

U.S. ENVIRON NTAL PROTECTION AGENCY
Office of Pesticide Programs
Registration Division (7505C)
Ariel Rios Building
1200 Pennsylvania Ave., NW
Washington, D.C. 20460

Number:

264-1110

May 25, 2010

Date of Issuance:

NOTICE OF PESTICIDE:

x RegistrationReregistration(under FIFRA, as amended)

Term of Issuance: conditional

Name of Pesticide Product:

Aeris Votivo

Name and Address of Registrant (include ZIP Code):

Bayer CropScience PO Box 12014 2 TW Alexander Drive Research Triangle Park, NC 27709

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 sec. 3(c)(7)(A) and (B) provided that you:

- 1. Submit and/or cite all data required for registration of your product under FIFRA sec. 3(c)(5) when the Agency requires all registrants of similar products to submit such data.
- 2. Per the indicated EPA Guidelines, submit the following within 18 months measured from the effective date of this registration. Make observations at 0, 3, 6, 9, and 12 months. Results must be submitted in electronic and paper format.
  - a. one year storage stability (830.6317)
  - b. corrosion characteristics (830.6320)

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- 3. Make the following label changes before you release the product for shipment:
  - a. Revise the EPA Registration Number to read, "EPA Reg. No. 264-1110."
- 4. Submit two copies of the revised final printed label for the record.

If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA sec. 6(e). Your release for shipment of the product constitutes acceptance of these conditions. A stamped copy of the label stamped "accepted with comments" is enclosed for your records.

Signature of Approving Official:

Date:

MAY 2 5 2010

John Hebert

Product Manager Insecticide Rodenticide Branch Registration Division (7505P)

# RESTRICTED USE PESTICIDE

Due to Avian, Aquatic and Small Mammal Toxicity

For retail sale to and use only by Certified Applicators or persons under their direct supervision and only for those uses covered by the Certified Applicator's Certification.

ACCEPTED
With COMMENTS
In EPA Letter Dated:
MAY 2 5 2010

# **AERIS® VOTIVO™**

Under the Federal Insecticide, Fungicide and Rodenticide Act, As amended, for the pesticide Registered under EPA Reg. No:

264-1110

A systemic insecticide and biological seed treatment for use on cotton and soybean for the control of listed insect pests and listed soil plant pathogenic nematodes

of listed insect pests and listed soil plant pathogenic nematodes	
ACTIVE INGREDIENTS	
Bacillus firmus I-1582	6.9%
Imidacloprid: 1-[(6-Chloro-3-pyridinyl)methyl]-N-nitro-2-imidazolidinimine]	20.4%
Thiodicarb: Dimethyl N, N' [thiobis[(methylimino)carbonyloxy]]bis[ethanimidothioate]	20.4%
INERT INGREDIENTS	52.3%
TOTAL:	100.0%
Contains 0.70 pounds <i>Bacillus firmus</i> I-1582 per U.S. gallon (contains a minimum of 2.8 X10 <sup>9</sup> cfu/ml)	
Contains 2.08 pounds imidacloprid per U.S. gallon	
Contains 2.08 pounds thiodicarb per U.S. gallon	
EPA Reg. No. 264-XXXX RRRV	EPA Est. No.

# KEEP OUT OF REACH OF CHILDREN CAUTION

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

For <u>MEDICAL</u> and <u>TRANSPORTATION</u> Emergencies <u>ONLY</u> Call 24 Hours A Day 1-800-334-7577 For PRODUCT USE Information Call 1-800-331-2867

# **FIRST AID**

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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 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.			
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.			
	Call a poison control center or doctor for treatment advice.			
(	For MEDICAL Emergencies Call 24 Hours A Day 1-800-334-7577			

For MEDICAL Emergencies Call 24 Hours A Day 1-800-334-7577.

Have the product container or label with you when calling a poison control center or doctor or going for treatment.

