



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

OFFICE OF CHEMICAL SAFETY
AND POLLUTION PREVENTION

November 23, 2021

Andrea Burns
Regulatory Manager
Syngenta Seeds, LLC – Field Crops – NAFTA
9 Davis Drive
Research Triangle Park, NC 27709

Subject: Labeling Notifications per Pesticide Registration Notice (PRN) 98-10– Addition of alternate brand name

Product Name: Bt11 × MIR162 × MIR604 × TC1507 × 5307 5% Refuge Seed Blend
Corn
EPA Registration Number: 67979-26
OPP Case Number: 00329537
Application Date: October 12, 2021

Dear Ms. Burns:

The U.S. Environmental Protection Agency (EPA) is in receipt of your applications for notification under Pesticide Registration Notice (PRN) 98-10 for the above referenced products. The Biopesticides and Pollution Prevention Division (BPPD) has conducted a review of these requests for applicability under PRN 98-10 and finds that the actions requested fall within the scope of PRN 98-10.

The labeling submitted with the applications have been stamped “Notification” and will be placed in our records. You must submit one (1) copy of the final printed labeling with the modifications for each product.

Should you wish to add/retain a reference to your company’s website on your labels, then please be aware that the website becomes labeling under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) and is subject to review by the EPA. If the website is false or misleading, the product will be considered to be misbranded and sale or distribution of the product is unlawful under FIFRA section 12(a)(1)(E). 40 CFR § 156.10(a)(5) lists examples of statements the 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 EPA 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.

If you have any questions, please contact Michael Glikes of my team by phone at (202) 566-1461 or via email at glikes.michael@epa.gov.

Sincerely,

A handwritten signature in black ink, appearing to read 'Alan Reynolds', with a long horizontal flourish extending to the right.

Alan Reynolds, Team Leader
Emerging Technologies Branch
Biopesticides and Pollution
Prevention Division (7511P)
Office of Pesticide Programs

Enclosure

The applicant has certified that no changes, other than those reported to the Agency have been made to the labeling. The Agency acknowledges this notification by letter dated:

11/23/2021

Plant-Incorporated Protectant Label

Bt11 × MIR162 × MIR604 × TC1507 × 5307 5% Refuge Seed Blend Corn

Alternate Brand Names:

Agrisure Duracade® 5222 E-Z Refuge®
Agrisure Duracade® 5222A E-Z Refuge®
DuracadeViptera®

OECD Unique Identifier: SYN-BT011-1 × SYN-IR162-4 × SYN-IR604-5 × DAS-01507-1 × SYN-05307-1

This product is effective in limiting corn leaf, stalk, ear, and root feeding damage caused by lepidopteran and corn rootworm pests.

Active Ingredients:

Bacillus thuringiensis Cry1Ab protein and the genetic material necessary for its production (via elements of vector pZO1502) in Bt11 corn (SYN-BT011-1) ≤0.00495%*

Bacillus thuringiensis Vip3Aa20 protein and the genetic material necessary for its production (via elements of vector pNOV1300) in MIR162 corn (SYN-IR162-4) ≤0.00431%*

Bacillus thuringiensis mCry3A protein and the genetic material necessary for its production (via elements of vector pZM26) in MIR604 corn (SYN-IR604-5) ≤0.00060%*

Bacillus thuringiensis Cry1F protein and the genetic material necessary for its production (via elements of vector PHP8999) in TC1507 corn (DAS-01507-1) ≤0.00122%*

Bacillus thuringiensis eCry3.1Ab protein and the genetic material necessary for its production (via elements of vector pSYN12274) in 5307 corn (SYN- 05307-1) ≤0.00261%*

Other Ingredients:

Phosphinothricin acetyltransferase marker protein and the genetic material necessary for its production (via elements of vector pZO1502) in Bt11 corn (SYN-BT011-1) and (via elements of vector PHP8999) in TC1507 corn (DAS-01507-1) ≤0.00020%*

Phosphomannose isomerase marker protein and the genetic material necessary for its production (via elements of vector pNOV1300) in MIR162 corn (SYN-IR162-4), (via elements of vector pZM26) in MIR604 corn (SYN-IR604-5), and (via elements of vector pSYN12274) in 5307 corn (SYN-05307-1) ≤0.00179%*

*Percent (wt/wt) of dried whole plant

KEEP OUT OF REACH OF CHILDREN

CAUTION

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EPA Registration No. 67979-26
EPA Establishment No. 66736-NC-01

Syngenta Seeds, LLC – Field Crops – NAFTA
9 Davis Drive
Research Triangle Park, NC 27709

Directions for Use

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

Seed bags and/or bag tags for corn hybrids that contain plant-incorporated protectants produced in Bt11 × MIR162 × MIR604 × TC1507 × 5307 5% Refuge Seed Blend Corn must display the registration number and active ingredients, and stipulate that growers read the Syngenta Stewardship Guide (or equivalent guidance) prior to planting these hybrids. The refuge size requirement must be displayed on the bag or bag tag in both text and graphic format.

