

# UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, DC 20460

OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION

April 19, 2022

Davis Daiker Regulatory Product Manager Syngenta Crop Protection, LLC PO Box 18300 Greensboro, NC 27419

Subject: Registration Review Label Mitigation for Fludioxonil and Mefenoxam

Product Name: Clariva Complete Beans 500

EPA Registration Number: 100-1597 Application Dates: 2/1/2019; 7/31/2018 Decision Numbers: 583296;583297

Dear Dr. Daiker:

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 Fludioxonil and Mefenoxam Interim Decisions, 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.

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 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.

Page 2 of 2 EPA Reg. No. 100-1597 Decision No. 583296;583297

If you have any questions about this letter, please contact Darius Stanton by phone at 202-566-2332, or via email at stanton.darius@epa.gov.

Sincerely,

Linda Arrington, Branch Chief

Risk Management and Implementation Branch 4 Pesticide Re-Evaluation Division

Office of Pesticide Programs

Enclosure

## (Master label)

THIAMETHOXAM	GROUP	4A	INSECTICIDE
MEFENOXAM	GROUP	4	FUNGICIDE
SEDAXANE	GROUP	7	FUNGICIDE
FLUDIOXONIL	GROUP	12	FUNGICIDE

## Clariva® Complete Beans 500

Insecticide and Nematicide with Fungicides

A seed treatment product for protection against damage from listed insects, seed-borne diseases, seedling diseases and Soybean Cyst Nematode on soybeans

Active	Ingred	lients:
--------	--------	---------

Thiamethoxam <sup>1</sup>	12.50%
Mefenoxam <sup>2</sup>	1.88%
Fludioxonil <sup>3</sup>	0.63%
Sedaxane <sup>4</sup>	0.63%
Pasteuria nishizawae – Pn1*5	5.07%
Other Ingredients:	79. 29%
Total:	100.00%

<sup>\*</sup> Contains at least 3.34 x 10<sup>9</sup> spores per mL or 1.3 x 10<sup>13</sup> spores per gal.

Clariva Complete Beans 500 contains 1.14 lb thiamethoxam, 0.17 lb mefenoxam, 0.06 lb fludioxonil and 0.06 lb sedaxane per gallon.

#### KEEP OUT OF REACH OF CHILDREN.

## **CAUTION**

[See additional precautionary statements and directions for use [in booklet] [on label].

EPA Reg. No. 100-1597 EPA Est. XXXXX

SCP

Net Contents

ACCEPTED

Apr 19, 2022

Under the Federal Insecticide, Fungicide and Rodenticide Act as amended, for the pesticide registered under

EPA Reg. No. 100-1597

<sup>&</sup>lt;sup>1</sup>CAS No. 153719-23-4

<sup>&</sup>lt;sup>2</sup>CAS No. 70630-17-0 and CAS No. 69516-34-3

<sup>&</sup>lt;sup>3</sup>CAS No. 131341-86-1

<sup>&</sup>lt;sup>4</sup>CAS No. 874967-67-6

<sup>&</sup>lt;sup>5</sup>CAS No. None

FIRST AID			
If swallowed	<ul> <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 a poison control center or doctor.</li> </ul>		
	<ul> <li>Do not give anything by mouth to an unconscious person.</li> </ul>		
Have the product container or label with you when calling a poison control center or doctor, or going for treatment.			
HOT LINE NUMBER			
	Hour Medical Emergency Assistance (Human or Animal) ical Emergency Assistance (Spill, Leak, Fire, or Accident),		

Call **1-800-888-8372** 

## **PRECAUTIONARY STATEMENTS**

## HAZARDS TO HUMANS AND DOMESTIC ANIMALS

## CAUTION

Harmful if swallowed. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet.

## PERSONAL PROTECTIVE EQUIPMENT (PPE)

## Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Chemical-resistant gloves: barrier laminate, butyl rubber ≥14 mils, nitrile rubber ≥14 mils, neoprene rubber ≥14 mils, polyvinyl chloride (PVC) ≥14 mils, Viton® ≥14 mils
- · Shoes plus socks
- Wear a minimum of a NIOSH-approved particulate filtering facepiece respirator with any N, R or P filter; <u>OR</u> a NIOSH-approved elastomeric particulate respirator with any N, R or P filter; <u>OR</u> a NIOSH-approved powered air purifying respirator with HE filters.

Repeated exposure to high concentrations of microbial proteins can cause allergic sensitization.