# SIGNS AND SYMPTOMS OF OVEREXPOSURE

Salivation, Muscle tremors, Nausea, Watery eyes, Difficult breathing, Vomiting, Pinpoint eye pupils, Excessive sweating, Diarrhea, Blurred vision, Abdominal cramps, Weakness, Headache.

IN SEVERE CASES, CONVULSIONS, UNCONSCIOUSNESS, AND RESPIRATORY FAILURE MAY OCCUR.

ANTIDOTE STATEMENT: ATROPINE SULFATE IS HIGHLY EFFECTIVE AS AN ANTIDOTE. See NOTE TO PHYSICIAN.

1 of 6

#### **GENERAL**

Contact a physician immediately in all cases of suspected poisoning. If breathing stops, establish an airway, start artificial respiration, and provide oxygen. Make certain to remove all sources of continuing contamination. Remove clothing and wash skin and hair immediately with large amounts of water. Transport the patient to a physician or hospital immediately and SHOW A COPY OF THIS LABEL TO THE PHYSICIAN. If poisoning is suspected in animals, contact a veterinarian.

#### **NOTE TO PHYSICIAN**

All treatments should be based on observed signs and symptoms of distress in the patient. Overexposure to materials other than this product may have occurred.

This product contains an N-methyl carbamate insecticide, which is a cholinesterase inhibitor. Overexposure to this substance may cause toxic signs and symptoms due to stimulation of the cholinergic nervous system. These effects of overexposure are spontaneously and rapidly reversible. Gastric lavage may be used if this product has been swallowed. AERIS<sup>®</sup> VOTiVO<sup>TM</sup> poisoning may occur rapidly after ingestion and prompt removal of stomach contents is indicated.

Specific treatment consists of parenteral atropine sulfate. Caution should be maintained to prevent over atropinization. Mild cases may be given 1 to 2 mg intramuscularly every 10 minutes until full atropinization has been achieved and repeated thereafter whenever symptoms reappear. Severe cases should be given 2 to 4 mg intravenously every 10 minutes until fully atropinized, then intramuscularly every 30 to 60 minutes as needed to maintain the effect for at least 12 hours. Dosages for children should be appropriately reduced. Complete recovery from overexposure is to be expected within 24 hours.

Narcotics and other sedatives should not be used. Further, drugs like 2-PAM (pyridine-2-aldoxime methiodide) are <u>NOT</u> recommended unless organophosphate intoxication is also suggested.

To aid in confirmation of a diagnosis, urine samples should be obtained within 24 hours of exposure and immediately frozen. Analyses will be arranged by Bayer CropScience.

Consultation on therapy can be obtained at all hours by calling the Bayer CropScience emergency number: 1-800-334-7577.

# PRECAUTIONARY STATEMENTS

# HAZARDS TO HUMANS & DOMESTIC ANIMALS CAUTION

Harmful if swallowed or inhaled. Causes moderate eye irritation. Avoid contact with eyes or clothing. Avoid breathing spray mist. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Remove contaminated clothing and wash before reuse.

#### PERSONAL PROTECTIVE EQUIPMENT (PPE)

Workers involved with treating the seed (e.g. connecting and disconnecting hoses and transfer pumps, mixing, equipment calibration, etc.) and others exposed to the concentrate, and cleaners/repairers of seed treatment equipment must wear a long-sleeve shirt and long pants, shoes plus socks, chemical resistant gloves made out of any waterproof material, and a dust/mist filtering respirator (dust mask) with a MSHA/NIOSH approval number prefix TC-84S or a NIOSH approved respirator with any N, R, P, or HE filter.

Baggers and bag sewers must wear a long-sleeve shirt and long pants, shoes plus socks, chemical resistant gloves made out of any waterproof material, and a dust/mist filtering respirator (dust mask) with a MSHA/NIOSH approval number prefix TC-84S or a NIOSH approved respirator with any N, R, P, or HE filter.

# **ENGINEERING CONTROLS STATEMENT**

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.
- Users should remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Users should 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.
- Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them.
- 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.

