

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, DC 20460

OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION

October 25, 2016

Michael D. Hall Product Registration Manager BASF Corporation 26 Davis Drive Research Triangle Park, NC 27709

Subject: Label Amendment – Addition of product use rate equivalent to corn use directions

Product Name: DIAMIR TTZ FUNGICIDE SEED TREATMENT

EPA Registration Number: 7969-377

Application Date: 07/19/2016 Decision Number: 519607

Dear Mr. Hall:

The amended label referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide and Rodenticide Act, as amended, is acceptable. This approval does not affect any conditions that were previously imposed on this registration. You continue to be subject to existing conditions on your registration and any deadlines connected with them.

A stamped copy of your labeling is enclosed for your records. This labeling supersedes all previously accepted labeling. 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 18 months from the date of this letter. After 18 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.

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.

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Your release for shipment of the product constitutes acceptance of these conditions. If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA section 6. If you have any questions, please contact Maryam K. Muhammad by phone at 703-347-0301, or via email at Muhammad.maryam@epa.gov.

Sincerely,

Hope Johnson, Product Manager 21 Fungicide Branch Registration Division (7505P) Office of Pesticide Programs

Enclosure



ACCEPTED

Oct 25, 2016

Under the Federal Insecticide, Fungicide and Rodenticide Act as amended, for the pesticide registered under

EPA Reg. No. 7969-377

Diamir® TTZ

Fungicide Seed Treatment

For commercial use only

Seed treatment for control of various seedborne and soilborne diseases in barley, corn, oats, rye, sorghum, triticale, and wheat

Active Ingredient:

triticonazole*	52%
Other Ingredients:	<u>48%</u>
Total:	00%
* Contains 2.5 lbs of the active ingredient per U.S. gallon.	

EPA Reg. No. 7969-377

EPA Est. No.

CAUTION/PRECAUCION

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand this label, find someone to explain it to you in detail.)

See inside for complete First Aid, Precautionary Statements, Directions For Use, Conditions of Sale and Warranty, and state-specific crop and/or use site restrictions.

In case of an emergency endangering life or property involving this product, call day or night 1-800-832-HELP (4357).

Net Contents:

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. 			
If on skin or clothing	 Take off contaminated clothing. Rinse skin immediately with plenty of water for 15 to 20 minutes. Call a poison control center or doctor for treatment advice. 			
 Hold eyes open and rinse slowly and gently with water for 15 to 20 minutes. Remove contact lenses, if present, after first 5 minutes; then continue rinsing. Call a poison control center or doctor for treatment advice. 				
HOTI INE NI IMBED				

HOTLINE NUMBER

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. In case of medical emergency involving this product, call BASF Corporation at 1-800-832-HELP (4357) or dial 911.

NOTE TO PHYSICIAN

No specific antidote is available. Treat symptomatically.

Precautionary Statements

Hazards to Humans and Domestic Animals

CAUTION. Harmful if swallowed, absorbed through skin, or inhaled. Causes moderate eye irritation. Avoid contact with skin, eyes, or clothing. Avoid breathing spray mist.

Personal Protective Equipment (PPE)

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Shoes plus socks
- Chemical-resistant gloves made of barrier laminate, but V rubber ≥ 14 mils. nitrile rubber ≥ 14 mils. neoprene rubber ≥ 14 mils, natural rubber* ≥ 14 mils, polyethylene, polyvinyl chloride (PVC) ≥ 14 mils, or viton ≥ 14 mils

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.

USER SAFETY RECOMMENDATIONS

Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.
- 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

DO NOT apply directly to water, or to areas where surface water is present, or intertidal areas below the mean high water mark. Drift and runoff from treated areas may be hazardous to fish and aquatic organisms in adjacent aquatic sites. **DO NOT** contaminate water when cleaning equipment or disposing of equipment washwater or rinsate.

If treated seed is spilled outdoors or in areas accessible to birds or endangered species, promptly clean up and dispose of (cover or collect) spilled treated seed to prevent ingestion. Dispose of all excess treated seed by burying seed away from bodies of water.

Physical or 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. Read entire label before using this product.

DO NOT apply this product in a way that will contact workers or other persons. Only protected handlers may be in the area during application. For requirements specific to your state or tribe, consult the agency responsible for pesticide regulation. Unless otherwise directed in supplemental labeling, all applicable directions, restrictions, precautions, and conditions of sale and warranty are to be followed.

^{*} Includes natural rubber blends and laminates

STORAGE AND DISPOSAL

DO NOT contaminate water, food, or feed by storage or disposal.

Pesticide Storage

Store in original container only. Keep container closed when not in use. **DO NOT** store near food or feed. Protect from frost and freezing.