## **User Safety Requirements**

Follow the manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

#### **USER SAFETY RECOMMENDATIONS**

#### **Users should:**

- Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.
- Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

#### **ENVIRONMENTAL HAZARDS**

This product is toxic to wildlife, freshwater and estuarine/marine fish, oysters, and shrimp and highly toxic to aquatic invertebrates. Runoff may be hazardous to aquatic organisms in neighboring areas. Exposed treated seed may be hazardous to wildlife. Do not contaminate water when disposing of equipment washwater or rinsate.

#### **Pollinator Precautions**

Thiamethoxam is highly toxic to bees, and effects are possible as a result of exposure to translocated residues in blooming crops.

#### **Groundwater Advisory**

Fludioxonil and Thiamethoxam have properties and characteristics associated with chemicals detected in groundwater. These chemicals may leach into groundwater if used in areas where soils are permeable, particularly where the water table is shallow.

Mefenoxam is known to leach through soil into groundwater under certain conditions as a result of label use. This chemical may leach into groundwater if used in areas where soils are permeable, particularly where the water table is shallow.

## **Physical and Chemical Hazards**

Do not use, pour, spill or store near heat or open flame. Do not mix or allow coming in contact with oxidizing agents. Hazardous chemical reaction may occur.

## 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**

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

For use in commercial seed treatment facilities only. Not for use in hopper box, planter box, slurry box, or other on-farm seed treatment applications.

This product is to be used in liquid or slurry treaters only.

Do not use this product until you have read the entire label. Keep unprotected persons out of treatment area until seeds have dried or been packaged.

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. Treat a quantity of seed using equipment similar to that planned for treating the total seed lot. Prior to treatment, conduct germination tests on a portion of seed before committing the total seed lot to a selected seed treatment.

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

Maximum usage when applying metalaxyl- and mefenoxam- containing products to the same crop within the same season: Do not apply more than the maximum yearly total application rate for the active ingredient as stated on the label of the product containing the lowest yearly total on that crop.

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

## **USE INFORMATION**

Clariva Complete Beans 500 is a seed treatment product containing the active ingredients thiamethoxam (insecticide) and fludioxonil, mefenoxam, sedaxane (fungicides) and *Pasteuria nishizawae* – Pn1 (nematicide). Clariva Complete Beans 500 protects against damage from listed early-season insects, soil-borne and seed-borne diseases on soybeans as well as offers season-long protection from soybean cyst nematode (*Heterodera glycines*)

Thiamethoxam is a systemic seed treatment insecticide belonging to the neonicotinoid class of chemistry. Thiamethoxam protects against listed chewing and sucking insects through contact and ingestion.

Mefenoxam fungicide is active against *Pythium*, *Phytophthora* and systemic downy mildew.

Fludioxonil fungicide is active against *Fusarium* and *Rhizoctonia*, and suppresses seed-borne *Sclerotinia* and *Phomopsis* species.

Sedaxane fungicide is active against seed decay, seedling blight and damping-off caused by *Rhizoctonia* species.

Pasteuria nishizawae (Pn1) is a biological nematicide for protection against soybean cyst nematode (Heterodera glycines)

#### RESISTANCE MANAGEMENT

## THIAMETHOXAM GROUP 4A INSECTICIDE

For resistance management, Clariva Complete Beans 500 contains a Group 4A/thiamethoxam insecticide. Any insect population may contain individuals naturally resistant to Clariva Complete Beans 500 and other Group 4A insecticides. The resistant individuals may dominate the insect population if this group of 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.

To delay insecticide resistance, take the following steps:

- Rotate the use of Clariva Complete Beans 500 or other Group 4A 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 crossresistance 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.

## For additional information on Insecticide Resistance Management:

- Contact Syngenta representatives at 1-800-334-9481
- Visit the Insecticide Resistance Action Committee (IRAC) on the web at: http://www.irac-online.org

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

MEFENOXAM	GROUP	4	FUNGICIDE
SEDAXANE	GROUP	7	FUNGICIDE
FLUDIOXONIL	GROUP	12	<b>FUNGICIDE</b>

For resistance management, please note that Clariva Complete Beans 500 contains Group 4/ mefenoxam, Group 7/sedaxane and Group 12/fludioxonil fungicides. Any fungal population may contain individuals naturally resistant to Clariva Complete Beans 500 and other Group 4, Group 7 or Group 12 fungicides. A gradual or total loss of pest control may occur over time if these fungicides are used repeatedly in the same fields. Appropriate resistance-management strategies should be followed.

Mefenoxam belongs to the phenylamide class of chemistry which interferes with fungal RNA synthesis. Sedaxane is a succinate dehydrogenase inhibitor (SDHI) and belongs to the carboxamide class of chemistry which disrupts cellular respiration and energy generation. Fludioxonil belongs to the phenylpyrrole class of chemistry which interferes with osmotic signal transduction.