# **ENVIRONMENTAL HAZARDS**

This product is highly toxic to birds and aquatic invertebrates and toxic to fish and mammals. Do not contaminate water when disposing of equipment washwater or rinsate.

# **DIRECTIONS FOR USE**

#### RESTRICTED USE PESTICIDE

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling.

# **GENERAL DIRECTIONS**

For use only in commercial seed treatment equipment. Not for use in hopper box, planter box, slurry box, or other farmer-applied applications.

Read the entire label and observe all label directions and precautions before use. Do not use this product except as directed on this label or on other Bayer CropScience supplemental labeling for this product.

#### COMPATIBILITY

It is essential that before using AERIS® VOTiVO™ in any tank mixture the compatibility of the mixture be established. Add AERIS® VOTiVO™ at the recommended label rate to a clean quart jar containing approximately one-half the amount of water intended for a final slurry application rate. Next, follow with all other tank mix components that will be used in the total slurry application. Add last the remaining balance of water. The total amount of volume is determined by the seed size and how much is necessary to ensure complete and uniform coverage and distribution on the seed, as well as the type of commercial seed treating application equipment that will be used

DO NOT USE MIXTURES THAT CURDLE, PRECIPITATE, OR GEL. FOR BEST RESULTS, TANK MIXTURES SHOULD BE USED IMMEDIATELY AFTER MIXING WITH ADEQUATE AGITATION.

NOTE: Thiodicarb is hydrolytically sensitive to degradation of active ingredient by strong acids AND strong bases. DO NOT ADD AERIS® VOTiVO<sup>TM</sup> TO WATER WITH pH VALUES BELOW 3.0 OR ABOVE 8.5. If necessary, water should be buffered within this range before adding AERIS® VOTiVO<sup>TM</sup>. Degradation can cause reduced effectiveness, plant phytotoxicity and increased handling hazards.

# **GENERAL INFORMATION**

AERIS® VOTiVO<sup>TM</sup> is a combination insecticide and biological seed treatment that, when applied to seed, protects the seed and seedling against certain early season insects and provides early season protection from plant pathogenic nematodes that attack the root system. As a result of the dual protection, there is an improvement in plant vigor, which often results in more uniform plants and greater yields. AERIS® VOTiVO<sup>TM</sup> is recommended for use with Bayer CropScience seed applied fungicides for complete pest protection. In areas of high nematode infestation additional control measures may be warranted.

#### DIRECTIONS FOR SEED TREATMENT

All seed treated with this product must be colored with an EPA-approved dye or colorant that imparts an unnatural color to the seed to help prevent the inadvertent use of treated seed for food, feed or oil purposes.

#### FOR USE AS A SEED TREATMENT

Apply AERIS<sup>®</sup> VOTiVO<sup>™</sup> as a water-based slurry either alone or with other registered seed treatment insecticides and fungicides through standard slurry or mist commercial seed treatment equipment. Treated seed must be labeled in accordance with the requirements of the Federal Seed Act.

#### MIXING INSTRUCTIONS

When applied with seed treatment application equipment designed to treat seed utilizing a treatment slurry mixture, add approximately ½ to ¾ of the required water to the treatment slurry tank followed by the accompanying seed treatment products and AERIS® VOTIVO<sup>TM</sup>. The order of product addition is dependant on the accompanying seed treatment products and application equipment used. Allow each slurry component to disperse completely prior to the next addition until a uniform suspension is obtained. After all slurry components have been added and dispersed completely add the remaining ½ to 1/3 of required water for proper slurry volume and mix until uniform. Do not store mixed slurries for greater than 72 hours. Maintain adequate agitation until treatment slurry is applied. For additional instructions for use, slurry component mixing order, and other application suggestions contact your Bayer CropScience representative.

# **APPLICATION RATES**

May be used in combination with other registered Bayer CropScience seed treatment fungicides and insecticides. Pre-test for compatibility with other seed treatment products. Observe the most restrictive of the labeling limitations and precautions of all products used in mixtures.