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 or refill this container. Triple rinse or pressure rinse container (or equivalent) promptly after emptying; then offer for recycling, if available, or reconditioning, if appropriate, or puncture and dispose of in a sanitary landfill, or by incineration, or by other procedures approved by state and local authorities.

Triple rinse containers small enough to shake (capacity ≤ 5 gallons) 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 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.

Triple rinse containers too large to shake (capacity > 5 gallons) as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container 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.

Pressure rinse as follows: Empty the remaining contents into application equipment or 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.

(continued)

STORAGE AND DISPOSAL (continued)

Container Handling (continued)

Refillable Container. Refill this container with pesticide only. **DO NOT** reuse this container for any other purpose. Triple rinsing the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller.

Triple rinse as follows: To clean the container before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container about 10% 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.

When this container is empty, replace the cap and seal all openings that have been opened during use; return the container to the point of purchase or to a designated location. This container must only be refilled with a pesticide product. Prior to refilling, inspect carefully for damage such as cracks, punctures, abrasions, worn-out threads and closure devices. Check for leaks after refilling and before transport. **DO NOT** transport if this container is damaged or leaking. If the container is damaged, or leaking, or obsolete and not returned to the point of purchase or to a designated location, triple rinse emptied container and offer for recycling, if available, or dispose of container in compliance with state and local regulations.

Spills

In case of large-scale spill of this product, call:

• CHEMTREC 1-800-424-9300

BASF Corporation 1-800-832-HELP (4357)

In case of medical emergency regarding this product, call:

- Your local doctor for immediate treatment
- Your local poison control center (hospital)
- BASF Corporation 1-800-832-HELP (4357)

Steps to take if this material is released into the environment or spilled:

- Wear Personal Protective Equipment (PPE) and avoid exposure when managing a spill. (See Precautionary Statements section of this label for required PPE.)
- Dike and contain the spill with inert, absorbent material (e.g., sand, earth) and transfer liquid and solid diking material to separate containers for disposal. Small-scale spills of this product (that can be cleaned up with a typical spill kit) may be applied to labeled sites.
- Remove contaminated clothing, and wash affected skin areas with soap and water. Wash clothing before reuse.
- Keep spill out of all sewers and open bodies of water.

Product Information

Diamir® TTZ Fungicide Seed Treatment is a liquid fungicide seed treatment that protects seed and seedlings from certain seedborne and soilborne diseases. Diamir TTZ will also suppress or control early season foliar diseases. See Table 1 for crop uses and diseases controlled or suppressed by Diamir TTZ.

NOTE: When handling Diamir TTZ and when treating seed or while augering or handling treated seed, work in a well-ventilated area.

Mode of Action

Triticonazole, the active ingredient in **Diamir TTZ**, belongs to the Sterol losynthesis Inhibitors or Demethylation Inhibitors (DMI) class of chemistry, or target-site-of-action **Group 3** fungicides.

Resistance Management

Due to the small amounts of **Diamir TTZ** applied to the seed that relocate to the upper parts of the plant, the potential for development of resistance is extremely low. Seed treatments of **Diamir TTZ** can, therefore, be followed by foliar use. Follow resistance management guidelines of foliar use fungicides containing triticonazole as specified on the respective labels.

Application Instructions

Diamir TTZ is for use in commercial seed treatment facilities. **DO NOT** use in on-farm systems.

Seed must be of a good quality, well-conditioned, and free of chaff before treatment.

Diamir TTZ contains an EPA-approved dye that imparts an unnatural color to the treated seed to prevent its accidental use as food or feed for animals. Refer to 21 CFR, Part 2.25.

Prepare only the mixture of **Diamir TTZ** needed for immediate application to seed. Refer to the **Tank Mixing Information** section of this label. Apply **Diamir TTZ** at the rates listed in **Table 1** and **Table 2** as a water-based mixture using standard slurry or mist-type seed treatment application equipment. The exact amount of water needed to provide the mixture or slurry rate for uniform and complete coverage of the seed surface is difficult to predict because weather conditions, seed type and surface, and equipment used all have a bearing on coverage. Thorough seed coverage and proper application equipment calibration are essential for good disease control. Consult a seed treatment specialist regarding slurry rates for the crop seed to be treated with **Diamir TTZ** and for calibration and operation procedures of the seed treatment equipment.

Tank Mixing Information

Tank Mix Partners

When using **Diamir TTZ** in a tank mixture with other seed treatment products, follow all directions for use, crops/sites, use rates, dilution ratios, precautions, and limitations on the tank mix partner label. **DO NOT** exceed label dosage or application rate. The most restrictive label precautions and limitations must be followed. **Diamir TTZ** must not be mixed with any product that prohibits such mixing.

Compatibility Test for Tank Mix Partners

When tank mixing **Diamir TTZ**, always test compatibility before use by performing a jar test as follows:

- 1. Add all intended seed treatment products and the appropriate amount of water in a clear glass container.
- 2. Mix well and allow to sit for one hour.
- 3. Remix and observe for incompatibility.

