

100-1363

11-04-2010

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U.S. ENVIRONMENTAL PROTECTION AGENCY

Office of Pesticide Programs
Registration Division (7505P)
1200 Pennsylvania Ave., N.W.
Washington, D.C. 20460

EPA Reg. Number:

100-1363

Date of Issuance:

NOV 4 2010

NOTICE OF PESTICIDE:

Registration
 Reregistration
(under FIFRA, as amended)

Term of Issuance:

Conditional

Name of Pesticide Product:

Bion 500FS

Name and Address of Registrant (include ZIP Code):

**Attn: Patrick McCain
Syngenta Crop Protection, Inc.
P.O. Box 18300
Greensboro, NC 27419**

Note: Changes in labeling differing in substance from that accepted in connection with this registration must be submitted to and accepted by the Registration Division prior to use of the label in commerce. In any correspondence on this product always refer to the above EPA registration number.

On the basis of information furnished by the registrant, the above named pesticide is hereby registered under the Federal Insecticide, Fungicide and Rodenticide Act. Registration is in no way to be construed as an endorsement or recommendation of this product by the Agency. In order to protect health and the environment, the Administrator, on his motion, may at any time suspend or cancel the registration of a pesticide in accordance with the Act. The acceptance of any name in connection with the registration of a product under this Act is not to be construed as giving the registrant a right to exclusive use of the name or to its use if it has been covered by others.

This product is conditionally registered in accordance with FIFRA section 3(c)(7)(B) provided that you:

1. Submit and/or cite all data required for registration of your product under FIFRA section 3(c)(5) when the Agency requires all registrants of similar products to submit such data; and submit acceptable responses required for reregistration of your product under FIFRA section 4.
2. You must submit the following conditional data, within 14 months of the date of this notice.
 - a. Storage Stability (830.6317), and
 - b. Corrosion Characteristics (830.6320) studies.

3. Make the following changes to the label:


- a. Change the product registration number to "EPA Reg. No. 100-1363"
- b. Insert the text "Harmful if absorbed through skin" in the Precautionary Statements section, directly under the signal word CAUTION, on page 2.
- c. Insert the text "Observe the most restrictive of the labeling limitations and precautions of all products used in mixtures", in the Mixing Instructions section, after the first sentence of the second paragraph, on page 6.
- d. Insert a column or note, for Maximum Total Seasonal Application Rates (0.0002 lbs a.i./acre), in the Crop Use Directions table, on page 7.
- e. Delete the Rotational Crop Restrictions section, on page 8.

4. Submit one copy of the revised final printed label for the record before the product is released for shipment.

If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA section 6(e). Your release for shipment of the product constitutes acceptance of these conditions.

A copy of the label stamped "Accepted with Comments" is enclosed for your records.

Signature of Approving Official:



Cynthia Giles-Parker, Branch Chief
Fungicide Branch, Registration Division (7504P)

Date:

11/4/10

Enclosure:

- Label stamped "Accepted with Comments"
- Product Chemistry Review
- Acute Toxicity Review

GROUP 21 FUNGICIDE

Bion™ 500FS

Fungicide

For protection against certain early season seed and seed-borne diseases and nematodes in cotton.

Active Ingredients:	
Acibenzolar-S-methyl*	42.0%
Other Ingredients:	58.0%
Total:	100.0%

*CAS No. 135158-54-2

Contains 4.17 pounds of Acibenzolar-S-methyl per gallon.

KEEP OUT OF REACH OF CHILDREN.

CAUTION

See additional precautionary statements and directions for use inside booklet.

EPA Reg. No. 100-XXXX

EPA Est. No.

- 1 quart
- 1 gallon
- 2.5 gallons
- 15 gallons
- _____ gallons
- Net Contents

**ACCEPTED
with COMMENTS
In EPA Letter Dated
NOV 04 2010**
Under the Federal Insecticide,
Fungicide, and Rodenticide Act
as amended, for the pesticide
registered under EPA Reg. No.
100-1363

FIRST AID	
If swallowed	<ul style="list-style-type: none"> • 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 inhaled	<ul style="list-style-type: none"> • 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.
If in eyes	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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.
Have the product container or label with you when calling a poison control center or doctor, or going for treatment.	
HOT LINE NUMBER For 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

CAUTION

Harmful if swallowed. Harmful if inhaled. Avoid breathing vapor or spray mist. Causes moderate eye irritation. Avoid contact with eyes, skin 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)

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
- Shoes plus socks
- Chemical resistant gloves made of any waterproof material such as barrier laminate, butyl rubber ≥ 14 mils, nitrile rubber ≥ 14 mils, neoprene rubber ≥ 14 mils, polyvinyl chloride (PVC) ≥ 14 mils and Viton® ≥ 14 mils

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.

