

DIFENOCONAZOLE	GROUP	3	FUNGICIDE
MEFENOXAM	GROUP	4	FUNGICIDE
AZOXYSTROBIN	GROUP	11	FUNGICIDE
FLUDIOXONIL	GROUP	12	FUNGICIDE



# SEED SHIELD®

## COTTON

## Fungicide

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

### Active Ingredients:

Azoxystrobin <sup>1</sup>	5.24%
Fludioxonil <sup>2</sup>	0.87%
Mefenoxam <sup>3</sup>	2.62%
Difenoconazole <sup>4</sup>	0.35%
Other Ingredients:	90.92%
Total:	100.00%

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

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

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

<sup>4</sup>(CAS No. 119446-68-3)

Contains 0.48 pound azoxystrobin, 0.08 pound fludioxonil, 0.21 pound mefenoxam and 0.03 pound difenoconazole per gallon

**KEEP OUT OF REACH OF  
CHILDREN.**

## CAUTION

See additional precautionary statements and directions for use inside booklet.

EPA Reg. No. 100-1286-5905

EPA Est. No. 100-NE-001

**SCPSR-HEL 1286-5905A-L1C 0919  
4115566**

**AD 091219**



## Seed Treatment

Manufactured For  
**HELENA AGRI-ENTERPRISES, LLC**  
225 SCHILLING BOULEVARD, SUITE 300  
COLLIERVILLE, TENNESSEE 38017 U.S.A. • (901) 761-0050

**NET CONTENTS: 15 GALLONS**

**Product ID 34912**

10129-L1058715 12-02-19 SCP 01-02 (12-19-19)  
Seed Shield Cotton – 15 gal booklet/base – Mech/FPL  
SCP 1790... 4793... 10129...

### AGI 107035

Print Size – Booklet: 5.75" wide X 6.75" high  
Base: 6.75" wide X 6.75" high

Pantone colors – Black, PMS 465, PMS 7629

No. of pages – 8

## NOTES

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<b>FIRST AID</b>	
<b>IF SWALLOWED:</b>	<ul style="list-style-type: none"> <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> <li>• Do not give anything by mouth to an unconscious person.</li> </ul>
<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.</li> <li>• 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>
<b>IF ON SKIN OR CLOTHING:</b>	<ul style="list-style-type: none"> <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>
<b>IF INHALED:</b>	<ul style="list-style-type: none"> <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>
<b>HOT LINE NUMBER</b>	
Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact 1-800-424-9300, collect day or night, for emergency medical treatment information.	

## **PRECAUTIONARY STATEMENTS**

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

## **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.

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

- Long-sleeved shirt and long pants
- Chemical resistant gloves made of barrier laminate, butyl rubber > 14 mils, nitrile rubber > 14 mils, neoprene rubber > 14 mils, or polyvinyl chloride (PVC) > 14 mils or Viton® > 14 mils
- Shoes plus socks

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, 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 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 pesticide is toxic to freshwater and estuarine/marine fish and aquatic invertebrates. Do not contaminate water when 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 properly to prevent ingestion.

## CONDITIONS OF SALE - LIMITED WARRANTY AND LIMITATIONS OF LIABILITY AND REMEDIES

**NOTICE:** Read the Conditions of Sale - Warranty and Limitations of Liability and Remedies before using this product. If the terms are not acceptable, return the product, unopened, and the full purchase price will be refunded.

The directions on this label are believed to be reliable and should be followed carefully. Insufficient control of pests and/or injury to the crop to which the product is applied may result from the occurrence of extraordinary or unusual weather conditions or the failure to follow the label directions or good application practices, all of which are beyond the control of Helena Agri-Enterprises, LLC (the "Company") or seller. In addition, failure to follow label directions may cause injury to crops, animals, man or the environment. The Company warrants that this product conforms to the chemical description on the label and is reasonably fit for the purpose referred to in the directions for use subject to the factors noted above which are beyond the control of the Company. The Company makes no other warranties or representations of any kind express or implied, concerning the product, including no implied warranty of merchantability or fitness for any particular purpose, and no such warranty shall be implied by law.

