

100-1321

10-31-2008

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

EPA Registration
Number:
100-1321

Date of Issuance:
10/31/2008

NOTICE OF PESTICIDE:
 Registration
 Reregistration
(under FIFRA, as amended)

Term of Issuance: **conditional**

Name of Pesticide Product:
Avicta Duo

Name and Address of Registrant (include ZIP Code):

Carolyn F. Brinkley
Syngenta Crop Protection, Inc.
PO 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 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. Make the following label changes before you release the product for shipment:
 - a. Revise the EPA Registration Number to read, "EPA Reg. No. 100-1321."
3. Per the indicated EPA Guidelines, submit the following within 18 months measured from the effective date of this registration.
 - a. one year storage stability (830.6317)
 - b. corrosion characteristics (830.6320)
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:

Thomas C. Harris
Biologist
Insecticide Rodenticide Branch
Registration Division (7505P)

Date:

OCT 31 2008

**RESTRICTED USE PESTICIDE
DUE TO 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.

Avicta® Duo

Nematicide/Insecticide

A Seed Treatment Product to Protect Cotton Seedlings from Early Season Nematode and Insect Damage

For use only in Syngenta-certified cottonseed treatment facilities and only in seed treatment equipment with closed transfer and application systems. Not for use in hopper box, planter box, slurry box, or other farmer-applied applications.

Active Ingredients:

Abamectin (CAS No. 65195-56-4 and No. 65195-55-3).....	12.4%
Thiamethoxam (CAS No. 153719-23-4).....	28.1%
<hr/>	
Other Ingredients:	59.5%
Total:	100.0%

*1 fluid ounce of Avicta Duo contains 4.39 grams of abamectin and 9.96 grams of thiamethoxam

KEEP OUT OF REACH OF CHILDREN.

WARNING/AVISO

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.)

See additional precautionary statements and directions for use in booklet.

EPA Reg. No. 100-xxxxx
EPA Est. XXXX

SCP XXXXXA-M(draft 10-31-08 Avicta Duo)

Net Contents

ACCEPTED
With COMMENTS
In EPA Letter Dated:
OCT 31 2008

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

100-1321

FIRST AID	
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 by mouth-to-mouth, if possible.• Call a poison control center or doctor for further treatment advice.
If swallowed	<ul style="list-style-type: none">• Call 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 the poison control center or doctor.• Do not give anything by mouth to an unconscious person.
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

WARNING/AVISO

May be fatal if inhaled or swallowed. Harmful if absorbed through skin. Causes moderate eye irritation. Do not breathe vapor. Avoid contact with skin, eyes, or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum or using tobacco. Remove and wash contaminated clothing before reuse.

The following personal protective equipment and clothing are required when using this product:

Personal Protective Equipment

I. Seed Treatment Workers

A. Workers involved with treating the seed (e.g. connecting and disconnecting hoses and transfer pumps, mixing, equipment calibration, etc.) must wear:

- Chemical resistant gloves made of any waterproof material – Category A (e.g., natural rubber ≥ 14 mils)
- Protective eyewear
- Coveralls over long sleeved shirt and long pants
- Chemical-resistant apron
- Shoes and socks

B. Workers Filling Seed Containers/Baggers and Bag Sewers must wear:

- NIOSH-approved respirator with any N, R, P, or HE filter
- Long sleeved shirt and long pants
- Shoes and socks

C. Workers involved with the clean up and maintenance of seed treatment equipment must wear:

- Chemical resistant gloves made of any waterproof material – Category A (e.g., natural rubber ≥ 14 mils)
- Protective eyewear
- NIOSH-approved respirator with an organic vapor (OV) cartridge or canister with any N, R, P, or HE prefilter
- Chemical-resistant coveralls over long sleeved shirt and long pants
- Shoes and socks

II. Multiple Task Workers must wear:

(Multiple task workers perform multiple tasks in one day such as mixing, product application, filling seed containers/ bagging, bag sewing, and clean up)

- Chemical resistant gloves (when handling treated seeds and equipment clean-up) made of any waterproof material – Category A (e.g., natural rubber ≥ 14 mils)
- Protective eyewear (when treating seed and during clean-up)
- Dust/mist filtering respirator (dust mask)
- Long sleeved shirt and long pants
- Chemical-resistant coveralls over long sleeved shirt and long pants (required when performing seed treatment equipment clean-up procedures)
- Shoes and socks

Environmental Hazards

This pesticide is toxic to fish and wildlife and highly toxic to aquatic invertebrates. Exposed treated seeds may be hazardous to wildlife. Do not contaminate water when disposing of equipment wash water.

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 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 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.

NOTE:

- Avicta Duo is only for use in Syngenta-certified seed treatment facilities: Use in hopper box, planter box, slurry box, or other farmer-applied applications is not permitted.
- Treatment of highly mechanically scarred or damaged seed or seed known to be of low vigor and poor quality may result in reduced germination and/or reduction of seed and seedling vigor. Conduct germination tests with a representative sample of the seed lot before committing the total seed lot to a selected seed treatment. Because seed quality and seed storage conditions are beyond the control of Syngenta, no claims are made to guarantee the germination of seed or propagating material for all crops.
- 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. Refer to the section on this label **REQUIRED SEED CONTAINER STATEMENTS** for language that must appear on the tag that is attached to the container of treated seed.