To delay fungicide resistance, take one or more of the following steps:

- Rotate the use of Clariva Complete Beans 500 or other Group 4, Group 7 or Group 12 fungicides within a growing season sequence with different groups that control the same pathogens.
- Use tank mixtures with fungicide from a different group that are equally effective on the target pest when such use is permitted. Use at least the minimum application rate as labeled by the manufacturer.
- Adopt an integrated disease management program for fungicide use that includes scouting, uses historical information related to pesticide use, and crop rotation, and which considers host plant resistance, impact of environmental conditions on disease development, disease thresholds, as well as cultural, biological and other chemical control practices.
- Where possible, make use of predictive disease models to effectively time fungicide applications. Note that using predictive models alone is not sufficient to manage resistance.
- Monitor treated fungal populations for resistance development.
- Contact your local extension specialist or certified crop advisor for any additional pesticide resistance-management and/or IPM recommendations for specific crop and pathogens.
- For further information or to report suspected resistance contact Syngenta at 1-866-Syngent(a) (866-796-4368). You can also contact your pesticide distributor or university extension specialist to report resistance.

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

## MIXING PROCEDURES

**Important:** Always re-circulate Clariva Complete Beans 500 thoroughly before using.

Consult the manufacturer of the application equipment you plan to use for suitability for this application and for instructions on operation and calibration of the equipment. Follow the manufacturer application instructions for the seed treatment equipment being used.

Apply Clariva Complete Beans 500 as a water-based slurry utilizing standard slurry seed treatment equipment which provides uniform seed coverage. Uneven or incomplete seed coverage may not give the desired level of disease control. Thoroughly mix the specified amount of Clariva Complete Beans 500 into the required amount of water or liquid inoculant for the slurry treater and dilution rate to be used.

Certain crops require addition of inoculants when the seed is treated or planted. Clariva Complete Beans 500 is compatible with several liquid inoculant products. Consult the

maker of the inoculant product and a Syngenta representative for directions before applying Clariva Complete Beans 500 with inoculants.

Continuous agitation or mixing of the slurry mixture is necessary to prevent settling out of the solution. Clean out any unused product from the treater after treating or maintain constant agitation if the leftover slurry will be maintained overnight.

The total application volume must be sufficient to provide desired level of coverage. Dilution is typically done with water or liquid inoculants. Continuous agitation or mixing of the slurry mixture is necessary to prevent settling out of the solution.

Use an EPA approved dye/colorant that imparts and unnatural color to the seed as required in 40CFR 153.155(c).

Allow seed to dry before bagging.

Follow planter manufacturer specifications for use of talc or other hopper box additives at planting.

## **USE RESTRICTIONS**

- Do not allow children, pets or livestock to have access to treated seed.
- Do not graze or feed livestock on treated areas for 45 days after planting seed treated with Clariva Complete Beans 500.
- Do not use at a rate that will result in more than 0.083 lb thiamethoxam (37.8 g) per acre, 0.004 lb fludioxonil (2.0 g) per acre and 0.013 lb mefenoxam (5.7 g) per acre per calendar year as a seed treatment application.
- This seed has been treated with 0.0756 mg thiamethoxam, 0.0113 mg mefenoxam, and 0.0038 mg fludioxonil per seed.
- Do not use more than 0.125 lb of thiamethoxam (56.7 g) per calendar year, including all thiamethoxam products and application methods (for example, seed treatment, in-furrow, and foliar).
- Do not apply a neonicotinoid insecticide within 45 days of planting seed treated with Clariva Complete Beans 500.

## **CROP ROTATIONAL RESTRICTIONS**

In the event of crop failure or harvest of a crop grown from grown from Clariva Complete Beans 500 treated seed, the field may be replanted according to the following schedule:

## **Plantback Interval Table**

Plantback Interval Table				
Immediate Plantback	Minimum 30-Day Plantback Interval			
Canola	Alfalfa			
Cereal Grains: Barley,Oats, Rye, Triticale, and Wheat	Brassica (Cole) Leafy Vegetables Crop Group 5			
Soybean	Cereal Grains: Buckwheat, Corn, Pearl Millet, Proso Millet, Popcorn, Rice (dry-seeded), Sorghum, Teosinte, Wild Rice			
	Cotton			
	Cucurbit Vegetables Crop Group 9			
	Fruiting Vegetables Crop Group 8			
	Leafy Vegetables Crop Group 4			
	Legume Vegetables (Succulent or Dried) Crop Group 6			
	Mint: Peppermint and Spearmint			
	Oilseeds: Borage, Crambe, Flax Seed, Mustard Seed, and Safflower			
	Onion, Bulb			
	Peanut			
	Root Vegetables (including Sugarbeet) Crop Subgroup 1A			
	Strawberry			
	Sunflower			
	Tobacco			
	Tuberous and Corm Vegetables (including Potato) Crop Subgroup 1C			

 For any other crops the minimum plant back interval is 120 days from the date the Clariva Complete Beans 500 treated 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.