The exclusive remedy against the Company for any cause of action relating to the handling or use of this product shall be limited to, at Helena Agri-Enterprises, LLC's election, one of the following:

1. Refund of the purchase price paid by buyer or user for product bought, or
2. Replacement of the product used

To the extent consistent with applicable law, the Company shall not be liable and any and all claims against the Company are waived for special, indirect, incidental, or consequential damages or expense of any nature, including, but not limited to, loss of profits or income. The Company and the seller offer this product and the buyer and user accept it, subject to the foregoing conditions of sale and limitation of warranty, liability and remedies.

## 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.

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 Helena Agri-Enterprises, LLC, no claims are made to guarantee germination of carry-over seed.

Due to seed quality, crop or variety sensitivity, and seed storage conditions beyond the control of Helena Agri-Enterprises, LLC, no claims are made to guarantee the germination of seed or propagating material for all crop seed when treated with **Seed Shield Cotton**.

**MAXIMUM USAGE WHEN APPLYING 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.

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

## PRODUCT INFORMATION

**Seed Shield Cotton** is a broad spectrum, preventative seed treatment fungicide with systemic and contact properties recommended for the control of many important plant diseases. **Seed Shield Cotton** may be applied in tank mixes, or sequentially with other registered, seed treatment products. If using **Seed Shield Cotton** 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 should be exceeded and the most restrictive label precautions and limitations should be followed. This product should not be mixed with any product, which prohibits such mixing.

For use in commercial seed treatment operations only. Not for use in planter or hopper box applications.

All applications should be made according to the use directions that follow.

## USE PRECAUTIONS

If necessary, cotton may be replanted immediately after last planting.

## USE RESTRICTION

Do not plant other crops sooner than 45 days after last planting.

## RESISTANCE MANAGEMENT

DIFENOCONAZOLE	GROUP	3	FUNGICIDE
MEFENOXAM	GROUP	4	FUNGICIDE
AZOXYSTROBIN	GROUP	11	FUNGICIDE
FLUDIOXONIL	GROUP	12	FUNGICIDE

For resistance management, please note that Seed Shield Cotton contains Group 3/difenoconazole, Group 4/mefenoxam, Group 11/azoxystrobin, and Group 12/fludioxonil fungicides. Any fungal population may contain individuals naturally resistant to Seed Shield Cotton and other Group 3, Group 4, Group 11, and Group 12 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. Azoxystrobin belongs to the strobilurin class of chemistry which disrupts cellular respiration and energy generation. Fludioxonil belongs to the phenylpyrrole class of chemistry which interferes with osmotic signal transduction.

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

- Rotate the use of Seed Shield Cotton or other Group 3, Group 4, Group 11, and Group 12 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 Helena at 901-761-0050. You can also contact your pesticide distributor or university extension specialist to report resistance.

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

## MIXING INSTRUCTIONS

Apply **Seed Shield Cotton** 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.

**Seed Shield Cotton** mixes easily with water and other water based seed treatments manufactured by Helena Agri-Enterprises, LLC. 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 **Seed Shield Cotton** with tank mix partners: Add 1/2 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 **Seed Shield Cotton** 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.

**Note:** Federal law requires that bags of treated seeds shall be labeled with the following information. "This seed has been treated with azoxystrobin, fludioxonil, difenoconazole and mefenoxam fungicides. Do not use for food, feed or oil purposes. Store away from food and feedstuffs. Do not apply more than 0.01 lb ai /Acre/calendar year (4.7 g ai/Acre/calendar year) of mefenoxam as a seed treatment on Cotton. Do not apply more than 0.125 lb ai/Acre/calendar year (56.7 g ai/Acre/calendar year) of mefenoxam regardless of type of application (seed treatment, soil or foliar) on Cotton." Use with an EPA-approved dye that imparts an unnatural color to the seed.