PRODUCT INFORMATION

Avicta Duo is a cottonseed treatment nematicide/insecticide that contains the active ingredients abamectin and thiamethoxam. When Avicta Duo is applied to cottonseed, seedlings are protected from early season nematode damage and damage from the insect pests specified in the Crop Use Directions.

To add early season disease protection, the seed treatment fungicides specified in the Crop Use Directions are approved for use on cottonseed and may also be mixed with Avicta Duo.

MIXING AND APPLICATION INSTRUCTIONS

NOTE:

- Consult the Syngenta Seed Treatment representative or the manufacturer of the application equipment you plan to use regarding the suitability of this application and equipment calibration and operating instructions.

- Always treat seed in a well-ventilated area. Refer to the **Precautionary Statements** section of this label for personal protective equipment requirements and other safety precautions.
- Prepare no more mixture than is needed for the immediate operation.
- Avicta Duo must be thoroughly recirculated in its original container before using. (See **Mixing Instructions**.)
- Apply Avicta Duo as a water-based slurry utilizing standard slurry seed treatment equipment that will provide uniform seed coverage. Uneven or incomplete seed coverage may not give the desired level of nematode and insect control.
- Thoroughly mix the required amount of Avicta Duo and other seed treatment products desired with the amount of water required for the slurry treater and the dilution rate. (See **Avicta Duo in Tank Mixtures**.)
- Use an EPA-approved dye or colorant that imparts an unnatural color to the seed.
- Allow seed to dry before bagging /filling containers, and store treated seed away from feed and foodstuffs.

Avicta Duo in Tank Mixtures:

- **Compatibility:**

Before mixing Avicta Duo with other seed treatment products, determine if all of the products are compatible by conducting a compatibility test:

- 1) In a clear glass container thoroughly mix all of the intended seed treatment products with the appropriate amount of water, and allow the mixture to sit for one hour.
- 2) Remix the solution and observe for incompatibility.
- 3) If compatibility is acceptable, follow the mixing instructions in the **Mixing Instructions** section on this label.

Mixing Instructions:

A. Avicta Duo Alone

1. To dispense Avicta Duo into a mix tank, first attach a pump with fittings (example: Micro Matic) that match the fittings on the Avicta Duo container.
2. Recirculate product. Recirculation time should be calculated based upon the ability of the pump to completely recirculate the volume of the tank 5-10 times within a 30-minute time period.
3. After the initial recirculation, a short recirculation period of 5 minutes per day is recommended.

4. Attach the dispensing hose to a dry-lock type of fitting that is permanently attached to the mix tank lid.
5. Add $1/4$ - $1/2$ of the required amount of water to the mix tank.
6. With the agitator running, add the Avicta Duo to the tank.
7. Continue agitation while adding the remainder of the water.
8. Begin application of the solution after the Avicta Duo has completely dispersed into the mix water.
9. Maintain agitation until all of the mixture has been applied.

B. Avicta Duo - Tank Mixing Instructions

- 1) Add $1/2$ of the required water to the mix tank and turn on the agitation. Mechanical agitation is preferred.
- 2) If using wettable powders and/or products in water-soluble packaging, add water-soluble packages first to clean water and allow them to completely disperse before adding Avicta Duo or other products.
- 3) Allow each tank mix partner to completely disperse before adding the next product.
- 4) Add the remaining amount of water and agitate.
- 5) Maintain agitation until the entire slurry mixture has been used.

CROP USE DIRECTIONS

Avicta Duo on Cottonseed

Avicta Duo is a seed treatment for the seed of delinted cotton. Avicta Duo will provide cotton seedlings early season protection from damage caused by nematodes and the insects specified in the following table. Tank mixing Avicta Duo with Dynasty CST fungicide will add early season disease protection. Refer to the following table for application directions.

Application

Pests /Diseases	Amount of Product to Apply	Instructions
<p>Nematodes and these insects:</p> <p>Cotton aphid Cotton fleahopper¹ Plant bugs¹ Tobacco thrips Western flower thrips Wireworm</p> <p>¹Avicta Duo only provides suppression of these pests. Suppression means either erratic control ranging from good to poor or consistent control at a level below that which is generally considered acceptable for commercial control.</p>	<p>Apply Avicta Duo to cottonseed at a rate to achieve:</p> <p>0.15 mg. abamectin / 0.34 mg. thiamethoxam per seed</p>	<p>To control early season nematodes and these insect pests apply the amount of Avicta Duo specified in the center column.</p> <p>NOTE:</p> <ul style="list-style-type: none"> • *1 fl. oz. of Avicta Duo contains 4.39 grams of abamectin and 9.96 grams of thiamethoxam. • The typical density of Avicta Duo is 10 lbs. per gallon.
<p>Disease Protection – Early Season</p>	<p>For the amount to apply, refer to the label of the cottonseed treatment fungicide, Dynasty™ CST.</p>	<p>To add early season disease control in cotton, cottonseed may be treated with a mixture of Avicta Duo plus Dynasty CST. Follow all directions for use and precautions on the Dynasty CST label.</p>

REQUIRED SEED CONTAINER STATEMENTS

The Federal Seed Act requires that the container of seed treated with Avicta Duo shall be labeled with the following statements:

- This seed has been treated with abamectin nematicide and thiamethoxam insecticide.
- Do not use treated seed for feed, food, or oil purposes.

