

# UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, DC 20460

OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION

November 14, 2016

Patrick McCain Senior Regulatory Product Manager Seedcare Syngenta Crop Protection, LLC P.O. Box 18300 Greensboro, NC 27419-8300

Subject: Label Amendment – Revisions to PPE, seed bag tag and other revisions Product Name: Avicta Complete Beans 500 EPA Registration Number: 100-1457 Application Date: 9/9/2015 Decision Number: 509988

Dear Mr. McCain:

The amended label referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide and Rodenticide Act, as amended, is acceptable. This approval does not affect any conditions that were previously imposed on this registration. You continue to be subject to existing conditions on your registration and any deadlines connected with them.

A stamped copy of your labeling is enclosed for your records. This labeling supersedes all previously accepted labeling. 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 18 months from the date of this letter. After 18 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.

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.

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

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with FIFRA section 6. If you have any questions, please contact Jacquelyn Herrick by phone at 703-347-0559, or via email at herrick.jacquelyn@epa.gov.

Sincerely,

Mark Suarez Product Manager 07 Invertebrate & Vertebrate Branch 3 Registration Division (7505P) Office of Pesticide Programs

Enclosure

(Master)

# **RESTRICTED USE PESTICIDE**

DUE TO 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.

GROUP	4A	6	INSECTICIDES
GROUP	4	12	FUNGICIDES

# Avicta® Complete Beans 500

Nematicide/Insecticide/Fungicide

A seed treatment product that provides soybean seedlings early-season protection from damage caused by nematodes (including soybean cyst nematode) and the listed insects and diseases

For use only in Syngenta-certified seed 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)	
Thiamethoxam (CAS No. 153719-23-4)	
Mefenoxam CAS 70630-17-0, 69516-34-3)	
Fludioxonil (CAS No. 131341-86-1)	0.55%
Other Ingredients:	64.48%
Total:	

Avicta Complete Beans 500 is a flowable concentrate containing 2.06 pounds of abamectin, 1.03 pounds of thiamethoxam, 0.15 pounds of mefenoxam, and 0.05 pounds of fludioxonil per gallon.

# KEEP OUT OF REACH OF CHILDREN.

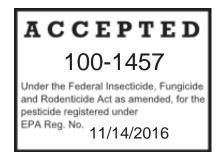
# WARNING/AVISO

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. 100-1457 EPA Est.

\_\_\_\_gallons Net Contents



FIRST AID						
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.					
If swallowed						
II Swalloweu	<ul> <li>Call a poison control center or doctor immediately for treatment advice.</li> </ul>					
	Have person sip a glass of water if able to swallow.					
	<ul> <li>Do not induce vomiting unless told to do so by the poison control</li> </ul>					
	center or doctor.					
	<ul> <li>Do not give anything by mouth to an unconscious person.</li> </ul>					
If in eyes	Hold eye open and rinse slowly and gently with water for 15-20					
	minutes. Remove contact lenses, if present, after the first 5					
	minutes, then continue rinsing eye.					
	Call a poison control center or doctor for treatment advice.					
If on skin or	Take off contaminated clothing.					
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						
1 000 000 0012						

# PRECAUTIONARY STATEMENTS

# Hazards to Humans and Domestic Animals

# WARNING/AVISO

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

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: barrier laminate, butyl rubber ≥ 14 mils, nitrile rubber ≥ 14 mils, neoprene rubber ≥ 14 mils, polyvinyl chloride (PVC) ≥ 14 mils, or Viton® ≥ 14 mils
- Protective eyewear
- Coveralls worn over long-sleeved shirt and long pants
- Chemical-resistant apron
- Shoes and socks
- NIOSH-approved respirator with any N, R, or P filter with NIOSH-approval number prefix TC-84A; or a NIOSH-approved powered air purifying respirator with HE filter with NIOSH-approval number prefix TC-21C

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

- Chemical-resistant gloves: barrier laminate, butyl rubber ≥ 14 mils, nitrile rubber ≥ 14 mils, neoprene rubber ≥ 14 mils, polyvinyl chloride (PVC) ≥ 14 mils, or Viton ≥ 14 mils
- Protective eyewear
- Coveralls worn over Long sleeved shirt and long pants
- Shoes and socks
- NIOSH-approved respirator with any N, R, or P filter with NIOSH-approval number prefix TC-84A; or a NIOSH-approved powered air purifying respirator with HE filter with NIOSH-approval number prefix TC-21C