Also test with the seed to ensure the combination of tank mix products does not have detrimental effects on the seed.

Mixing Order

- 1. **Water** Add 3/4 of the required volume of water to the mix tank and turn on agitation.
- 2. **Agitation** Mechanical agitation is required for proper mixing of **Diamir TTZ**.
- 3. Dye or colorant
- 4. Wettable powders
- 5. Soluble powders
- 6. Flowable formulations (such as Diamir TTZ)
- 7. Emulsifiable concentrates
- 8. **Water** Remaining 1/4 of required water volume is added last and can be used as rinsate for the chemical container or to adjust the total slurry to compensate for water displacement by powdered products.

Maintain agitation until the entire slurry mixture has been used.

Ensure seed is dry before bagging.

Use Restrictions

- **DO NOT** use treated seed for food, feed, or oil purposes.
- **DO NOT** store treated seed near feed or foodstuffs.
- DO NOT contaminate feed or foodstuffs.
- DO NOT use the same auger for treating seed that will handle commercial or feed grains.
- **DO NOT** contaminate domestic or irrigation waters.
- DO NOT store leftover treated seed where it could be mixed with untreated seed. Store treated seed in cool, dry conditions.
- DO NOT use in on-farm systems.

SEED CONTAINER LABEL REQUIREMENTS

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

"This seed has been treated with Diamir® TTZ fungicide containing triticonazole. DO NOT use treated seed for food, feed or oil purposes."

The U.S. Environmental Protection Agency requires the following statements on containers containing seed treated with triticonazole:

"Store treated seed away from food and feedstuffs. DO NOT allow children, pets or livestock to have access to treated seed. Wear long pants, longsleeved shirt, shoes plus socks, and protective gloves when handling treated seed.

Treated seed exposed on soil surfaces may be hazardous to wildlife. Plant treated seed into the soil to the recommended minimum depth or greater to minimize exposure. Cover or collect treated seed spilled during loading and planting, in particular at row ends and field corners.

Dispose of all excess treated seed by burying seed away from bodies of water. DO NOT enter or allow worker entry into areas with treated seed during the restricted-entry interval (REI) of 12 hours with the exception that workers may enter these areas if there will be no worker contact with soil/media subsurface. DO NOT contaminate bodies of water when disposing of planting equipment washwater. Dispose of seed packaging or containers in accordance with local requirements. Excess treated seed may be used for ethanol production only if (1) byproducts are not used for livestock feed and (2) no measurable residues of pesticide remain in ethanol by-products that are used in agronomic practice.

In the event of crop failure or harvest of a crop grown from this seed, the field may be replanted immediately with barley, buckwheat, corn, millet (pearl & proso), oats, popcorn, rye, sorghum, teosinte, triticale, wheat or any other crop for which a tolerance for triticonazole exists. For all other crops, the minimum plant back interval is 30 days from the date this seed was planted. A cover crop without a tolerance for triticonazole may be planted for purposes of erosion control or soil improvement; however, the crop must not be grazed or harvested for food or feed."

SEED CONTAINER LABEL REQUIREMENTS Export Only

Federal law requires that containers of treated seed for export only must be labeled with the following information:

"TREATED SEED: FOR EXPORT ONLY – NOT FOR DOMESTIC SALE OR USE IN THE UNITED STATES. TREATED WITH THE FUNGICIDE TRITICONAZOLE."

Table 1. Diamir® TTZ Fungicide Seed Treatment Crop-specific Use Directions for Domestic Use

Crop	Target Disease	Product Use Rate ml/100 kg seed (gram ai/100 kg seed)	Product Use Rate fl ozs/100 lbs seed (lb ai/100 lbs seed)
Barley	Control of: Seed and seedling disease caused by: Ustilago spp. Fusarium spp.	17 (5.1)	0.26 (0.005)
	Suppression of: Common bunt (Tilletia caries) Common root rot (Cochliobolus spp.) Rhizoctonia root rot (R. solani)		
	Seed and seedling disease caused by: Fusarium spp.		
Corn¹ Field corn Popcorn (including seed production corn)	Control of: Seed and seedling disease caused by: Fusarium spp.	17 (5.1)	0.26 (0.005) Equivalent to
	Suppression of: Rhizoctonia root rot (R. solani)		0.013 mg ai per kernel
	Control of: Corn head smut* (Sphacelotheca reiliana)	167.9 (50.3)	2.58 (0.05)
			Equivalent to 0.13 mg ai per kernel
Corn ² Sweet corn	Control of: Seed and seedling disease caused by: Fusarium spp.	33.8 (10.1)	0.52 (0.051)
	Suppression of: Rhizoctonia root rot (R. solani)		Equivalent to 0.013 mg ai per kernel
Oat	Control of: Seed and seedling disease caused by: Ustilago spp.	17 (5.1)	0.26 (0.005)
	Suppression of: Seed and seedling disease caused by: Fusarium spp.		
Rye	Control of: Common bunt (Tilletia caries)	17 (5.1)	0.26 (0.005)
	Seed and seedling disease caused by: Fusarium spp.		
	Suppression of: Seed and seedling disease caused by: Fusarium spp.		
Sorghum	Control of: Seed and seedling disease caused by: Fusarium spp.	33.8 to 67.0 (10.1 to 20.1)	0.52 to 1.03 (0.01 to 0.02)
	Suppression of: Rhizoctonia root rot (R. solani)		