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

This pesticide is toxic to 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 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, INC. 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 this 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.

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

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.

Seed treated with this product must be visually identifiable from untreated seed by the use of an approved colorant or dye to prevent accidental use of treated seed as food for humans or feed for animals. Refer to 21 CFR, Part 2.25. Any colorant or dye added to treated seed must be cleared for use in accordance with 40 CFR, Part 180.1001.

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.

Due to seed quality, crop or variety sensitivity, and seed storage conditions beyond the control of Syngenta, no claims are made to guarantee the germination of seed or propagating material for all crop seed when treated with Bion 500FS.

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

GENERAL INFORMATION

Bion 500FS is a selective, systemic compound used for the protection of cotton from early season diseases and nematodes. Bion 500FS induces host plant resistance; it has no direct activity against target pathogens. Bion 500FS exhibits a unique mode of action which mimics the natural systemic activated resistance (SAR) response found in most plant species. It is recommended that Bion 500FS be used in combination with azoxystrobin based fungicide packages for early season protection against pre- and postemergence damping-off. Bion 500FS may be applied in tank mixes or sequentially with other registered seed treatment products.

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

RESISTANCE MANAGEMENT

Bion 500FS exhibits a mode of action unique from currently available fungicides and bactericides. Since Bion 500FS has no direct activity on plant pathogens, the likelihood that resistance (insensitivity) will develop in the pathogens is low. However, plant pathogens are known to develop tolerance to host plant resistance and to products used repeatedly for control. Because insensitivity development cannot be fully predicted, the use of this product should conform to sensitivity management strategies established for the crop and use area. Such strategies may include rotating and/or tank mixing with products with different modes of action as well as the use of good cultural practices. Consult your local pest control advisor or extension office for details. If insensitivity to this product develops in your area, this product or other products with a similar mode of action may not provide adequate control. If you experience difficulty with control and insensitivity is a likely cause, consult your local Syngenta Crop Protection representative, local agricultural extension office, or pest control advisor for the best alternative method of control. Syngenta encourages responsible product stewardship to ensure effective long-term disease control.

MIXING INSTRUCTIONS

Apply Bion 500FS 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.

Bion 500FS 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 Bion 500FS 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 Bion 500FS 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 Acibenzolar-S-methyl. Do not use for food, feed or oil purposes. Store away from food and feedstuffs." Use with an EPA-approved dye that imparts an unnatural color to the seed.

CROP USE DIRECTIONS

Crop	Target Disease	Amount of Active Ingredient (Acibenzolar-S-Methyl)	Comments
Cotton	<p>Protection from: Black Root Rot caused by <i>Thielaviopsis basicola</i></p> <p>Suppression of: <i>Fusarium oxysporum</i> f. sp. <i>vasinfectum</i> that incites Fusarium wilt and early season damping-off symptoms.</p> <p>Suppression of: Early season nematodes.</p>	0.0003 to 0.0009 mg*	<p>* mg per seed rates based on 5,000 seeds per pound</p> <p>Reduction in nematode fecundity.</p>
	<p>For early season protection of pre- and postemergence damping-off caused by <i>Rhizoctonia solani</i>, <i>Pythium</i> and <i>Fusarium</i> sp. Apply Bion 500FS with azoxystrobin-based fungicide packages.</p>		
	<p>For early season protection against <i>T. basicola</i> and <i>Meloidogyne incognita</i> interactions (disease/nematode interaction), apply Bion 500FS with Avicta® Duo Cotton and Dynasty® CST.</p>		

- 1 fluid ounce of Bion 500FS contains 14.8 g Acibenzolar-S-Methyl.

Rotational Crop Restrictions

If necessary, the following crops may be replanted immediately after last planting: cotton, the Fruiting Vegetable crop group, Cole (Brassica) Leafy Vegetables crop group, Cucurbit Vegetable crop group, Lettuce (head and leaf), dry bulb Onions, Spinach, and Tobacco. Do not plant other crops sooner than 30 days after last planting.

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 5 gallons]

Non-refillable container. Do not reuse or refill this container. Offer for recycling if available. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use and 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.

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Container Handling [more than 5 gallons]

Non-refillable container. Do not reuse or refill this container. Offer for recycling if available. 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 once 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 and 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 IS NOT SAFE FOR FOOD, FEED, OR DRINKING WATER.

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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, Inc.
P.O. Box 18300
Greensboro, North Carolina 27419-8300

Bion 500FS-B – 11-3-10

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