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

- Chemical resistant gloves (minimum length 12 inches): barrier laminate, butyl rubber ≥ 14 mils, nitrile rubber ≥ 14 mils, neoprene rubber ≥ 14 mils, polyvinyl chloride (PVC) ≥ 14 mils, or Viton ≥ 14 mils Important: tape down gloves to the sleeves of coveralls.
- Protective eyewear
- Chemical-resistant, hooded coveralls worn over long-sleeved shirt and long pants
- Shoes and socks
- NIOSH-approved respirator with an organic vapor (OV) cartridge with a combination N, R, or P filter with NIOSH-approval number prefix TC-84A; OR NIOSH-approved gas mask with an organic vapor canister with NIOSH-approval number prefix TC-14G; OR a NIOSH-approved powered air purifying respirator with organic vapor (OV) cartridge and combination HE filter with NIOSH-approval number prefix TC-23C

# 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: barrier laminate, butyl rubber ≥ 14 mils, nitrile rubber ≥ 14 mils, neoprene rubber ≥ 14 mils, polyvinyl chloride (PVC) ≥ 14 mils, or Viton ≥ 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
- NIOSH-approved respirator with any N, R, or P filter with NIOSH-approval number prefix TC-84A; or a NIOSH-approved powered air purifying respirator with HE filter with NIOSH-approval number prefix TC-21C

#### **Environmental Hazards**

This pesticide product is toxic to wildlife, freshwater and estuarine/marine fish, and highly toxic to aquatic invertebrates. 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.

This pesticide product contains the active ingredient thiamethoxam, which is highly toxic to bees exposed to direct treatment. Effects may be possible as a result of exposure to translocated residues in blooming crops.

#### **Pollinator Precautions**

Thiamethoxam is highly toxic to bees exposed to direct treatment, and effects may be possible as a result of exposure to translocated residues in blooming crops.

#### **Groundwater Advisory**

This product contains the active ingredient mefenoxam, which is known to leach through soil into groundwater under certain conditions as a result of agricultural use. Use of mefenoxam in areas where soils are permeable, particularly where the water table is shallow, may result in groundwater contamination.

This product also contains thiamethoxam, which has properties and characteristics associated with chemicals detected in groundwater. Use of thiamethoxam in areas where soils are permeable, particularly where the water table is shallow, may result in groundwater contamination.

#### 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 Complete Beans 500 is for use only in Syngenta-certified seed treatment facilities and only in seed treatment equipment with closed transfer and application systems. 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 153.155(c). Refer to the section on this label **REQUIRED SEED CONTAINER STATEMENTS** for language that must appear on the container or on the tag that is attached to the container of treated seed.

#### **PRODUCT INFORMATION**

Avicta Complete Beans 500 is a seed treatment nematicide/insecticide/fungicide for soybeans. Avicta Complete Beans 500 contains the active ingredients abamectin, thiamethoxam, mefenoxam, and fludioxonil. When applied to soybean seed, Avicta Complete Beans 500 will provide soybean seedlings early-season protection from damage caused by nematodes (including soybean cyst nematode) and from the insects, soil-borne diseases, and seed-borne diseases specified in the **Crop Use Directions**. Refer to the **Crop Use Directions** for application instructions.

# REQUIRED SEED CONTAINER STATEMENTS

User is responsible for ensuring that the seed container meets all requirements under the Federal Seed Act.

The Federal Seed Act requires that the container of soybean seed treated with Avicta Complete Beans 500 shall be labeled with the following statements:

- Store treated seed away from food and feedstuffs.
- Do not allow children, pets, or livestock to have access to treated seeds.
- This seed has been treated with abamectin nematicide, thiamethoxam insecticide, and mefenoxam and fludioxonil fungicides.
- 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 soybean seed treated with Avicta Complete Beans 500.

- Wear long-sleeved shirt, long pants, shoes, socks, and chemical-resistant gloves when handling treated seed.
- Treated seed must be planted into the soil at a depth greater than 1 inch.
- **Groundwater Advisory:** This product contains the active ingredient mefenoxam, which is known to leach through soil into groundwater under certain conditions as a result of agricultural use.

This product also contains thiamethoxam, which has properties and characteristics associated with chemicals detected in groundwater. Use of this product in areas where soils are permeable, particularly where the water table is shallow, may result in groundwater contamination.

- **Pollinator Precautions:** This product contains thiamethoxam, which is highly toxic to bees. Effects are possible as a result of exposure to translocated residues in blooming crops.
- Excess treated seed may be used for biofuel production only if:

(1) By-products are not used for livestock feed, and

(2) No measurable residues of pesticides remain in ethanol by-products that are used for agronomic practice.

