



**OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION**

WASHINGTON, D.C. 20460

December 19, 2025

Nestor Algarin  
Regulatory Product Manager  
Syngenta Crop Protection, LLC  
P.O. Box 18300  
Greensboro, NC 27419

Subject: Label Amendment - Registration Review Mitigation for Metalaxyl-M/Mefenoxam  
Product Name: DFZ/MFX FS  
EPA Registration Number: 100-1428  
Case Number: 671128  
Application Date: November 21, 2022

Dear Nestor Algarin:

The Agency, in accordance with the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), as amended, has completed reviewing all the information submitted with your application to support the Registration Review of the above referenced product in connection with the Metalaxyl-M/Mefenoxam Interim Decision, and has concluded that your submission is acceptable. The label referred to above, submitted in connection with registration under FIFRA, as amended, is acceptable.

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 Assurance.

A stamped copy of your labeling is enclosed for your records. This labeling supersedes all previously accepted labeling and must be used at your next label printing. 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 12 months from the date of this letter. After 12 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.

If you have any questions about this letter, please contact Concepción Rodríguez by phone at 202-566-0820, or via email at [rodriguez.concepcion@epa.gov](mailto:rodriguez.concepcion@epa.gov).

Sincerely,

A handwritten signature in black ink, appearing to read "Julie R. Javier". The signature is fluid and cursive, with the first name "Julie" being the most prominent.

Julie Javier, Team Leader  
Risk Mitigation and Implementation Branch 4  
Pesticide Re-Evaluation Division  
Office of Pesticide Programs

ENCLOSURE: Stamped label

[Booklet Label - 2.5, 30, 110 Gallons & Bulk]

DIFENOCONAZOLE	GROUP	3	FUNGICIDE
MEFENOXAM	GROUP	4	FUNGICIDE

**DFZ/MFX FS**

### **Fungicide**

A seed treatment for control of diseases of barley, cotton, sweet corn, wheat and triticale

Active Ingredients:

Difenoconazole:\* ..... 7.73%

Mefenoxam\*\* ..... 1.93%

Other Ingredients: ..... 90.34%

Total: ..... 100.00%

\*CAS No. 119446-68-3

\*\*CAS Nos. 70630-17-0 and 69516-34-3

DFZ/MFX FS contains 0.70 lb. difenoconazole and 0.18 lb. mefenoxam per gallon product.

**KEEP OUT OF REACH OF CHILDREN.**

## **CAUTION**

See additional precautionary statements and directions for use inside booklet.

EPA Reg. No. 100-1428

EPA Est.

2.5 gallons  
Net Contents

30 gallons  
Net Contents

\_\_\_ gallons  
Net Contents

**ACCEPTED**

**Dec 19, 2025**

Under the Federal Insecticide, Fungicide  
and Rodenticide Act as amended, for the  
pesticide registered under  
EPA Reg. No. 100-1428

<b>FIRST AID</b>	
<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. 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>
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> For 24-Hour Medical Emergency Assistance (Human or Animal) or Chemical Emergency Assistance (Spill, Leak, Fire, or Accident), Call <b>1-800-888-8372</b>	

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## **PRECAUTIONARY STATEMENTS**

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

#### **CAUTION**

Causes moderate eye irritation. Avoid contact with eyes or clothing. 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)**

#### **Applicators and other handlers must wear:**

- Long-sleeved shirt and long pants
- Shoes plus socks
- Protective eyewear

Follow the 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 Control Statements**

When handlers use closed systems or enclosed cabs 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:**

- Remove clothing/PPE 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.

### **Environmental Hazards**

This product is toxic to fish and aquatic invertebrates. 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 washwaters or rinsate.

### **Ground Water Advisory**

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

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## CONDITIONS OF SALE AND LIMITATION OF WARRANTY AND LIABILITY

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**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 SYNGENTA CROP PROTECTION, LLC or Seller. To the extent permitted by applicable law, Buyer and User agree to hold SYNGENTA and Seller harmless for any claims relating to such factors.

SYNGENTA 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 SYNGENTA, and (2) Buyer and User assume the risk of any such use. TO THE EXTENT PERMITTED BY APPLICABLE LAW, SYNGENTA 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 SYNGENTA 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 SYNGENTA 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 SYNGENTA OR SELLER, THE REPLACEMENT OF THE PRODUCT.**

SYNGENTA 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 SYNGENTA.