## CROP USE DIRECTIONS

Crop	Target Diseases	Amount of active ingredient (azoxystrobin, fludioxonil, mefenoxam, difenoconazole combined) per seed*	Remarks
Cotton	Seed-borne and soil-borne fungi causing decay, damping-off and/or seedling blight.  Seedling damping-off ( <i>Rhizoctonia solani</i> , <i>Pythium</i> spp., <i>Fusarium</i> spp.)	0.023 mg	*mg per seed rates based on 5000 seeds per pound

\*1 fl. oz. of **Seed Shield Cotton** contains 1.70 grams azoxystrobin, 0.28 grams fludioxonil, 0.74 grams mefenoxam, and 0.11 grams difenoconazole.

### Application Based on a Weight Basis:

Crop	Target Diseases	Use Rate fl. oz. product per 100 lbs seed*
Cotton	Seed-borne and soil-borne fungi causing decay, damping-off and/or seedling blight.  Seedling damping-off ( <i>Rhizoctonia solani</i> , <i>Pythium</i> spp., <i>Fusarium</i> spp.)	4.0

\*1 fl. oz. of **Seed Shield Cotton** contains 1.70 grams azoxystrobin, 0.28 grams fludioxonil, 0.74 grams mefenoxam, and 0.11 grams difenoconazole.

**Restrictions:**

- The maximum application rate for Cotton is not to exceed 0.00018 lbs ai/seed.
- Do not apply more than 0.01 lb ai /Acre/calendar year (4.7 g ai/Acre/calendar year) of mefenoxam as a seed treatment on Cotton.
- Do not apply more than 0.125 lb ai/Acre/calendar year (56.7 g ai/Acre/calendar year) of mefenoxam regardless of type of application (seed treatment, soil or foliar) on Cotton.

## 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**

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 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 by other procedures approved by state and local authorities.

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

**Seed Shield®** is a trademark of Helena Holding Company

Viton® trademark of E.I. du Pont de Nemours and Company

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For non-emergency (e.g., current product information), call  
CHEMTREC at 1-800-424-9300.

Manufactured for:  
Helena Agri-Enterprises, LLC  
225 Schilling Boulevard, Suite 300  
Collierville, TN 38017

**SCPSR-HEL 1286-5905A-L1C 0919**  
**4115566**  
**AD 091219**

## NOTES

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DIFENOCONAZOLE	GROUP	3	FUNGICIDE
MEFENOXAM	GROUP	4	FUNGICIDE
AZOXYSTROBIN	GROUP	11	FUNGICIDE
FLUDIOXONIL	GROUP	12	FUNGICIDE



**SEED  
SHIELD®**  
COTTON

## Fungicide

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

### Active Ingredients:

Azoxystrobin <sup>1</sup>	5.24%
Fludioxonil <sup>2</sup>	0.87%
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Difenoconazole <sup>4</sup>	0.35%

Other Ingredients:	90.92%
Total:	100.00%

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Contains 0.48 pound azoxystrobin, 0.08 pound fludioxonil, 0.21 pound mefenoxam and 0.03 pound difenoconazole per gallon

See additional precautionary statements and directions for use inside booklet.

EPA Reg. No. 100-1286-5905

EPA Est. No. 100-NE-001

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225 Schilling Boulevard, Suite 300  
Collierville, TN 38017

**SCPSR-HEL 1286-5905A-L1C 0919**

**4115566**

**AD 091219**

**NET CONTENTS: 15 gallons**

## KEEP OUT OF REACH OF CHILDREN. CAUTION

### PRECAUTIONARY STATEMENTS

Hazards to Humans and Domestic Animals

#### CAUTION

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

#### 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 do so by a poison control center or doctor. Do not give anything by mouth to an unconscious person.

**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 continue rinsing eye. Call a poison control center or doctor for treatment advice.

**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 further treatment advice.

**HOT LINE NUMBER:** Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact 1-800-424-9300, collect day or night, for emergency medical treatment information.

#### Environmental Hazards

This pesticide is toxic to freshwater and estuarine/marine fish and aquatic invertebrates. Do not contaminate water when 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 properly to prevent ingestion.

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

