10/8/2014

UNITED . ATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, DC 20460



OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION

Patrick McCain Sr. Regulatory Product Manager Seed Care Division Syngenta Crop Protection, LLC P.O. Box 18300 Greensboro, NC 27419 OCT 0 8 2014

Subject:

Label Amendment – Updated Environmental Hazards Section, Resistance Management Section, and Application Rate Expressed in Different Units

Management Section, and Application Rate Expresse

Product Name: Dynasty CST

EPA Registration Number: 100-1177

Application Date: 5/21/2014 Decision Number: 491852

Dear Mr. McCain:

The amended label referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide and Rodenticide Act, as amended, is acceptable.

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.

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(e). If you have any questions, please Erin Malone at (703) 347-0253 or by email at malone.erin@epa.gov.

Sincerely,

Shaja B. Joyner, Product Manager 20

Fungicide Branch

Registration Division (7505P) Office of Pesticide Programs

Enclosure

GROUP 4 11 12 FUNGICIDES

# **Dynasty® CST**

### **Fungicide**

Broad-spectrum seed treatment fungicide for control of seed and seed borne diseases in cotton.

 Active Ingredients :
 6.64%

 Azoxystrobin¹:
 1.11%

 Fludioxonil²:
 1.11%

 Mefenoxam³:
 3.32%

 Other Ingredients:
 88.93%

 Total:
 100.00%

<sup>1</sup>(CAS No. 131860-33-8) <sup>2</sup>(CAS No. 131341-86-1)

Contains 0.63 pound azoxystrobin, 0.10 pound fludioxonil, and 0.31 pound mefenoxam per gallon.

#### KEEP OUT OF REACH OF CHILDREN.

#### CAUTION

See additional precautionary statements and directions for use inside booklet.

EPA Reg. No. 100-1177

SCP 1177A-MAS 0609

15 gallons Net Contents

ACCEPTED OCT 0 8 2014

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

EPA. Reg. No: 100-1177

<sup>3(</sup>CAS No. 70630-17-0 and 69516-34-3)

	FIRST AID
If swallowed	<ul> <li>Call a poison control center or doctor immediately for treatment advice.</li> <li>Have person sip a glass of water if able to swallow.</li> <li>Do not induce vomiting unless told to do so by a poison control center or doctor.</li> </ul>
	<ul> <li>Do not give anything by mouth to an unconscious person.</li> </ul>
If in eyes	<ul> <li>Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li> <li>Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li> </ul>
•	Call a poison control center or doctor for treatment advice.
If on skin or clothing	<ul> <li>Take off contaminated clothing.</li> <li>Rinse skin immediately with plenty of water for 15-20 minutes.</li> <li>Call a poison control center or doctor for treatment advice.</li> </ul>
If inhaled	<ul> <li>Move person to fresh air.</li> <li>If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth, if possible.</li> <li>Call a poison control center or doctor for further treatment advice.</li> </ul>
Have the product going for treatme	container or label with you when calling a poison control center or doctor, or
<u> </u>	HOT LINE NUMBER
	or 24 Hour Medical Emergency Assistance (Human or Animal) or Chemical Emergency Assistance (Spill, Leak, Fire, or Accident),  Call
	1-800-888-8372

# PRECAUTIONARY STATEMENTS

### Hazards to Humans and Domestic Animals

Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

# **CAUTION**

Harmful if swallowed. Wash thoroughly with soap and water after handling.

# Personal Protective Equipment (PPE)

Some materials that are chemical-resistant to this product are listed below. If you want more options follow the instructions for Category C on an EPA chemical resistance category selection chart.

# Applicators and other handlers must wear:

Long-sleeved shirt and long pants

4/13

- Chemical resistant gloves made of any waterproof material such as polyvinyl chloride, nitrile rubber, or butyl rubber.
- 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 Control Statements**

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 into clean clothing.

#### **Environmental Hazards**

This product is toxic to fish, aquatic invertebrates, oysters and shrimp.

For terrestrial uses: Do not apply directly to water or 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 washwater or rinsate.

