



**OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION**

WASHINGTON, D.C. 20460

October 3, 2025

Cathy Mazo  
Regulatory Manager  
Syngenta Crop Protection, LLC  
P.O. Box 18300  
Greensboro, NC 27419

Subject: Label Amendment - Registration Review Mitigation for Abamectin  
Product Name: AVICTA DUO  
EPA Registration Number: 100-1321  
Case Number: 476389  
Application Dates: October 3, 2019

Dear Cathy Mazo:

The Agency, in accordance with the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), as amended, has completed reviewing all the information submitted with your application to support the Registration Review of the above referenced product in connection with the Abamectin Interim Decision, and has concluded that your submission is acceptable. The label referred to above, submitted in connection with registration under FIFRA, as amended, is acceptable.

Should you wish to add/retain a reference to the company's website on your label, then please be aware that the website becomes labeling under the Federal Insecticide, Fungicide, and Rodenticide Act and is subject to review by the Agency. If the website is false or misleading, the product would be misbranded and unlawful to sell or distribute under FIFRA section 12(a)(1)(E). 40 CFR 156.10(a)(5) list examples of statements EPA may consider false or misleading. In addition, regardless of whether a website is referenced on your product's label, claims made on the website may not substantially differ from those claims approved through the registration process. Therefore, should the Agency find or if it is brought to our attention that a website contains false or misleading statements or claims substantially differing from the EPA approved registration, the website will be referred to the EPA's Office of Enforcement and Compliance Assurance.

A stamped copy of your labeling is enclosed for your records. This labeling supersedes all previously accepted labeling and must be used at your next label printing. 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 12 months from the date of this letter. After 12 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.

If you have any questions about this letter, please contact Caleb Carr by phone at 202-566-0636, or via email at [carr.caleb@epa.gov](mailto:carr.caleb@epa.gov).

Sincerely,

A handwritten signature in black ink, appearing to read 'M. Perch', with a long, sweeping horizontal line extending to the right.

Maryam K. Muhammad-Perch, Team Lead  
Risk Management and Implementation Branch 4  
Pesticide Re-Evaluation Division  
Office of Pesticide Programs

ENCLOSURE: Stamped label

(Master label)

## RESTRICTED USE PESTICIDE

### DUE TO ACUTE INHALATION TOXICITY

FOR 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.

THIAMETHOXAM	GROUP	4A	INSECTICIDE
ABAMECTIN	GROUP	6	INSECTICIDE

### Avicta® Duo

Nematicide/Insecticide

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

For use only in Syngenta-certified corn or 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. 71751-41-2)..... 12.4%

Thiamethoxam (CAS No. 153719-23-4)..... 28.1%

Other Ingredients:..... 59.5%

Total:..... 100.0%

\*1 fluid ounce of Avicta Duo is a flowable concentrate containing 4.39 grams of abamectin and 9.96 grams of thiamethoxam.

**KEEP OUT OF REACH OF CHILDREN.**

## WARNING/AVISO

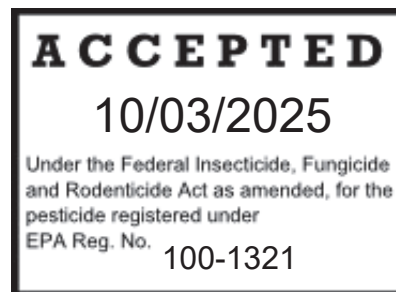
Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand the label, find someone to explain it to you in detail.)

See additional precautionary statements and directions for use in booklet.

EPA Reg. No. 100-1321

EPA Est. XXXX

\_\_\_\_\_ gallons  
Net Contents



<b>FIRST AID</b>	
<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>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 the 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. 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>
Have the product container or label with you when calling a poison control center or doctor, or going for treatment.	
<p align="center"><b>SYNGENTA HOTLINE NUMBER</b>  For 24-Hour Medical Emergency Assistance (Human or Animal)  Or Chemical Emergency Assistance (Spill, Leak, Fire or Accident)  Call  <b>1-800-888-8372</b></p>	

---

## **PRECAUTIONARY STATEMENTS**

---

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

#### **WARNING/AVISO**

May be fatal if inhaled. May be fatal if 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, using tobacco, or using the toilet.