- 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 wash water.
- Dispose of seed packaging in accordance with local requirements.
- Plant Avicta Complete Beans 500-treated soybean seed based upon the local planting dates and soil temperatures that are recommended by your state agricultural extension agent. In areas with a history of high nematode populations, a soil fumigant may be recommended.
- Do not use at a rate that will result in more than 0.008 lb fludioxonil per acre per calendar year (4.0 g ai/A), 0.026 lb mefenoxam per acre per calendar year (11.4 g ai/A), or 0.083 lb thiamethoxam per acre per calendar year (37.8 g ai/A) as a seed treatment application. This seed has been treated with 0.0038 mg fludioxonil/seed, 0.0113 mg mefenoxam/seed, and 0.0756 mg thiamethoxam/seed.
- After the seeds have been planted, do not enter or allow worker entry into treated areas during the restricted entry interval (REI) which is 48 hours. **Exception:** Once the seeds are planted into the soil workers are permitted to enter the treated area immediately if there will be no worker contact with the soil subsurface.
- Wait a minimum of 45 days after planting Avicta Complete Beans 500-treated soybean seed before treating the soybeans with a neonicotinoid insecticide.
- In the event of crop failure or after harvest of soybeans grown from Avicta Complete Beans 500-treated soybean seed, the following crops may be replanted immediately:

# 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 Brassica), 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

For any other crop, the minimum plant back interval is 120 days from the date the Avicta Complete Beans 500 treated soybean seeds were planted. 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**

# GROUP 4A 6 INSECTICIDES

Avicta Complete Beans 500 contains thiamethoxam, a Group 4A insecticide, and abamectin, a Group 6 insecticide. 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.

Insect populations may contain individuals naturally resistant to Group 4A and 6 insecticides and if used repeatedly in the same fields, then resistant members may eventually dominate the population. Because resistance development cannot be predicted, use sound resistance management strategies established for the crop and use area.

Base seed treatment on an integrated pest management program that includes field sanitation, historical information related to pesticide use, careful selection of pest-tolerant crop varieties, scouting, and management practices which optimize populations of natural enemies of insect pests such as within-field refuge (untreated areas). Sound management programs also consider cultural and biological control practices.

#### In order to maintain susceptibility to these classes of chemistry:

- Use products at their full, specified doses.
- Use appropriate, well-maintained equipment. Use specified water volumes and apply at optimal temperatures in order to obtain optimal treatment.
- When rate ranges are given, use the higher rate within the listed rate range when insect pressure is expected to be high.
- Avoid using a single active ingredient or mode of action (same insecticide group) exclusively for season long control of insect species with more than one generation per crop season.
- For insect species with successive or overlapping generations, use a treatment window approach. A treatment window is a period of time defined by the stage of crop development and the biology of the pests of concern. Within the treatment window, depending on the length of residual activity, single or consecutive applications may be made using seed, in-furrow, or foliar treatments unless otherwise excluded by product labels. Do not exceed the maximum amount of this insecticide's mode of action allowed per growing season.
- Following a treatment window of this insecticide's mode of action, rotate to a treatment window of effective products with a different mode of action before making additional applications of this insecticide.

If resistance to this product develops in your area, this product or other products with a similar mode of action may not provide adequate control. If poor performance cannot be attributed to improper application or weather conditions, a resistant strain of insect may be present. If you experience difficulty with control and resistance is a reasonable

cause, immediately consult your local company representative or agricultural advisor for the best alternative method of control for the crop and use 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 1-800-334-9481
- 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: <u>http://www.irac-online.org</u>

# GROUP 4 12 FUNGICIDES

Avicta Complete Beans 500 contains mefenoxam, a Group 4 fungicide, and fludioxonil, a Group 12 fungicide. Mefenoxam belongs to the phenylamide class of chemistry which interferes with fungal RNA synthesis. Fludioxonil belongs to the phenylpyrrole class of chemistry which interferes with in osmotic signal transduction.

Fungal populations may contain individuals naturally resistant to Group 4 or 12 fungicides and if used repeatedly in the same fields, then resistant members may eventually dominate the population. Because resistance development cannot be predicted, the use of this product should conform to sound resistance management strategies such as alternation with fungicides with a different mode of action and/or tank mixes established for the crop and use area.