## 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.

**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.

### 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
- Chemical-resistant gloves made of barrier laminate, butyl rubber > 14 mils, nitrile rubber > 14 mils, neoprene rubber > 14 mils, polyvinyl chloride (PVC) > 14 mils, or Viton® > 14 mils
- Socks plus shoes



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

Treatment of highly mechanically scarred or damaged seed, or seed known to be of low vigor and poor quality, except for the purpose of curative control of existing disease pests, may result in reduced germination and/or reduction of seed and seedling vigor. Treat using equipment similar to that planned for treating the total seed lot. Conduct germination tests on a small portion of seed before committing the total seed lot to a selected seed treatment. Due to seed quality and seed storage conditions beyond the control of Syngenta, to the extent consistent with applicable law, no claims are made to guarantee the germination of carry-over treated seed.

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**PRODUCT INFORMATION**

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DFZ/MFX FS is a systemic seed treatment that provides protection against listed seed-borne, soil-borne, and early season foliar diseases of wheat, barley and triticale, and listed seed and seedling diseases of sweet corn and cotton. The product contains mefenoxam which protects young seedlings against Pythium, and difenoconazole is effective against all other plant pathogens mentioned in this label.

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**RESISTANCE MANAGEMENT**

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<b>DIFENOCONAZOLE</b>	<b>GROUP 3</b>	<b>FUNGICIDE</b>
<b>MEFENOXAM</b>	<b>GROUP 4</b>	<b>FUNGICIDE</b>

For resistance management, please note that DFZ/MFX FS contains difenoconazole, a Group 3 fungicide, and mefenoxam, a Group 4 fungicide. Any fungal population may contain individuals naturally resistant to DFZ/MFX FS and other Group 3 and Group 4 fungicides. A gradual or total loss of pest control may occur over time if these fungicides are used repeatedly in the same fields. Appropriate resistance management strategies should be followed.

Difenoconazole belongs to the triazole class of chemistry and is a demethylation inhibitor of sterol biosynthesis (DMI) which disrupts membrane synthesis of the fungal cell. Mefenoxam belongs to the phenylamide class of chemistry which interferes with fungal RNA synthesis.

To delay fungicide resistance, take one or more of the following steps:

- Rotate the use of DFZ/MFX FS or other Group 3 or Group 4 fungicides 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 crop and pathogens.
- For further information or to report suspected resistance contact Syngenta at 1-866-Syngent(a) (866-796-4368). You can also contact your pesticide distributor or university extension specialist to report resistance.

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## **MIXING PROCEDURES**

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Apply DFZ/MFX FS 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 labeled amount of DFZ/MFX FS into the required amount of water for the slurry and dilution rate to be used. Follow the manufacturer's 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. Treated seed bagged for later use must contain an EPA-approved dye or colorant that imparts an unnatural color to the seed as required in 40 CFR 153.155 (c). Allow seed to dry before bagging.

### **Tank Mixtures**

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.

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## **SEED BAG LABEL REQUIREMENT**

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Federal law requires that bags containing treated seeds shall be labeled with the following information: "This seed has been treated with the fungicides difenoconazole and mefenoxam. Do not use for feed, food, or oil purposes. Store away from feeds and foodstuffs. If treated seed is spilled outdoors or in areas accessible to birds, promptly clean up or bury to prevent ingestion. Green wheat or triticale forage may not be grazed until 55 days after planting. Green barley forage may not be grazed until 30

days after planting. Do not plant any crop other than those on this label within 30 days to fields in which treated seeds were planted. 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 in agronomic practice.”

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## BARLEY

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Apply DFZ/MFX FS to barley seed at the rates given in the following table:

<b>Rate DFZ/MFX FS Per 100 lb. Seed</b>	<b>Diseases Controlled</b>	<b>Diseases Partially Controlled<sup>1</sup></b>
2.2 oz.	Barley Stripe Seed Rots <sup>2</sup> Covered Smut Pythium Damping Off	Common Root Rot ( <i>Cochliobolus</i> spp.) Fusarium Seed Scab Rhizoctonia Root Rot
4.4 oz.	Barley Stripe Seed Rots <sup>2</sup> Fusarium Seed Scab Covered Smut Pythium Damping Off	Take-all Common Root Rot ( <i>Cochliobolus</i> spp.) Fusarium Root Rot Fusarium Crown Rot Rhizoctonia Root Rot

<sup>1</sup> Partial control can either mean erratic control from good to poor, or consistent control at a level below that is generally considered acceptable for commercial disease control.

<sup>2</sup> Seed rots controlled include those caused by saprophytic organisms such as *Penicillium* spp. and *Aspergillus* spp.

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## **COTTON**

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Apply DFZ/MFX FS at a rate of 2.2 to 6.32 fl. oz. of product per 100 lb. of seed for protection against preemergent and postemergent damping off seedling diseases caused by *Rhizoctonia* spp. and *Fusarium* spp. Use the higher rate where disease is expected to be severe. Always apply in combination with Apron XL® for activity against seed and seedling diseases caused by *Pythium* spp. Follow application and other instructions found on the Apron XL product label.