## SEED BAG LABEL REQUIREMENTS

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

- This seed has been treated with thiamethoxam insecticide, fludioxonil, mefenoxam, sedaxane fungicides, and *Pasteuria nishizawae* Pn1 nematicide.
- Do not use for feed, food, or oil purposes.

In addition, the U.S. Environmental Protection Agency requires the following statements on bags containing seeds treated with Clariva Complete Beans 500:

## Groundwater Advisory:

Fludioxonil and Thiamethoxam have properties and characteristics associated with chemicals detected in groundwater. These chemicals may leach into groundwater if used in areas where soils are permeable, particularly where the water table is shallow.

Mefenoxam is known to leach through soil into ground water under certain conditions as a result of agricultural use. This chemical may leach into groundwater if used in areas where soils are permeable, particularly where the water table is shallow.

#### Pollinator Precautions:

Thiamethoxam is highly toxic to bees, and effects are possible as a result of exposure to translocated residues in blooming crops.

- Excess treated seed may be used for ethanol production only if (1) by-products are not used for livestock feed and (2) no measurable residues of pesticide remain in the ethanol by-products that are used in agronomic practice.
- Do not allow children, pets, or livestock to have access to treated seed.
- Store away from feeds and foodstuffs.
- Wear long-sleeved shirt, long pants and chemical resistant gloves when handling treated seed.
- Treated seeds exposed on soil surface may be hazardous to wildlife. Cover or collect treated seeds spilled during loading.
- Treated seed must be planted into the soil at a depth greater than 1 inch.
- Dispose of all excess treated seed. Leftover treated seed may be doublesown around the headland or buried away from water sources in accordance with local requirements.
- Do not contaminate water bodies when disposing of planting equipment wash waters.
- Dispose of seed packaging in accordance with local requirements.
- Do not graze or feed livestock on treated areas for 45 days after planting seed treated with Clariva Complete Beans 500.
- In the event of a crop failure or harvest of a crop grown from Clariva Complete Beans 500 treated seed, the field may be replanted according to the following schedule:

#### Plantback Interval Table

Immediate Plantback	Minimum 30-Day Plantback Interval
Canola	Alfalfa
Cereal Grains: Barley,Oats, Rye, Triticale, and Wheat	Brassica (Cole) Leafy Vegetables Crop Group 5
Soybean	Cereal Grains: Buckwheat, Corn, Pearl Millet, Proso Millet, Popcorn, Rice (dry-seeded), Sorghum, Teosinte, Wild Rice
	Cotton
	Cucurbit Vegetables Crop Group 9
	Fruiting Vegetables Crop Group 8
	Leafy Vegetables Crop Group 4
	Legume Vegetables (Succulent or Dried) Crop Group 6
	Mint: Peppermint and Spearmint
	Oilseeds: Borage, Crambe, Flax Seed, Mustard Seed, and Safflower
	Onion, Bulb
	Peanut
	Root Vegetables (including Sugarbeet) Crop Subgroup 1A
	Strawberry
	Sunflower
	Tobacco
	Tuberous and Corm Vegetables (including Potato) Crop Subgroup 1C

- For any other crops the minimum plant back interval is 120 days from the date the Clariva Complete Beans 500 treated 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.
- Do not use at a rate that will result in more than 0.083 lb thiamethoxam (37.8 g) per acre, 0.004 lb fludioxonil (2.0 g) per acre and 0.013 lb mefenoxam (5.7 g) per acre per calendar year as a seed treatment application.
- This seed has been treated with 0.0756 mg ai thiamethoxam, 0.0113 mg mefenoxam, and 0.0038 mg fludioxonil per seed.

- Do not use more than 0.125 lb of thiamethoxam (56.7 g) per calendar year, including all thiamethoxam products and application methods (for example, seed treatment, in-furrow, and foliar).
- Do not apply a neonicotinoid insecticide within 45 days of planting seed treated with Clariva Complete Beans 500.