Remove and wash contaminated clothing before reuse.

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

## **Personal Protective Equipment (PPE)**

### **Seed Treatment Workers**

**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: barrier laminate, butyl rubber  $\geq 14$  mils, nitrile rubber  $\geq 14$  mils, neoprene rubber  $\geq 14$  mils, polyvinyl chloride (PVC)  $\geq 14$  mils, or Viton™  $\geq 14$  mils
- Protective eyewear
- Coveralls worn over long-sleeved shirt and long pants
- Chemical-resistant apron
- Shoes and socks
- A minimum of a NIOSH-approved particulate filtering facepiece respirator with any N, R or P filter; OR a NIOSH-approved elastomeric particulate respirator with any N, R or P filter; OR a NIOSH-approved powered air purifying respirator with HE filters.

**Workers filling Seed Containers/Baggers and Bag Sewers must wear:**

- Chemical-resistant gloves made of: barrier laminate, butyl rubber  $\geq 14$  mils, nitrile rubber  $\geq 14$  mils, neoprene rubber  $\geq 14$  mils, polyvinyl chloride (PVC)  $\geq 14$  mils, or Viton  $\geq 14$  mils
- Protective eyewear
- Coveralls worn over long-sleeved shirt and long pants
- Shoes and socks
- A minimum of a NIOSH-approved particulate filtering facepiece respirator with any N, R or P filter; OR a NIOSH-approved elastomeric particulate respirator with any N, R or P filter; OR a NIOSH-approved powered air purifying respirator with HE filters.

**Workers involved with the clean-up and maintenance of seed treatment equipment must wear:**

- Chemical-resistant gloves (minimum length 12 inches) made of: barrier laminate, butyl rubber  $\geq 14$  mils, nitrile rubber  $\geq 14$  mils, neoprene rubber  $\geq 14$  mils, polyvinyl chloride (PVC)  $\geq 14$  mils, or Viton  $\geq 14$  mils. Important: Tape down gloves to the sleeves of the coveralls.
- Protective eyewear
- Chemical-resistant, hooded coveralls worn over long-sleeved shirt and long pants
- Shoes and socks
- A minimum of a NIOSH-approved elastomeric half mask respirator with organic vapor (OV) cartridges and combination N, R, or P filters; OR a NIOSH-approved gas mask with OV canisters; OR a NIOSH-approved powered air purifying respirator with OV cartridges and combination HE filters.

**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 made of: barrier laminate, butyl rubber  $\geq 14$  mils, nitrile rubber  $\geq 14$  mils, neoprene rubber  $\geq 14$  mils, polyvinyl chloride (PVC)  $\geq 14$  mils, or Viton  $\geq 14$  mils. Important: when performing seed treatment equipment clean-up procedures, gloves must be at least 12 inches long and taped down to the sleeves of the coveralls.
- Protective eyewear
- Long-sleeved shirt and long pants
- Chemical-resistant, hooded coveralls over long-sleeved shirt and long pants (required when performing seed treatment equipment clean-up procedures)
- Shoes and socks
- A minimum of a NIOSH-approved particulate filtering facepiece respirator with any N, R or P filter; OR a NIOSH-approved elastomeric particulate respirator with any N, R or P filter; OR a NIOSH-approved powered air purifying respirator with HE filters.

**Environmental Hazards**

This pesticide is toxic to fish and wildlife and highly toxic to aquatic invertebrates. Do not apply directly to water or to areas where surface water is present or to intertidal areas below the mean high-water mark. Treated seeds exposed on the soil surface may be hazardous to wildlife. Cover or collect seeds spilled during loading. Do not contaminate water when disposing of equipment washwater or rinsate.

**Pollinator Precautions**

Abamectin and thiamethoxam are highly toxic to bees exposed to direct treatment or residues in blooming crops or weeds. Do not apply this product or allow it to drift to blooming crops or weeds if bees are visiting the treatment area.

