## SPECIMEN LABEL

# Agri Star®

DIFENOCONAZOLE	GROUP	3	FUNGICIDE
METALAXYL	GROUP	4	FUNGICIDE
THIABENDAZOLE	GROUP	1	FUNGICIDE
TOLCLOFOS-METHYL	GROUP	14	FUNGICIDE

# **CEREAL PREMIX F4 ST**

FUNGICIDE SEED TREATMENT FOR PROTECTION AGAINST CERTAIN DISEASES OF BARLEY, OATS, RYE, TRITICALE, AND WHEAT.

ACTIVE INGREDIENTS:	
Difenoconazole*	4.36%
Metalaxyl**:	4.72%
Thiabendazole***	2.36%
Tolclofos-methyl****	3.60%
OTHER INGREDIENTS:	84.96%
TOTAL:	100.00%
* CAS No. 110446 69.2. ** CAS No. 57927 10.1	

\* CAS No. 119446-68-3, \*\* CAS No. 57837-19-1, \*\*\*CAS No. 148-79-8, \*\*\*\*CAS No. 57018-04-9

Contains 0.38 pound active ingredient of difenoconazole, 0.41 pound active ingredient of metalaxyl, 0.21 pound active ingredient thiabendazole, and 0.31 pound active ingredient of Tolclofos-methyl per gallon.

EPA Reg. No. 42750-334 EPA Est. No. 42750-MO-002

# KEEP OUT OF REACH OF CHILDREN CAUTION

#### FIRST AID

**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 continuing rinsing eyes. Call a poison control center or doctor for 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 by a poison control center or doctor. Do not give anything by mouth to an unconscious person.

**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 mouth-to-mouth if possible. Call a poison control center or doctor for treatment advice.

Have the product container or label with you when calling a poison control center or doctor, or going for treatment.

**HOT LINE NUMBER:** Have the product container or label with you when calling poison control center or doctor, or going for treatment. For 24- Hour Emergency Assistance spill, leak, fire, exposure, or accident call CHEMTREC 1-800-424-9300

See additional precautionary statements and directions for use inside booklet.

Manufactured By:

## **ALBAUGH, LLC**

1525 NE 36th Street Ankeny, Iowa 50021

FOR CHEMICAL SPILL, LEAK, FIRE, OR EXPOSURE, CALL CHEMTREC 1-800-424-9300



#### PRECAUTIONARY STATEMENTS

# Hazards to Humans and Domestic Animals **CAUTION**

Causes moderate eye irritation. Avoid contact with eyes or clothing. Wear protective eyewear. 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
- Chemical resistant gloves made of any waterproof material (barrier laminate, butyl rubber ≥ 14 mils, nitrile rubber ≥ 14 mils, neoprene ≥ 14 mils, polyvinyl chloride≥ 14 mils or Viton≥ 14 mils)
- · Shoes plus socks

#### **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.

#### **ENGINEERING CONTROLS**

When handlers use closed systems, enclosed cabs, or aircraft 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:

- 1. Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.
- 2. Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- 3. 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.

#### **ENVIRONMENTAL HAZARDS**

This product is toxic to fish, shrimp and aquatic invertebrates. Do not apply directly to water, or to areas where surface water is present, or to intertidal areas below the mean highwater mark. Do not contaminate water when disposing of equipment washwater or rinsate. Treated seed exposed on soil surface may be hazardous to birds. Cover or collect seeds spilled during loading.

#### **GROUNDWATER ADVISORY**

Metalaxyl is known to leach through soil into groundwater under certain conditions as a result of label use. Metalaxyl may leach into groundwater if used in areas where soils are permeable, particularly where the water table is shallow.

#### PHYSICAL-CHEMICAL HAZARDS

Do not mix or allow coming in contact with oxidizing agents. Hazardous chemical reaction may occur.

#### **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 pesticide regulation.

#### 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), notifications to workers, 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
- Chemical resistant gloves made of any waterproof material.
- · Shoes plus socks

FAILURE TO FOLLOW THE DIRECTIONS FOR USE, RESTRICTIONS AND PRECAUTIONS ON THIS LABEL MAY RESULT IN CROP INJURY, POOR DISEASE CONTROL, AND/OR ILLEGAL RESIDUES.

RESTRICTION: CEREAL PREMIX F4 ST is for seed treatment only. DO NOT apply by ground or air as a foliar spray or in-furrow application to any crop or use site.

#### PRODUCT INFORMATION

CEREAL PREMIX F4 ST is a systemic seed treatment that provides protection against certain seed-borne, soil-borne, and early season foliar diseases of wheat, barley, oats, rye and triticale.