CROP	INSECT PESTS	NEMATODE PESTS	RATE of <b>AERIS® VOTIVO™</b>
Cotton	For Early Season Protection Against Certain Sucking and Lepidopteran Insects: Aphids, Black Cutworms Fleahoppers Plant bugs including lygus Thrips <sup>1</sup> Suppression of Wireworms	Soil Nematodes including: Lance Nematode Reniform Nematode Root Knot Nematode	Apply AERIS <sup>®</sup> VOTiVO <sup>™</sup> at a rate of 22.5 fl oz/100 lbs seeds <sup>1</sup> (or 11.2 fl oz per 250,000 seeds  (or 9.9 fl oz per 220,000 seeds
Soybean	For Early Season Protection Against Certain Insects: Soybean Aphids³ Over-wintering Bean Leaf Beetle Thrips¹  For Early Season Protection of Planted Seed from Damage Caused by Seed Corn Maggot  For Suppression of Grape Colapsis and Three Corner Alfalfa Hopper  For Suppression of the Spread of Certain Viruses	Soil Nematodes including: Reniform Nematode Root Knot Nematode Soybean Cyst Nematode	Apply AERIS® VOTiVO <sup>TM</sup> at a rate of 4 fl oz/100 lbs seeds²  (or 1.6 fl oz per 100,000 seeds)

# <sup>1</sup> For Cotton:

- Do not exceed a total of 5.4 pounds thiodicarb a.i. (active ingredient) per acre per season for seed treatment and foliar applications combined. In Arizona and California, do not exceed a total of 1.8 pounds thiodicarb per acre per season for seed treatment and foliar applications combined.
- Do not exceed a total of 0.5 pounds imidacloprid per acre per season for seed treatment, soil, and foliar applications combined.

# <sup>2</sup> For Soybean:

- Do not exceed a total of 3.0 pounds thiodicarb per acre per season for seed treatment and foliar applications combined.
- Do not exceed a total of 0.38 pounds imidacloprid per acre per season for seed treatment, soil, and foliar applications combined.
- Do not allow grazing or feed soybean forage or hay to livestock.

#### SEED BAG LABEL REQUIREMENTS

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

- This seed has been treated with thiodicarb and imidacloprid.
- Do not use for food, feed or oil purposes.

In addition, the U.S. Environmental Protection Agency requires the following statements on bags containing cotton or soybean seed treated with  $AERIS^{\otimes}$  VOTiVO $^{TM}$ .

- Store away from food and feedstuffs.
- Do not allow children, pets, or livestocks to have access to treated seeds.

<sup>&</sup>lt;sup>3</sup> Follow up sprays of a locally registered insecticide may be needed under heavy pest pressure. Consult your local Extension office for recommendations.

- Wear long-sleeved shirt, long pants, and chemical resistant gloves made out of any waterproof material when handling treated seed
- For cotton, growers must not exceed a total of 5.4 pounds thiodicarb a.i. (active ingredient) per acre per season for seed treatment
  and foliar applications combined. In Arizona and California, do not exceed a total of 1.8 pounds thiodicarb a.i. per acre per season
  for seed treatment and foliar applications combined. Growers must not exceed a total of 0.5 pounds imidacloprid a.i. per acre per
  season for seed treatment, soil, and foliar applications combined.
- For soybean, growers must not exceed a total of 3.0 pounds thiodicarb a.i. per acre per season for seed treatment and foliar
  applications combined. Do not exceed a total of 0.38 pound imidacloprid a.i. per acre per season for seed treatment, soil and foliar
  applications combined. Do not allow grazing or feed soybean forage or hay to livestock.
- 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 birds or other wildlife. Cover or collect treated seeds that are spilled during loading and in areas such as row ends.
- Dispose of all excess treated seed by burial away from bodies of water.
- Dispose of seed packaging in accordance with local requirements.
- Do not contaminate bodies of water when disposing of planting equipment wash water.