Runoff may be hazardous to aquatic organisms in water adjacent to treated areas.

#### **Groundwater Advisory**

Azoxystrobin and fludioxonil have properties and characteristics associated with chemicals detected in groundwater. These chemicals may leach into groundwater if used in areas where soils are permeable, particularly where the water table is shallow. Mefenoxam is known to leach through soil to ground water under certain conditions as a result of label use.

# **Surface Water Advisory**

This product may impact surface water quality due to runoff of rain water. This is especially true for poorly draining soils and soils with shallow ground water. This product is classified as having high potential for reaching both surface water and aquatic sediment via runoff for several months or more after application.

A level, well-maintained vegetative buffer strip between areas to which this product is applied and surface water features such as ponds, streams, and springs will reduce the potential loading of azoxystrobin, fludioxonil, mefenoxam and a degradate of azoxystrobin from runoff water and sediment. Runoff of this product will be reduced by avoiding applications when rainfall or irrigation is expected to occur within 48 hours. Sound erosion control practices will reduce this product's potential to reach aquatic sediment via runoff.

#### 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 Syngenta Crop Protection, LLC or Seller. To the extent permitted by applicable law, all such risks shall be assumed by Buyer and User, and 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 or Seller 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.

Page 6 of 12

7/13

#### **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 such as polyvinyl chloride, nitrile rubber, or butyl rubber
- · Shoes plus socks

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

TREATMENT OF HIGHLY MECHANICALLY DAMAGED SEED, OR SEED OF KNOWN LOW VIGOR AND POOR QUALITY, MAY RESULT IN REDUCED GERMINATION AND/OR REDUCTION OF SEED AND SEEDLING VIGOR. TREAT AND CONDUCT GERMINATION TEST ON A SMALL PORTION OF SEED BEFORE COMMITTING THE TOTAL SEED LOT TO A SELECTED CHEMICAL TREATMENT. DUE TO SEED QUALITY CONDITIONS BEYOND THE CONTROL OF SYNGENTA CROP PROTECTION, NO CLAIMS ARE MADE TO GUARANTEE GERMINATION OF CARRY-OVER SEED.

#### PRODUCT INFORMATION

Dynasty CST is a broad spectrum, preventative seed treatment fungicide with systemic and contact properties recommended for the control of many important plant diseases. Dynasty CST may be applied in tank mixes, or sequentially with other registered, seed treatment products. If using Dynasty CST in a tank mixture with other seed treatment products, observe all directions for use, crops/sites, use rates, dilution ratios, precautions, and limitations, which appear on the tank mix partner label. No label dosage can be exceeded and the most restrictive label precautions and limitations must be followed. This product is not to be mixed with any product which prohibits such mixing.

All applications must be made according to the use directions that follow. If a rate range is specified, use higher rates of Dynasty CST when the disease pressure is expected to be high.

## **USE PRECAUTIONS**

Cotton may be replanted immediately after an azoxystrobin treatment. Do not plant any other crop within 45 days after the last treatment of the cotton crop with a product that contains azoxystrobin or after the planting of cotton seeds that have been treated with a product that contains azoxystrobin.

#### RESISTANCE MANAGEMENT

GROUP 4 11 12 FUNGICIDES

Dynasty CST contains azoxystrobin, a Group 11 fungicide, fludioxonil, a Group 12 fungicide, and mefenoxam, a Group 4 fungicide. Azoxystrobin belongs to the methoxy-acrylate class of chemistry and is a Qol (Quinone outside Inhibitor). Qol's inhibit the quinone outside site within the electron transport system. Fludioxonil belongs to the phenylpyrrole class of chemistry and has a unique mode of action which prevents fungal respiration. Mefenoxam is a systemic fungicide belonging to the phenylamide class of chemistry which adversely affects fungal RNA synthesis.

Fungal populations may contain individuals naturally resistant to Group 4, 11 or 12 fungicides. If Group 4, 11 or 12 fungicides are 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 established for the crop and use area.

Seed treatment 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.