**Groundwater Advisory**

This product has properties and characteristics associated with chemicals detected in groundwater. This chemical may leach into groundwater if used in areas where soils are permeable, particularly where the water table is shallow.

---

## 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, 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

### RESTRICTED USE PESTICIDE

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

- 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 corn or cotton seed treatment nematicide/insecticide that contains the active ingredients abamectin and thiamethoxam. When Avicta Duo is applied to corn or cotton seed, 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 corn or cotton seed and may also be mixed with Avicta Duo.



---

## REQUIRED SEED CONTAINER STATEMENTS

---

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

- This seed has been treated with abamectin nematocide 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 seed treated with Avicta Duo.

- Store treated seed away from feed and foodstuffs.
- Do not allow children, pets or livestock to have access to treated seeds.
- Wear long-sleeved shirt, long pants, and chemical-resistant gloves: barrier laminate, butyl rubber  $\geq 14$  mils, nitrile rubber  $\geq 14$  mils, neoprene rubber  $\geq 14$  mils, polyvinyl chloride (PVC)  $\geq 14$  mils, or Viton  $\geq 14$  mils when handling treated seed.
- Plant Avicta Duo treated seed 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 seeds exposed on soil surface may be hazardous to 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 burying seed away from bodies of water.
- Do not contaminate bodies of water when disposing of planting equipment washwater or rinsate.
- **Pollinator Precautions:** Abamectin and thiamethoxam are highly toxic to bees exposed to direct treatment or residues in blooming crops or weeds. Do not apply this product or allow it to drift to blooming crops or weeds if bees are visiting the treatment area.
- **Groundwater Advisory:** This product has properties and characteristics associated with chemicals detected in groundwater. This chemical may leach into groundwater if used in areas where soils are permeable, particularly where the water table is shallow.
- In areas with a history of high nematode populations, use of a soil fumigant before planting Avicta Duo treated seed is recommended.
- Dispose of seed packaging in accordance with local requirements.
- Excess treated seed may be used for ethanol production only if, (1) by-products are not used for livestock feed, and (2) no measurable pesticides remain in ethanol by-products that are used for agronomic practice.
- For corn:
  - Do not apply neonicotinoid insecticides to the soil or foliage of corn grown from seed treated with Avicta Duo.
  - Do not use at a rate that will result in more than 0.165 lb of thiamethoxam per acre per calendar year (74.8 g ai/Acre) as a seed treatment

application. This seed has been treated with thiamethoxam at \_\_x\_\_ mg ai/seed.

- Do not apply at a rate that will result in more than 0.033 lb of abamectin/acre/calendar year (15 g) as a corn seed treatment application. This seed has been treated with abamectin at \_\_x\_\_ mg ai/seed.
- In limited areas birds, such as Sand Hill Cranes, have been known to damage early, developing corn seedlings. Some seed-applied or hopper box-applied bird repellents have been shown to be effective in reducing this damage. In fields where seedling damage is expected, use of an approved bird repellent should be considered.
- For cotton:
  - Do not use at a rate that will result in more than 0.075 lb thiamethoxam per acre (34.0 g ai/A) per calendar year as a seed treatment application. This seed has been treated with thiamethoxam at \_\_x\_\_ mg ai/seed.
  - Do not use at a rate that will result in more than 0.03 lb of abamectin per acre (13.6 g) per calendar year as a seed treatment application. This seed has been treated with abamectin at \_\_x\_\_ mg ai/seed.
  - Allow a minimum of 45 days after planting Avicta Duo treated cottonseed before treating the cotton with a neonicotinoid insecticide.
  - 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 1<sup>st</sup> and 3<sup>rd</sup> leaf stage.