# STORAGE AND DISPOSAL

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

#### PESTICIDE STORAGE

Store unused product in a cool, ventilated, dry area.

#### PESTICIDE DISPOSAL

Wastes resulting from the use of this product must be disposed of on site or at an approved waste disposal facility.

#### CONTAINER DISPOSAL

#### Rigid Non-refillable Containers with Capacities Equal to or Less than 5 Gallons

Non-refillable container. Do not reuse or refill this container. Triple rinse or pressure 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 or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times.

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

Offer for recycling, if available. If not recycled, then 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.

#### Rigid Non-refillable Containers with Capacities Greater than 5 Gallons

Non-refillable containers. Do not reuse or refill this container. After emptying product from container, either return container to Bayer CropScience per instructions from Bayer CropScience Customer Service Center (1-800-527-4781), or rinse and either recycle or dispose of the container as follows:

Bottom Discharge IBC (e.g. - Schuetz Caged IBC or Snyder Square Stackable)

Pressure rinsing the container before final disposal is the responsibility of the person disposing of the container. To pressure rinse the container before final disposal, empty the remaining contents from the IBC into application equipment or mix tank. Raise the bottom of the IBC by 1.5 inch on the side which is opposite of the bottom discharge valve to promote more complete product removal. Completely remove the top lid of the IBC. Use water pressurized to at least 40 PSI to rinse all interior portions. Continuously pump or drain rinsate into application equipment or rinsate collection system while pressure rinsing. Continue pressure rinsing for 2 minutes or until rinsate becomes clear. Replace the lid and close bottom valve.

Top Discharge IBC, Drums, Kegs (e.g.- Snyder 120 Next Gen, Bonar B120, Drums, and Kegs)

Triple rinsing the container before final disposal is the responsibility of the person disposing of the container. To triple rinse the container before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container at least 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Rinse all interior surfaces. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this procedure two more times.

Once container is rinsed, offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration.

# IMPORTANT: READ BEFORE USE

Read the entire Directions for Use, Conditions, Disclaimer of Warranties and Limitations of Liability before using this product. If terms are not acceptable, return the unopened product container at once.

By using this product, user or buyer accepts the following Conditions, Disclaimer of Warranties and Limitations of Liability.

**CONDITIONS:** The directions for use of this product are believed to be adequate and must be followed carefully. However, it is impossible to eliminate all risks associated with the use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as weather conditions, presence of other materials, or the manner of use or application, all of which are beyond the control of Bayer CropScience. All such risks shall be assumed by the user or buyer.

DISCLAIMER OF WARRANTIES: TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, BAYER CROPSCIENCE MAKES NO OTHER WARRANTIES, EXPRESS OR IMPLIED, OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE OR OTHERWISE, THAT EXTEND BEYOND THE STATEMENTS MADE ON THIS LABEL. No agent of Bayer CropScience is authorized to make any warranties beyond those contained herein or to modify the warranties contained herein. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, BAYER CROPSCIENCE DISCLAIMS ANY LIABILITY WHATSOEVER FOR SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT.

LIMITATIONS OF LIABILITY: TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, THE EXCLUSIVE REMEDY OF THE USER OR BUYER FOR ANY AND ALL LOSSES, INJURIES OR DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, WHETHER IN CONTRACT, WARRANTY, TORT, NEGLIGENCE, STRICT LIABILITY OR OTHERWISE, SHALL NOT EXCEED THE PURCHASE PRICE PAID, OR AT BAYER CROPSCIENCE'S ELECTION, THE REPLACEMENT OF PRODUCT.

# **NET CONTENTS:**

AERIS is the registered trademark of Bayer.

#### PRODUCED FOR



Bayer CropScience LP P.O. Box 12014, 2 T.W. Alexander Drive Research Triangle Park, North Carolina. 27709 1-866-99BAYER (1-866-992-2937)

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