The active ingredients in CEREAL PREMIX F4 ST are thiabendazole, difenoconazole, metalaxyl and tolclofos-methyl.

- Tolclofos-methyl enhances protection against Rhizoctonia soloni, Fusarium spp, and other deuteromycete fungi causing seed decay and seedling blights.
- Difenoconazole provides protection against several seed, seedling and certain foliar diseases including bunts and smuts.
- Metalaxyl provides protection against damping-off caused by *Pythium* spp.
- Thiabendazole is a systemic fungicide which aids in the control of seed borne Fusarium spp. and Common Bunt.

Maximum usage when applying both metalaxyl- and mefenoxam-containing products to the same crop within the same season:

Do not apply more than the maximum yearly total application rate for the active ingredient as stated on the label of the product containing the lowest yearly total on that crop.

#### RESISTANCE MANAGEMENT

DIFENOCONAZOLE	GROUP	3	FUNGICIDE
METALAXYL	GROUP	4	FUNGICIDE
THIABENDAZOLE	GROUP	1	FUNGICIDE
TOLCLOFOS-METHYL	GROUP	14	FUNGICIDE

For Resistance Management, CEREAL PREMIX F4 ST contains difenoconazole, a Group 3 fungicide; metalaxyl, a Group 4 fungicide; thiabendazole a Group 1 fungicide and Tolclofos-methyl, a Group 14 fungicide.

Any fungal population may contain individuals naturally resistant to CEREAL PREMIX F4 ST and other Group 3 or Group 4 or Group 1 or Group 14 fungicides. A gradual or total loss of pest control may occur over time if these fungicides are used repeatedly in the same fields.

Because resistance development cannot be predicted, the use of this product should follow appropriate resistance-management strategies. To delay fungicide resistance, use should be based on an IPM program that includes the following steps:

- · Rotate the use of CEREAL PREMIX F4 ST with other fungicide Groups within a growing season sequence with different groups that control the same pathogens.
- Use tank mixtures with fungicide from a different group that are equally effective on the target pest when such use is permitted. Use at least the minimum application rate as labeled by the manufacturer.
- Adopt an integrated disease management program for fungicide use that includes scouting, uses historical information related to pesticide use, and crop rotation, and which considers
  host plant resistance, impact of environmental conditions on disease development, disease thresholds, as well as cultural, biological and other chemical control practices.
- Where possible, make use of predictive disease models to effectively time fungicide applications. Note that using predictive models alone is not sufficient to manage resistance.
- Monitor treated fungal populations for resistance development.
- Contact your local extension specialist or certified crop advisor for any additional pesticide resistance- management and/or IPM recommendations for specific crops and pathogens.
- For further information or to report suspected resistance contact Albaugh, LLC at 1-800-247-8013. You can also contact your pesticide distributor or university extension specialist to report resistance.

#### **MIXING INSTRUCTIONS**

- Apply CEREAL PREMIX F4 ST as a water-based slurry utilizing standard slurry treatment equipment which provides uniform seed coverage.
- Uneven or incomplete seed coverage may not give the desired level of disease control.
- Thoroughly mix the specified amount of CEREAL PREMIX F4 ST into the required amount of water for the slurry and dilution rate to be used.
- Follow the manufacturer instructions for the seed treatment equipment being used.
- Maintain constant agitation of the slurry during the treatment. If application is stopped maintain agitation of slurry until all of the slurry has been used.
- . CEREAL PREMIX F4 ST contains an EPA-approved/colorant that imparts an unnatural color to the seed as required by the Federal Seed Act.
- Allow seed to dry before bagging.

#### **TANK MIXES**

Tank mix when a problem is expected with the diseases that are not controlled by CEREAL PREMIX F4 ST.

Confirm physical compatibility, seed safety, seed safety in stored seed, and biological efficacy before tank mixing with other seed treatment products.

Follow the label directions for the most restrictive of label precautions and limitations.

This product cannot be mixed with any product containing a label prohibiting such mixing. For protection from various insects on registered crops, CEREAL PREMIX F4 ST seed treatment may be mixed seed treatment insecticide in commercial seed treatment facilities.

Follow all appropriate directions, precautions, as specified on the respective product labels.

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.

#### **SEED BAG LABEL REQUIREMENT**

The Federal Seed Act requires that bags containing treated seeds shall be labeled with the following statements:

- This seed has been treated with difenoconazole, metalaxyl, thiabendazole and tolclofos-methyl fungicides.
- Do not use for feed, food, or oil purposes.