- In the event of crop failure or after harvest of crop grown from Avicta Duo treated seed, crops may be replanted according to the following schedule:

Immediate Plantback
<p>Alfalfa</p> <p>Cereal Grains: Barley, Buckwheat, Corn (field, pop, and sweet), Oat, Pearl Millet, Proso Millet, Rice (Dry-seeded), Rye, Sorghum, Teosinte, Triticale, Wheat, and Wild Rice</p> <p>Canola</p> <p>Cotton</p> <p>Cucurbit Vegetables Crop Group 9</p> <p>Fruiting Vegetables Crop Group 8</p> <p>Head and Stem <i>Brassica</i> Crop Subgroup 5A</p> <p>Leafy <i>Brassica</i> Greens Crop Subgroup 5B</p> <p>Leafy Vegetables (Except <i>Brassica</i>) Crop Group 4</p> <p>Legume Vegetables (Succulent or Dried, Including Soybean) Crop Group 6</p> <p>Mint: Peppermint and Spearmint</p> <p>Oilseed Crops: Borage, Crambe, Flax Seed, Mustard Seed, and Safflower</p> <p>Onion, Dry Bulb</p> <p>Peanut</p> <p>Potato</p> <p>Root Vegetables Crop Subgroup 1A</p> <p>Strawberry</p> <p>Sunflower</p> <p>Tobacco</p> <p>Tuberous and Corm Vegetables (Except Potato) Crop Subgroup 1D</p>
120-Day Plantback
All other crops
A cover crop other than the crops listed above that is planted for erosion control or soil improvement, may be planted sooner than the 120-day interval; however, the crop may not be grazed or harvested for food or feed.

---

## RESISTANCE MANAGEMENT

---

For resistance management, please note that Avicta Duo contains both thiamethoxam, a Group 4A insecticide, and abamectin, a Group 6 insecticide. Any insect population may contain individuals naturally resistant to Avicta Duo and other Group 4A or Group 6 insecticides. The resistant individuals may dominate the insect population if these insecticides are used repeatedly in the same fields. Appropriate resistance-management strategies should be followed.

Thiamethoxam is a systemic insecticide belonging to the neonicotinoid class of chemistry which includes nicotinic acetylcholine receptor (nAChR) agonists. Abamectin belongs to the avermectin class of chemistry which affects nerves and muscles.

To delay insecticide resistance, take the following steps:

- Rotate the use of Avicta Duo or other Group 4A or Group 6 insecticides within a growing season, or among growing seasons, with different groups that control the same pests.
- Use tank mixtures with insecticides from a different group that are equally effective on the target pest when such use is permitted. Do not rely on the same mixture repeatedly for the same pest population. Consider any known cross-resistance issues (for the targeted pests) between the individual components of a mixture. In addition, consider the following recommendations provided by the Insecticide Resistance Action Committee (IRAC):
  - Individual insecticides selected for use in mixtures should be highly effective and be applied at the rates at which they are individually registered for use against the target species.
  - Mixtures with components having the same IRAC mode of action classification are not recommended for insect resistance management.
  - When using mixtures, consider any known cross-resistance issues between the individual components for the targeted pest(s).
  - Mixtures become less effective if resistance is already developing to one or both active ingredients, but they may still provide pest management benefits.
  - The insect resistance management benefits of an insecticide mixture are greatest if the two components have similar periods of residual insecticidal activity. Mixtures of insecticides with unequal periods of residual insecticide activity may offer an insect resistance management benefit only for the period where both insecticides are active.
- Adopt an integrated pest management program for insecticide use that includes scouting, uses historical information related to pesticide use, crop rotation, record keeping, and which considers cultural, biological and other chemical control practices.

- Monitor after application for unexpected target pest survival. If the level of survival suggests the presence of resistance, consult with your local university specialist or certified pest control advisor.
- Contact your local extension specialist or certified crop advisors for any additional pesticide resistance-management and/or IPM recommendations for the specific site and pest problems in your area.