In addition, the U.S. Environmental Protection Agency requires the following statements on the container of cottonseed treated with Avicta Duo

- Store away from food and feedstuffs.
- Do not allow children, pets or livestock to have access to treated seeds.
- Wear long-sleeved shirt, long pants, and rubber gloves when handling treated seed.
- Plant Avicta Duo-treated cottonseed based upon the local planting dates and soil temperatures that are recommended by your state agricultural extension agent.
- Treated seed must be planted into the soil at a depth greater than 1 inch.
- Treated seed exposed on soil surface may be hazardous to wildlife; cover or collect treated seed that are spilled during loading and in areas such as row ends.
- Dispose of all 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 in accordance with local requirements.
- In areas with a history of high nematode populations, use of a soil fumigant before planting Avicta Duo treated seed is recommended.
- In areas with a history of high thrips pressure or for cotton grown in North Carolina, South Carolina, and Virginia, apply a foliar insecticide, that is approved for thrips control, when cotton is between the 1st and 3rd leaf stage.
- Allow a minimum of 45 days after planting Avicta Duo treated cottonseed before treating the cotton with a neonicotinoid insecticide
- In the event of crop failure or after harvest of cotton grown from Avicta Duo treated cottonseed,

- the following crops may be replanted immediately:

barley, canola, corn, cotton, cucurbit vegetables, fruiting vegetables, legume vegetables, mint (peppermint and spearmint) oil seed crops (black mustard seed, borage seed, crambe seed, field mustard seed, flax seed, Indian mustard seed, Indian rapeseed seed, rapeseed seed, and safflower seed), root vegetables (except sugar beets), sorghum, strawberries, sunflowers, tobacco, tuberous root and corm vegetables, and wheat.

- the minimum plant back interval is 120 days from the date the Avicta Duo treated cottonseed were planted for:

all other crops (except a cover crop not listed above).

- the minimum plant back interval is less than 120 days for:

a cover crop planted for erosion control or soil improvement; however the crop may not be grazed or used for food or feed.

STORAGE AND DISPOSAL

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

Pesticide Storage

Store in a cool, dry place.


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 at the nearest EPA Regional Office for guidance.

Container Disposal

Nonrefillable container. Do not reuse or refill this container.

Syngenta or its authorized agent will pick up the empty container and handle its disposal. Contact Syngenta or its authorized agent to make arrangements for this service and store empty container in a secure area until pick up.

Avicta®, Dynasty™, the Syngenta logo and the CP FRAME  are trademarks of a Syngenta Group Company

Protected by U.S. Patent Nos. 5,852,012, 6,002,871 & 6875727. Other patents pending.

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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

SCP xxxxxA-M (draft 10-31-08 Avicta Duo)

Avicta Duo (draft 10-31-08)-clean-lg 000100-xxxxx.20081031.AvictaDuo.pdf

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(Non-detachable Container Label)

**RESTRICTED USE PESTICIDE
DUE TO TOXICITY**
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Avicta® Duo

Nematicide/Insecticide

A Seed Treatment Product to Protect Cotton Seedlings from Early Season Nematode and Insect Damage

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Total:	100.0%

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KEEP OUT OF REACH OF CHILDREN.

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EPA Reg. No. 100-xxxxx
EPA Est. XXXX

SCP xxxxA-M(draft 10-31-08 Avicta Duo)

Net Contents

PRECAUTIONARY STATEMENTS

Hazards to Humans and Domestic Animals

WARNING/AVISO

May be fatal if inhaled or swallowed. Harmful if absorbed through skin. Causes moderate eye irritation. Do not breathe vapor. Avoid contact with skin, eyes, or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum or using tobacco. Remove and wash contaminated clothing before reuse.

FIRST AID	
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 by mouth-to-mouth, if possible.• Call a poison control center or doctor for further treatment advice.
If swallowed	<ul style="list-style-type: none">• Call 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 the poison control center or doctor.• Do not give anything by mouth to an unconscious person.
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STORAGE AND DISPOSAL

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Protected by U.S. Patent Nos. 5,852,012, 6,0022,871 & 6875727. Other patents pending.

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Manufactured for:
Syngenta Crop Protection, Inc.
P.O. Box 18300
Greensboro, North Carolina 27419-8300

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