In addition, the U.S. Environmental Protection Agency requires the following statements on bags containing seed treated with CEREAL PREMIX F4 ST fungicide:

- · Store away from food and feedstuffs.
- Do not allow children, pets, or livestock to have access to treated seeds.
- · Wear long-sleeved shirt, long pants, and waterproof gloves when handling treated seed.
- Treated seeds exposed on soil surface may be hazardous to wildlife. Cover or collect treated seeds spilled during loading.
- Dispose of all excess treated seed. Left over treated seed may be double- sown around the headland or buried away from water sources in accordance with local requirements.
- Do not contaminate water bodies when disposing of planting equipment washwater.
- Do not plant treated seeds by broadcast.
- Dispose of seed packaging in accordance with local requirements.
- 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 of pesticide remain in ethanol by-products that are used for agronomic practice.
- In the event of crop failure or harvest of a crop grown from seed treated with CEREAL PREMIX F4 ST, the following crops may be replanted immediately: canola, soybean, and cereal grains (barley, oat, rye, triticale, and wheat). For any other crops the minimum plantback interval is 30 days from the date seeds treated with CEREAL PREMIX F4 ST were planted.

#### **CROP USE DIRECTIONS**

#### **RESTRICTIONS:**

- . DO NOT apply CEREAL PREMIX F4 ST by ground or air as a foliar spray or in-furrow application to any crop or use site.
- Do not apply this product in hopper-box or planter-box at planting time.
- Do not plant treated seed by broadcast application.
- Regardless of type of application, do not apply more than 0.15 lb thiabendazole per acre per year or 0.46 lb difenoconazole per acre per year. Four fluid ounces of CEREAL PREMIX F4 ST contains 0.007 lb of thiabendazole and 0.012 lb of difenoconazole.

Crop	Rate/100 Lbs. of seed	Diseases Controlled	Diseases Suppressed <sup>2</sup>
Barley	4 fluid ounces	General Seed Rots¹: Seedling Blight, Root Rot and Damping-off caused by seed- and soil-borne Fusarium spp. or Rhicoztonia spp. Seedling Blight, Root Rot, Damping-off caused by soil-borne Pythium spp. Seed-borne Septoria Covered Smut False Loose Smut True Loose Smut	Common Root Rot (Cochliobolus spp.)  Fusarium Crown and Foot Rot  Take All

Crop	Rate/100 Lbs. of seed	Diseases Controlled	Diseases Suppressed <sup>2</sup>
Oats	4 fluid ounces	General Seed Rots¹: Seedling Blight, Root Rot, Damping-off caused by seed- and soil-borne Fusarium spp. or Rhicoztonia spp. Seedling Blight, Root Rot, and Damping-off caused by soil-borne Pythium spp. Covered Smut Loose Smut	Common Root Rot (Cochliobalus spp.)

Crop	Rate/100 Lbs. of seed	Diseases Controlled	Diseases Suppressed <sup>2</sup>
Rye	4 fluid ounces	General Seed Rots <sup>1</sup> Seedling Blight, Root Rot, and Damping-Off caused by seed- and soil-borne <i>Fusarium</i> spp. or <i>Rhizoctonia</i> spp. Seedling Blight, Root Rot, and Damping- Off caused by soil-borne <i>Pythium</i> spp. Seed-borne <i>Septoria</i> Common Bunt <sup>3</sup> Dwarf Bunt <sup>3</sup>	Common Root Rot (Cochliobalus spp.)  Fusarium Crown and Foot Rot  Take All

General Seed Rots¹ Seedling Blight, Root Rot, and Damping-Off caused by seed- and soil-borne Fusarium spp. or Rhizoctonia spp. Seedling Blight, Root Rot, and Damping-Off caused by seed- and soil-borne Fythium spp. Seedling Blight, Root Rot, and Damping-Off caused by soil-borne Pythium spp. Seed-borne Pythium spp. Seed-borne Septoria Septoria Leaf Blotch Common Bunt³ Dwarf Bunt³ Karnal Bunt Flag Smut  Common Root Rot (Cochliobalus spp.)  Fusarium Crown and Foot Rot  Take All	Crop	Rate/100 Lbs. of seed	Diseases Controlled	Diseases Suppressed <sup>2</sup>
Fusarium Seed Scab Loose Smut	Winter Wheat and		General Seed Rots¹ Seedling Blight, Root Rot, and Damping-Off caused by seed- and soil-borne Fusarium spp. or Rhizoctonia spp. Seedling Blight, Root Rot, and Damping-Off caused by soil-borne Pythium spp. Seed-borne Septoria Septoria Leaf Blotch Common Bunt³ Dwarf Bunt³ Karnal Bunt Flag Smut Fusarium Seed Scab	Common Root Rot (Cochliobalus spp.)  Fusarium Crown and Foot Rot