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

**For additional information on Insect Resistance Management:**

- Contact Syngenta representatives at 1-866-796-4368
- Contact your local Cooperative Extension Service specialist, pest control advisor, or certified crop advisor.
- Visit the Insecticide Resistance Action Committee (IRAC) on the web at:  
<http://www.irac-online.org/>

---

## ROTATIONAL CROP RESTRICTIONS

---

In the event of crop failure or after harvest of corn or cotton grown from Avicta Duo treated corn seed or cottonseed, the following crops may be replanted as follows:

Immediate Plantback
Alfalfa Cereal Grains: Barley, Buckwheat, Corn (field, pop, and sweet), Oat, Pearl Millet, Proso Millet, Rice (Dry-seeded), Rye, Sorghum, Teosinte, Triticale, Wheat, and Wild Rice Canola Cotton Cucurbit Vegetables Crop Group 9 Fruiting Vegetables Crop Group 8 Head and Stem <i>Brassica</i> Crop Subgroup 5A Leafy <i>Brassica</i> Greens Crop Subgroup 5B Leafy Vegetables (Except <i>Brassica</i> ) Crop Group 4 Legume Vegetables (Succulent or Dried, Including Soybean) Crop Group 6 Mint: Peppermint and Spearmint Oilseed Crops: Borage, Crambe, Flax Seed, Mustard Seed, and Safflower Onion, Dry Bulb Peanut Potato Root Vegetables Crop Subgroup 1A Strawberry Sunflower Tobacco Tuberous and Corm Vegetables (Except Potato) Crop Subgroup 1D
120-Day Plantback
All other crops
A cover crop other than the crops listed above that is planted for erosion control or soil improvement, may be planted sooner than the 120-day interval; however, the crop may not be grazed or harvested for food or feed.

---

## MIXING AND APPLICATION INSTRUCTIONS

---

- 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:**

It is the pesticide user's responsibility to ensure that all products in the listed mixtures are registered for the intended use. Read and follow the applicable restrictions, limitations, and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.

- **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  $\frac{1}{4}$ - $\frac{1}{2}$  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  $\frac{1}{2}$  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

---

### A. Avicta Duo on Corn Seed (Includes corn grown for seed, field corn, popcorn, and sweetcorn)

Avicta Duo is a seed treatment for corn grown for seed, field corn, popcorn, and sweetcorn. Avicta Duo, contains the active ingredients abamectin and thiamethoxam. Avicta Duo alone will provide corn seedlings early season protection from damage caused by nematodes and the insects specified in the section, “**Application**”. Tank mixing Avicta Duo with additional thiamethoxam (Cruiser® 5FS) will provide protection from damage caused by additional insects. Tank mixing Avicta Duo with seed treatment fungicides will add early season disease protection. Refer to the following table for application directions.



## Application

Pests / Diseases	Amount of Product to Apply	Instructions
<p><b>Nematodes and these Insects:</b></p> <p>Black cutworm Chinch bug Corn flea beetle Corn leaf aphid Grape colaspis Seedcorn beetle Seedcorn maggot Southern corn leaf beetle Southern green stinkbug Sugarcane beetle Thrips White grub Wireworm</p>	<p>Apply Avicta Duo to corn seed at a rate to achieve:</p> <p>0.2000 mg. abamectin/ 0.4538 mg. thiamethoxam per seed to 0.2500 mg. abamectin/ 0.5672 mg. thiamethoxam per seed</p> <p><b>NOTE:</b></p> <ul style="list-style-type: none"> <li>• 1 fl. oz. of Avicta Duo contains 4.39 grams of abamectin and 9.96 grams of thiamethoxam.</li> <li>• The typical density of Avicta Duo is 10 lbs. per gallon.</li> </ul>	<p>To provide protection from early season nematode damage and damage from these insects apply the specified amount of Avicta Duo.</p>
<p><b>Additional Insects:</b></p> <p>Billbug Corn rootworm: (includes Mexican, northern, southern, and western)</p>	<p>In addition to the amount of Avicta Duo specified above, to protect corn seedlings from billbug and corn rootworm damage, apply Cruiser 5FS to the corn seed to achieve a total of 1.25 mg. of thiamethoxam per seed.</p> <p>1) Apply Avicta Duo at a rate to achieve:</p> <p>0.2000 mg. abamectin/ 0.4538 mg. thiamethoxam per seed to 0.2500 mg. abamectin/ 0.5672 mg. thiamethoxam per seed</p> <p><b>NOTE:</b></p> <ul style="list-style-type: none"> <li>• 1 fl. oz. of Avicta Duo contains 4.39 grams of abamectin and 9.96 grams of thiamethoxam.</li> <li>• The typical density of Avicta Duo is 10 lbs. per gallon.</li> </ul> <p>2) Then add the amount of Cruiser 5FS to achieve:</p> <p>a total of 1.25 mg. of thiamethoxam per seed.</p> <p><b>NOTE:</b> One fl. oz. of Cruiser 5FS contains 17.7 grams of thiamethoxam.</p>	<p>Avicta Duo contains the active ingredients abamectin and thiamethoxam. Cruiser 5FS is a seed treatment insecticide that contains only the active ingredient, thiamethoxam. To add protection from billbug and corn rootworm damage to Avicta Duo treated corn seed, Cruiser 5FS must be mixed with Avicta Duo to increase the amount of thiamethoxam per seed.</p>