(continued)

Table 1. Diamir® TTZ Fungicide Seed Treatment Crop-specific Use Directions for Domestic Use (continued)

Crop	Target Disease	Product Use Rate ml/100 kg seed (gram ai/100 kg seed)	Product Use Rate fl ozs/100 lbs seed (lb ai/100 lbs seed)
Wheat and Triticale	Control of: Common bunt (Tilletia caries) Flag smut (Urocystis agropyri) Loose smut (Ustilago nuda var. tritici)	17 (5.1)	0.26 (0.005)
	Seed and seedling disease caused by: Fusarium spp.		
	Suppression of: Common bunt (Tilletia caries) Common root rot (Cochliobolus spp.) Rhizoctonia root rot (R. solani) Seed and seedling disease caused by: Fusarium spp.		

^{*} Suppression/control is enhanced when used on hybrids with at least partial resistance to corn head smut caused by Sphacelotheca reiliana.

¹ **Corn** - 1,761 seeds per pound (3,878 kernels per kilogram)

² **Sweet corn** - 3,522 seeds per pound (7,748 kernels per kilogram)

EXPORT ONLYCorn Seed Treatment

Corn seed treated with **Diamir® TTZ Fungicide Seed Treatment** at the rates in **Table 2** is for **EXPORT ONLY - NOT** for domestic sale or use in the United States and its territories. Containers of treated seed for **EXPORT ONLY** must be labeled **"TREATED SEED: FOR EXPORT ONLY - NOT FOR DOMESTIC SALE OR USE IN THE UNITED STATES. TREATED WITH THE FUNGICIDE TRITICONAZOLE."**

Table 2. Diamir Crop-specific Use Directions Corn Seed for EXPORT ONLY

Crop	Target Disease	Product Use Rate ml/100 kg seed (gram ai/100 kg seed)	Product Use Rate* fl ozs/100 lbs seed (lb ai/100 lbs seed)
Corn ¹ Field corn	Control of:	169 to 286	2.6 to 4.4
	Corn head smut (Sphacelotheca reiliana)	(50.7 to 85.8)	(0.051 to 0.086)
Popcorn		Equivalent to	Equivalent to
(including seed		0.13 to 0.22 mg ai	0.13 to 0.22 mg ai
production corn)		per kernel	per kernel

^{*} Product use rates are compatible with non-pelleted and variable-rate pelleted commercial seed treatments.

¹ Corn - 1,761 seeds per pound (3,878 kernels per kilogram)

Conditions of Sale and Warranty

The **Directions For Use** of this product reflect the opinion of experts based on field use and tests. The directions are believed to be reliable and must be followed carefully. However, 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 the presence of other or untested or unapproved materials, seed of low quality or low vigor or low germination, use of the product in a manner inconsistent with its labeling. misapplication of the product, or weather conditions at planting or environmental conditions during seed storage, all of which are beyond the control of BASF CORPORATION ("BASF") or the Seller. To the extent consistent with applicable law, all such risks shall be assumed by the Buyer.

BASF warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes referred to in the **Directions For Use**, subject to the inherent risks, referred to above.

TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, BASF MAKES NO OTHER EXPRESS OR IMPLIED WARRANTY OF FITNESS OR MERCHANTABILITY OR ANY OTHER EXPRESS OR IMPLIED WARRANTY.

TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, BUYER'S EXCLUSIVE REMEDY AND BASF'S EXCLUSIVE LIABILITY, WHETHER IN CONTRACT, TORT, NEGLIGENCE, STRICT LIABILITY, OR OTHERWISE, SHALL BE LIMITED TO REPAYMENT OF THE PURCHASE PRICE OF THE PRODUCT.

TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, BASF AND THE SELLER DISCLAIM ANY LIABILITY FOR CONSEQUENTIAL, EXEMPLARY, SPECIAL OR INDIRECT DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT.

BASF and the Seller offer this product, and the Buyer and User accept it, subject to the foregoing **Conditions of Sale and Warranty** which may be varied only by agreement in writing signed by a duly authorized representative of BASF.

Diamir is a registered trademark of BASF.

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