Where possible, rotate or mix the use of Group 4, 11 and 12 fungicides with different fungicide groups to which resistance has not developed.

Syngenta encourages responsible product stewardship to ensure effective long term control of the fungal diseases on this label.

Page 8 of 12

# 9/13

# For additional information on fungicide resistance management:

- Contact Syngenta representatives at 1-800-334-9481
- Contact your local extension specialist or certified crop advisor
- Visit the Fungicide Resistance Action Committee (FRAC) on the web at: http://www.frac.info

#### **MIXING INSTRUCTIONS**

Apply Dynasty CST as a water based slurry using seed treatment application equipment that will provide uniform coverage on the seed surface. Consult the manufacturer of the application equipment being used for calibration and operation procedures.

Dynasty CST mixes easily with water and other water based seed treatments manufactured by Syngenta. When mixing with products from other manufacturers, the compatibility should be tested prior to use by conducting a jar test. Mix all intended seed treatments with the appropriate amount of water in a clear glass container. Mix well and let sit for one hour. Remix and observe for incompatibility.

Mixing Dynasty CST with tank mix partners: Add ½ of the required water to the mix tank and turn on the agitation. Mechanical agitation is preferred. If using wettable powders and/or products in water-soluble pouches, add them first to clean water allowing them to completely disperse prior to adding Dynasty CST or other products. Allow each tank mix partner to completely disperse before adding the next product. Add the remaining amount of water and agitate. Maintain agitation until the entire slurry mixture has been used. Allow seed to dry prior to bagging.

Product must be used with an EPA-approved dye that imparts an unnatural color to the seed.

10/13

# SEED BAG LABEL REQUIREMENTS

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

- This seed has been treated with azoxystrobin, fludioxonil, and mefenoxam fungicides.
- Do not use treated seed for feed, food, or oil purposes.

In addition, the U.S. Environmental Protection Agency requires the following statements on containers containing seed treated with azoxystrobin:

Store treated seed away from food and feedstuffs.

- Do not allow children, pets, or livestock to have access to treated seeds.
- Wear long pants, long-sleeved shirt and protective gloves when handling treated seed.
- Treated seed must be planted into the soil at a depth greater than 1 inch.
- Treated seeds exposed on soil surface may be hazardous to wildlife. Cover or collect treated seeds spilled during loading and planting.
- **Ground Water Advisory:** Azoxystrobin and fludioxonil have properties and characteristics associated with chemicals detected in groundwater. These chemicals may leach into groundwater if used in areas where soils are permeable, particularly where the water table is shallow. Mefenoxam is known to leach through soil to ground water under certain conditions as a result of label use.
- Excess treated seed may be used for biofuel production only if: (1) By-products are not used for livestock feed, and (2) No measurable residues of pesticides remain in ethanol by-products that are used for agronomic practice.
- Dispose of excess treated seed by burying seed away from bodies of water.
- Do not contaminate bodies of water when disposing of planting equipment wash water.
- Dispose of seed packaging or containers in accordance with local requirements.

# **CROP USE DIRECTIONS**

Crop	Target Diseases	Use Rate		
		fl oz product/100 lb seed	Total mg ai/seed*	Remarks
Cotton	Seed-borne and soil-borne fungi causing decay, damping-off, and seedling blight.  Seedling damping-off (Rhizoctonia solani) (Pythium spp.) (Fusarium spp.)	3.1-3.95	0.025-0.032	For Black Root Rot control (Thielaviopsis basicola), use Dynasty CST in combination with products containing the active ingredient myclobutanil. Use labeled rates for application as a seed treatment.

<sup>\*</sup>Based on 4,500 cotton seeds/lb.

Page 11 of 12

1413

#### STORAGE AND DISPOSAL

Do not contaminate water, food or feed by storage or disposal. Open dumping is prohibited.

#### **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 acutely hazardous. 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. 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, by burning.

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

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 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 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.

13/13

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 IS NOT SAFE FOR FOOD, FEED OR DRINKING WATER.

Dynasty® CST, 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.

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

SCP 1177A-MAS 0609

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