Use should be based on an IPM program that includes field sanitation, scouting, historical information related to pesticide use, and crop rotation. The IPM program should also consider cultural, biological, and other chemical control practices.

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

#### For additional information on Fungicide Resistance Management:

- Contact Syngenta representatives at 1-800-334-9481
- Contact your local extension specialist or certified crop advisor
- Visit the Fungicide Resistance Action Committee (FRAC) on the web at: <u>http://www.frac.info</u>

# **ROTATIONAL CROP RESTRICTIONS**

In the event of crop failure or after harvest of soybeans grown from Avicta Complete Beans 500-treated soybean seed, the following crops may be replanted immediately:

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 Brassica Crop Subgroup 5A				
Leafy Brassica Greens Crop Subgroup 5B				
Leafy Vegetables (Except Brassica), 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				

For any other crop, the minimum plant back interval is 120 days from the date the Avicta Complete Beans 500 treated soybean seeds were planted. 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

# **RESTRICTIONS:**

- Consult the Syngenta Seed Care 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 Complete Beans 500 must be thoroughly recirculated in its original container before using. (See **Mixing Instructions**.)
- Apply Avicta Complete Beans 500 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, insect, or disease protection.
- Thoroughly mix the required amount of Avicta Complete Beans 500 with the amount of water required for the slurry treater and the dilution rate.
- 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 food and feed.

#### Mixing Instructions

- 1. To dispense Avicta Complete Beans 500 into a mix tank, first attach a pump with fittings (e.g., Micro Matic) that match the fittings on the Avicta Complete Beans 500 container.
- 2. Recirculate product. Calculate the recirculation time 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, recirculate for a short period of 5 minutes per day. Attach the dispensing hose to a dry-lock type of fitting that is permanently attached to the mix tank lid.
- 4. Add 1/4-1/2 of the required amount of water to the mix tank.
- 5. With the agitator running, add the Avicta Complete Beans 500 to the tank.
- 6. Continue agitation while adding the remainder of the water.
- 7. Begin application of the solution after the Avicta Complete Beans 500 has completely dispersed into the mix water.
- 8. Maintain agitation until all of the mixture has been applied.

# **CROP USE DIRECTIONS**

To provide soybean seedlings early-season protection from damage caused by nematodes, including soybean cyst nematode, and the specified insects and diseases on this label, apply Avicta Complete Beans 500 to soybean seed as directed in the **Application** table.

**NOTE:** Soybean seed that can be treated with this product also include those varieties that produce edible (green) soybean seed (edamame).

# Application

To Protect Soybean	Amount of Avicta Complete Beans 500 to Apply to Soybean Seed					
Seedlings from Damage Caused by These Pests/ Diseases	FI oz of product per 100 lb (cwt) of seed	Total grams of the 4 active ingredients (ai) per 100 kg of seed	Total mg of the 4 active ingredients (ai) per seed			
Nematodes (including soybean cyst nematode) Insects:	6.2 fl oz (@ 3,000 seeds per pound)	160 grams (@ 3,000 seeds per pound) NOTE:	0.242 mg (@ 3,000 seeds per pound)			
Aphids Bean beetles Bean leaf beetles Grape colaspis Leaf hoppers Leaf miners Mexican bean beetle Seed corn maggot Three-cornered alfalfa hopper Thrips White grubs Wireworms		<ul> <li>160 g of these 4 active ingredients per 100 kg of seed consists of the following amounts of each active ingredient:</li> <li>100 g abamectin 50 g thiamethoxam 7.5 g mefenoxam 2.5 g fludioxonil</li> </ul>				
Diseases: Damping-off and seed- borne rots due to <i>Pythium</i> and <i>Phytophthora</i> Early-season Phytophthora root rot, <i>Fusarium</i> , and <i>Rhizoctonia</i>						
Avicta Complete Beans 500 also suppresses seed-borne <i>Sclerotinia</i> and <i>Phomopsis</i> species.						

**Restriction:** Do not use at a rate that will result in more than 0.008 lb fludioxonil per acre per calendar year (4.0 g ai/A), 0.026 lb mefenoxam per acre per calendar year (11.4 g ai/A), or 0.083 lb thiamethoxam per acre per calendar year (37.8 g ai/A) as a seed treatment application. This seed has been treated with 0.0038 mg fludioxonil/seed, 0.0113 mg mefenoxam/seed, and 0.0756 mg thiamethoxam/seed.

#### **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**

**Non-refillable 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 the container as follows: Empty the remaining contents into application equipment or 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 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 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!

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

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