Insects Controlled or Suppressed

European corn borer (*Ostrinia nubilalis*)
Southwestern corn borer (*Diatraea grandiosella*)
Southern cornstalk borer (*Diatraea crambidoides*)
Corn earworm (*Helicoverpa zea*)
Fall armyworm (*Spodoptera frugiperda*)
Beet armyworm (*Spodoptera exigua*)
Black cutworm (*Agrotis ipsilon*)
Western bean cutworm (*Striacosta albicosta*)
Sugarcane borer (*Diatraea saccharalis*)
Lesser cornstalk borer (*Elasmopalpus lignosellus*)
Dingy Cutworm (*Feltia jaculifera*)
Common stalk borer (*Papaipema nebris*)
True armyworm (*Pseudeletia unipuncta*)
Western corn rootworm (*Diabrotica virgifera virgifera*)
Northern corn rootworm (*Diabrotica barberi*)
Mexican corn rootworm (*Diabrotica virgifera zea*)

Insect Resistance Management

Each bag of Bt11 × MIR162 × MIR604 × TC1507 × 5307 5% Refuge Seed Blend Corn contains a blend of 95% Bt11 × MIR162 × MIR604 × TC1507 × 5307 seed and 5% non-Bt refuge seed.

IRM Requirements for Corn-Growing Areas of the U.S.

Refuge seed is blended into each bag of Bt11 × MIR162 × MIR604 × TC1507 × 5307 5% Refuge Seed Blend Corn. There is no requirement for growers to plant a separate structured refuge for managing resistance risk in corn-growing areas of the U.S. Corn-growing areas are those counties and states not defined below as comprising the cotton-growing areas of the U.S. Read the Syngenta Stewardship Guide.

IRM Requirements for Cotton-Growing Areas of the U.S.

In cotton-growing areas growers who plant Bt11 × MIR162 × MIR604 × TC1507 × 5307 5% Refuge Seed Blend Corn must plant a supplemental 20% structured refuge. The following table lists those states and counties identified by the Environmental Protection Agency (EPA) as cotton-growing areas.

State	Counties Identified by EPA as Cotton-Growing Areas			
Alabama	All Counties			
Arkansas	All Counties			
Florida	All Counties			
Georgia	All Counties			
Louisiana	All Counties			
Mississippi	All Counties			
Missouri	Dunklin Stoddard	New Madrid	Pemiscot	Scott
North Carolina	All Counties			
Oklahoma	Beckham Greer Kiowa	Caddo Harmon Tillman	Comanche Jackson Washita	Custer Kay
South Carolina	All Counties			
Tennessee	Carroll Fayette Hardin Lincoln Shelby	Chester Franklin Haywood Madison Tipton	Crockett Gibson Lake Obion	Dyer Hardeman Lauderdale Rutherford
Texas	All counties with the exception of the following:			
	Carson Hutchinson Roberts	Dallam Lipscomb Sherman	Hansford Moore	Hartley Ochiltree
Virginia	Dinwiddie Northampton Sussex	Franklin City Southampton	Greensville Suffolk City	Isle of Wight Surrey

The 20% supplemental refuge must be planted with hybrids that do not contain Bt technologies. The supplemental refuge can be planted as strips within the field, perimeter strips, a block within the field, a block adjacent to the field, or a separate block within ½ mile of the Bt11 × MIR162 × MIR604 × TC1507 × 5307 5% Refuge Seed Blend Corn field. If in-field or perimeter strips are implemented, the strips must be at least four consecutive rows wide.

The supplemental refuge in cotton-growing areas can be protected from feeding damage by application of non-Bt microbial insecticides if the population of one or more lepidopteran pests exceeds economic thresholds. Economic thresholds will be determined using methods recommended by local or regional professionals (e.g., Extension Service agents or crop consultants). While it is highly unlikely that corn rootworm pressure will be seen in the cotton-growing region of the United States, the supplemental refuge can be protected from corn rootworm feeding damage by use of an appropriate seed treatment or conventional insecticide. However, insecticides labeled for adult corn rootworm control must be avoided in the supplemental refuge during the period of corn rootworm adult emergence.

The following text and graphic indicating the supplemental refuge size requirement will appear on Bt11 × MIR162 × MIR604 × TC1507 × 5307 5% Refuge Seed Blend Corn bags or bag tags.

**Important grower information.
Supplemental refuge planting requirement.**



**For more information, please refer
to Syngenta Stewardship Guide.**