Crop	Rate/100 Lbs. of seed	Diseases Controlled	Diseases Suppressed <sup>2</sup>
Spring Wheat	4 fluid ounces	General Seed Rots¹ Seedling Blight, Root Rot, and Damping-Off caused by seed- and soil-borne Fusarium spp. or Rhizoctonia spp. Seedling Blight, Root Rot, and Damping-Off caused by soil-borne Pythium spp. Common Bunt³ Karnal Bunt Fusarium Seed Scab Loose Smut Pythium Damping Off	Common Root Rot (Cochliobalus spp.)  Fusarium Crown and Foot Rot  Take All

<sup>&</sup>lt;sup>1</sup>Active on pathogens that cause general seed rots. This includes those caused by saprophytic organisms such as *Fusarium, Pythium, Rhizoctonia, Penicillium* and *Aspergillus*.

<sup>&</sup>lt;sup>2</sup>Suppression means consistent protection at a level which is not optimal but is still of commercial benefit.

<sup>&</sup>lt;sup>3</sup>Provides protection against both seed- and soil-borne bunts (common, dwarf).

## STORAGE AND DISPOSAL

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

#### **PESTICIDE STORAGE**

Store in original containers only. Keep container closed when not in use. Do not store near food or feed. In case of spill on floor or paved surfaces, mop and remove to chemical waste storage area until proper disposal can be made if product cannot be used according to the label.

#### PESTICIDE DISPOSAL

Pesticide wastes are toxic. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste Representative of the nearest EPA Regional Office for guidance.

#### **CONTAINER HANDLING** [less than or equal to 5 gallons]

Non-refillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. 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. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, or by other procedures approved by state and local authorities.

#### **CONTAINER HANDLING** [greater than 5 gallons - mini bulk]

Non-refillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. 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. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, or by other procedures approved by state and local authorities.

#### **CONTAINER HANDLING** [greater than 5 gallons - bulk]

Refillable container. Refill this container with pesticide only. Do not reuse this 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 person refilling. To clean container before final disposal, empty the remaining contents from this 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. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, or by other procedures approved by state and local authorities.

CONTAINER IS NOT SAFE FOR FOOD, FEED OR DRINKING WATER.

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

**NOTICE**: Read the entire Directions for Use and Conditions of Sale and Limitation of Warranty and Liability before buying or using this product. If the terms are not acceptable, return the product at once, unopened, and the purchase price will be refunded.

The Directions for Use of this product must be followed carefully. It is impossible to eliminate all risks inherently associated with the use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as manner of use or application, weather or crop conditions, presence of other materials or other influencing factors in the use of the product, which are beyond the control of ALBAUGH CROP PROTECTION, LLC or Seller. To the extent permitted by applicable law, Buyer and User agree to hold ALBAUGH and Seller harmless for any claims relating to such factors.

ALBAUGH 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, subject to the inherent risks referred to above, when used in accordance with directions under normal use conditions. To the extent permitted by applicable law: (1) this warranty does not extend to the use of the product contrary to label instructions, or under conditions not reasonably foreseeable to or beyond the control of Seller or ALBAUGH, and (2) Buyer and User assume the risk of any such use. TO THE EXTENT PERMITTED BY APPLICABLE LAW, ALBAUGH MAKES NO WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE NOR ANY OTHER EXPRESS OR IMPLIED WARRANTY EXCEPT AS WARRANTED BY THIS LABEL.

To the extent permitted by applicable law, in no event shall ALBAUGH be liable for any incidental, consequential or special damages resulting from the use or handling of this product. TO THE EXTENT PERMITTED BY APPLICABLE LAW, THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE EXCLUSIVE LIABILITY OF ALBAUGH AND SELLER FOR ANY AND ALL CLAIMS, LOSSES, INJURIES OR DAMAGES (INCLUDING CLAIMS BASED ON BREACH OF WARRANTY, CONTRACT, NEGLIGENCE, TORT, STRICT LIABILITY OR OTHERWISE) RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, SHALL BE THE RETURN OF THE PURCHASE PRICE OF THE PRODUCT OR, AT THE ELECTION OF ALBAUGH OR SELLER, THE REPLACEMENT OF THE PRODUCT.

ALBAUGH and Seller offer this product, and Buyer and User accept it, subject to the foregoing Conditions of Sale and Limitation of Warranty and Liability, which may not be modified except by written agreement signed by a duly authorized representative of ALBAUGH.