#### **CROP USE DIRECTIONS**

When applied according to the **CLARIVA COMPLETE BEANS 500 RATE TABLE**, Clariva Complete Beans 500 provides early season protection against injury by aphids, bean leaf beetle, grape colaspis, leaf miners, leaf hoppers, Mexican bean beetle, seed corn maggot, three-cornered alfalfa hopper, thrips, white grubs, and wireworm.

Clariva Complete Beans 500 provides protection against damping-off and seed borne rots due to *Pythium*, *Phytophthora*, *Fusarium*, *Rhizoctonia* species and early season *Phytophthora* root rot . Clariva Complete Beans 500 also suppresses seed-borne *Sclerotinia* and *Phomopsis* species.

Clariva Complete Beans 500 provides protection against soybean cyst nematode.

## **Clariva Complete Beans 500 Rate Table**

Crop	Rate of Clariva Complete Beans 500					
Soybean including soybean, vegetable	fl oz per 100 lb seed <sup>1</sup> or fl oz per 140 000 seeds <sup>1</sup>		g ai per 1	l00 kg	mg ai per	seed
	Clariva Complete Beans 500	Apron XL	Clariva Complete Beans 500	Apron XL	Clariva Complete Beans 500	Apron XL
	5.6 fl oz/100 lb seed or 2.6 fl oz per 140,000 seeds	0.32 fl oz Apron XL/100 lb seed or 0.15 fl oz Apron XL/ 140,000 seeds	Thiamethoxam 50 g  Mefenoxam 7.5 g  Fludioxonil 2.5 g  Sedaxane 2.5 g  Pasteuria nishizawae Pn1 20 g  Total = 82.5 g	Mefenoxam 7.5 g	Total of all active ingredients = 0.125 mg	0.011 mg mefenoxam

<sup>&</sup>lt;sup>1</sup>The mg ai per seed, fl oz 500 per 100 lb seed, and fl oz per 140,000 seeds rates are based on 3,000 seeds per pound.

Additional Apron® XL or similar mefenoxam product, may be necessary for high levels of *Phytophthora* or *Pythium*. Refer to the table above to determine the appropriate use rate of Apron XL, if needed. Read and follow all label direction for Apron XL use.

For additional protection from early season infection of *Fusarium virguliforme* (causal organism of Sudden Death Syndrome or SDS), add 20 g ai/100 kg seed or 0.64 fl oz//100 lb seed of Mertect® 340-F (or 0.29 fl oz /140,000 seeds of Mertect 340-F).

#### STORED GRAIN PROTECTION

When treated according to the directions for post-planting protection against listed pests, Clariva Complete Beans 500 will also provide protection during post treatment storage of the seed listed on this label against damage from the following stored grain insects: Indian Meal Moth (*Plodia interpunctella*), Rice Weevil (*Sitophilus oryza*), Red Flour Beetle (*Tribolium castaneum*), and Lesser Grain Borer (*Rhizopertha dominica*).

If the seed to be treated has existing infestations of stored grain insects, fumigate the seed with a registered product approved for such use prior to treating with Clariva Complete Beans 500 and bagging.

#### STORAGE AND DISPOSAL

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

#### **Pesticide Storage**

Store between a range of 32°F to 100°F.

#### **Pesticide Disposal**

Wastes resulting from the use of this product must be disposed of on site or at an approved waste disposal facility. 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 [less than or equal to 5 gallons]

**Non-refillable container**. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, or by other procedures approved by state and local authorities.

## **Container Handling [greater than 5 gallons]**

Non-refillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container ½ 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 offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, or by other procedures approved by state and local authorities.

## **Container Handling [greater than 5 gallons]**

**Refillable container.** Refill this container with pesticide only. Do not reuse this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the person refilling. To clean container before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container about 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, or by other procedures approved by state and local authorities.

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 cleanup procedures and disposal of wastes.

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

Apron®, Clariva®, Mertect®, the ALLIANCE FRAME, the SYNGENTA Logo, and the PURPOSE ICON are Trademarks of a Syngenta Group Company

Viton® trademark of E. I. du Pont de Nemours & Company, Inc.

©20XX Syngenta

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 CLARIVA COMPLETE BEANS 500 1597 MAS 1216 AMEND JAN2019 - mar - 01/22/2019 000100-01597.20190122.CLARIVA\_COMP\_BNS\_500-AMEND-JAN2019.PDF

CLARIVA COMPLETE BEANS 500 1597 MAS 1216 AMEND JAN2019 –HI – mar – 01/22/2019 000100-01597.20190122.CLARIVA\_COMP\_BNS\_500-AMEND-JAN2019-HI.PDF