<b>Disease Protection – Early Season</b>	For the amount of fungicide to apply, refer to the EPA-approved label for the corn seed treatment fungicide.	To add early season and broad spectrum disease protection for corn seedlings, treating corn seed with a mixture of Avicta Duo plus seed treatment fungicides registered for use on corn seed, such as Apron® XL, Dynasty®, Maxim® Quattro, Vibrance® and Maxim XL, is highly recommended.
--	--	---

Do not use at a rate that will result in more than 0.165lb of thiamethoxam per acre per calendar year (74.8 g ai/Acre) as a seed treatment application.

Do not use at a rate that will result in more than 0.033 lb (15.0 g) of abamectin per acre per calendar year as a corn seed treatment application.

## **B. 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><b>Nematodes and these insects:</b></p> <p>Cotton aphid Cotton fleahopper<sup>1</sup> Plant bugs<sup>1</sup> Tobacco thrips Western flower thrips Wireworm</p> <p><i><sup>1</sup>Avicta 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.</i></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><b>NOTE:</b></p> <ul style="list-style-type: none"> <li>• *1 fl. oz. of Avicta Duo contains 4.39 grams of abamectin and 9.96 grams of thiamethoxam.</li> <li>• The typical density of Avicta Duo is 10 lbs. per gallon.</li> </ul>
<p><b>Disease Protection – Early Season</b></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>

Do not use at a rate that will result in more than 0.075 lb thiamethoxam per acre (34.0 grams ai/A) per calendar year as a seed treatment application.

Do not use at a rate that will result in more than 0.03 lb abamectin (13.6 g) abamectin per acre per calendar year as a cotton seed treatment application per calendar year.

## **CLEANING SEED TREATMENT EQUIPMENT**

Do not use compressed air hoses to remove the dust from the seed treating equipment or the area around the equipment; use a central vacuum system or a HEPA filter portable vacuum cleaner.

## STORAGE AND DISPOSAL

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

### **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 Handling**

**Nonrefillable container. Do not reuse or refill this container.** Syngenta's 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.

Triple rinse container promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container  $\frac{1}{4}$  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 contact Syngenta or its authorized agent for disposal.

For minor spills, leaks, etc., follow all precautions indicated on this label and clean-up immediately. Take special care to avoid contamination of equipment and facilities during clean-up procedures and disposal of wastes.

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

Avicta®, Apron®, Cruiser®, Dynasty®, Maxim®, Vibrance®, the ALLIANCE FRAME, Syngenta Logo and the PURPOSE ICON are Trademarks of a Syngenta Group Company

Viton™ is a trademark of The Chemours Company FC, LLC

Protected by U.S. Patent Nos. 5,852,012, & 6875727.

© 20XX Syngenta

For non-emergency (e.g., current product information) call  
Syngenta Crop Protection at 1-866-796-4368.

Manufactured for:  
Syngenta Crop Protection, LLC

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

Avicta Duo 1321 MAS 0317 AMEND-D 0919-CL – jeb – 06/13/2024  
000100-01321.20190930D.AVICTA DUO.AMEND.SEP2019-CL