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## **SWEET CORN**

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Apply DFZ/MFX FS at a rate of 2.2 to 5.5 fl. oz. of product per 100 lb. seed for suppression of postemergent die-back complex and damping off. Confirm physical compatibility, seed safety, seed safety in stored seed, and biological efficacy before tank mixing with other seed treatment products.

## WHEAT AND TRITICALE

Apply DFZ/MFX FS to wheat or triticale seed at the rates given in the following table:

### Winter Wheat and Triticale

Rate DFZ/MFX FS Per CWT	Diseases Controlled	Fall Season Foliar Diseases Controlled <sup>1</sup>	Early Season Control
1.1 fl. oz. <sup>4</sup>	Common Bunt Loose Smut		
2.2 fl. oz.	Common Bunt <sup>2</sup> Dwarf Bunt Karnal Bunt Flag Smut Seed-Borne Septoria Loose Smut Seed Rots <sup>3</sup> Fusarium Seed Scab Pythium Damping-Off		Common Root Rot ( <i>Cochliobolus</i> spp.) Rhizoctonia Root Rot
4.4 fl. oz.	Common Bunt <sup>2</sup> Karnal Bunt Dwarf Bunt Loose Smut Flag Smut Seed-Borne Septoria Seed Rots <sup>3</sup> Fusarium Seed Scab Pythium Damping-Off	Fall Season Powdery Mildew Fall Season Leaf Rust Fall Season Septoria Leaf Blotch	Common Root Rot ( <i>Cochliobolus</i> spp.) Fusarium Root Rot Fusarium Crown Rot Take-All Rhizoctonia Root Rot

<sup>1</sup>DFZ/MFX FS provides control of fall season powdery mildew, fall season leaf rust, and fall season Septoria leaf blotch in winter wheat and triticale for the first 6 weeks after planting. For full season control of these foliar diseases, use Tilt® fungicide according to label instructions.

<sup>2</sup>DFZ/MFX FS controls both seed-borne and soil-borne common bunt.

<sup>3</sup>Seed rots controlled include those caused by saprophytic organisms, such as *Penicillium* spp. and *Aspergillus* spp.

<sup>4</sup>The 1.1 fl. oz. rate is allowed only in the following states: CA, CO, KS, MN, MO, MT, ND, NE, OK, SD, TX.

## Spring Wheat and Triticale

Rate DFZ/MFX FS Per CWT	Diseases Controlled	Early Season Control
1.1 fl. oz. <sup>3</sup>	Common Bunt Loose Smut Fusarium Seed Scab	
2.2 fl. oz.	Common Bunt <sup>1</sup> Karnal Bunt Seed-Borne Septoria Loose Smut Seed Rots <sup>2</sup> Fusarium Seed Scab Pythium Damping-Off	Common Root Rot ( <i>Cochliobolus</i> spp.) Rhizoctonia Root Rot
4.4 fl. oz.	Common Bunt <sup>1</sup> Karnal Bunt Loose Smut Flag Smut Seed-Borne Septoria Seed Rots <sup>2</sup> Fusarium Seed Scab Pythium Damping-Off	Take-All Common Root Rot ( <i>Cochliobolus</i> spp.) Rhizoctonia Root Rot

<sup>1</sup>DFZ/MFX FS controls both seed-borne and soil-borne common bunt.

<sup>2</sup>Seed rots controlled include those caused by saprophytic organisms, such as *Penicillium* spp. and *Aspergillus* spp.

<sup>3</sup>The 1.1 fl. oz. rate is allowed only in the following states: CA, CO, KS, MN, MO, MT, ND, NE, OK, SD, TX.

## STORAGE AND DISPOSAL

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

### Pesticide Storage

Keep container tightly closed when not in use.

### Pesticide Disposal

Wastes resulting from the use of this product may be disposed of onsite or at an approved waste disposal facility.



### **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  $\frac{1}{4}$  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, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

### **Container Handling [greater than 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. Fill the container  $\frac{1}{4}$  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, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

### **Container Handling [greater than 5 gallons]**

Refillable container. Refill this 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 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 other procedures approved by state and local authorities.

For minor spills, leaks, etc., follow all precautions indicated on this label and clean up immediately. Take special care to avoid contamination of equipment and facilities during cleanup and disposal of wastes. In the event of a major spill, fire, or other emergency, call 1-800-888-8372, day or night.

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

Apron XL®, Tilt®, the ALLIANCE FRAME, the SYNGENTA logo and the PURPOSE ICON are trademarks of a Syngenta Group Company.

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For non-emergency (e.g., current product information) call  
Syngenta Crop Protection at 1-800-334-9481.

Manufactured for:  
Syngenta Crop Protection, LLC  
P.O. Box 18300  
Greensboro, North Carolina 27419-8300

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