which no employee or agent of LOVELAND PRODUCTS, INC. or the seller is authorized to vary in any way.

Follow the Directions for Use of this product carefully. It is impossible to eliminate all risks inherently associated with the use of this product. Crop or other plant injury, ineffectiveness, or other unintended consequences may result from such risks as weather or crop conditions, mixture with other chemicals not specifically identified in this product's label, or use of this product contrary to the label instructions, all of which are beyond the control of LOVELAND PRODUCTS, INC, and the seller. To the extent consistent with applicable law the buyer or user of this product assumes all such inherent risks.

Subject to the foregoing inherent risks, LOVELAND PRODUCTS, INC. warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated in the Directions for Use when the product is used in strict accordance with such Directions for Use under normal conditions of use. EXCEPT AS WARRANTED IN THIS LABEL AND TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, THIS PRODUCT IS SOLD "AS IS," AND LOVELAND PRODUCTS, INC. MAKES NO OTHER WAR-RANTY, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR ELIGIBILITY OF THIS PRODUCT FOR ANY PARTICULAR TRADE USAGE.

IN THE UNLIKELY EVENT THAT BUYER OR USER BELIEVES THAT LOVELAND PRODUCTS, INC. HAS BREACHED A WARRANTY CONTAINED IN THIS LABEL AND TO THE EXTENT REQUIRED BY APPLICABLE LAW, BUYER OR USER MUST SEND WRITTEN NOTICE OF ITS CLAIM TO THE FOLLOWING ADDRESS: LOVELAND PRODUCTS, INC., ATTENTION: LAW DEPARTMENT, P.O. BOX 1286, GREELEY, CO 80632-1286.

TO THE EXTENT CONSISTENT WITH APPLICABLE LAW. THE BUYER'S OR USER'S EXCLUSIVE REMEDY FOR ANY INJURY, LOSS, OR DAMAGE RESULTING FROM THE HANDLING OR USE OF THIS PRODUCT, INCLUDING BUT NOT LIMITED TO CLAIMS OF BREACH OF WARRANTY OR CONTRACT, NEGLIGENCE, STRICT LIABILITY, OR OTHER TORTS. SHALL BE LIMITED TO ONE OF THE FOLLOWING. AT THE ELECTION OF LOVELAND PRODUCTS, INC. OR THE SELLER: DIRECT DAMAGES NOT EXCEEDING THE PURCHASE PRICE OF THE PRODUCT OR REPLACEMENT OF THE PRODUCT. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, LOVELAND PRODUCTS, INC. AND THE SELLER SHALL NOT BE LIABLE TO THE BUYER OR USER OF THIS PRODUCT FOR ANY CONSEQUENTIAL. SPECIAL, OR INDIRECT DAMAGES, OR DAMAGES IN THE NATURE OF A PENALTY.

Dyna-Shield and LOVELAND PRODUCTS, INC. are registered trademarks of Loveland Products, Inc. Spera is a trademark of Nufarm Americas Inc.