

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

WASHINGTON, D.C. 20460

OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION

Heidi Reistad Biotech Regulatory & Gov't Affairs Specialist Dow AgroSciences LLC 9330 Zionsville Road Indianapolis, IN 46268

DEC 0 4 2014

Re:

Product Name - SmartStax Enlist, PowerCore Enlist, SmartStax Enlist Refuge Advanced, and

PowerCore Enlist Refuge Advanced

EPA Reg. No. 68467-7.68467-12, 68467-16, and 68467-21

Your applications dated October 31, 2014 to add alternate brand names

Pesticide Registration (PR) Notice 98-10

Decision No. D-497807, D-497808, D-497809, and D-497804

Dear Ms Reistad:

The Biopesticides and Pollution Prevention Division is in receipt of your applications, as indicated above, for notification under PR Notice 98-10. A preliminary screen of this request has been conducted for its applicability under PR Notice 98-10, and it has been determined that the action requested falls within the scope of this document. Our records have been duly noted, and the labels submitted with this application has been stamped "Notification Accepted" and will be placed accordingly in our records. Submit two (2) copies of final printed labeling before the product, as modified, is sold or distributed [40 C.F.R. § 156.10(a)(6)].

Questions concerning this action should be directed to Dr. Kenneth Haymes by phone (703-347-0398) or email (haymes.kenenth@epa.gov).

Sincerely,

Alan Reynolds, Team Leader Microbial Pesticides Branch Biopesticides and Pollution Prevention Division (7511P)

Plant-Incorporated Protectant Label

MON 89034 × TC1507 PowerCoreTM Enlist™

Insect-Protected, Herbicide-Tolerant Corn (Alternate Brand Name MON 89034 x TC1507) (Alternate Brand Name PowerCoreTM)

(OECD Unique Identifier: MON-89Ø34-3 × DAS-Ø15Ø7-1)

Active Ingredients:

Bacillus thuringiensis Cry1A.105 protein and the genetic material (vector PV-ZMIR245) necessary for its production in corn event MON 89034 (OECD Unique Identifier: MON-89Ø34-3) ≤ 0.0026%*

Bacillus thuringiensis Cry2Ab2 protein and the genetic material (vector PV-ZMIR245) necessary for its production in corn event MON 89034 (OECD Unique Identifier: MON-89Ø34-3) ≤ 0.0053%*

Bacillus thuringiensis Cry1F protein and the genetic material (vector PHP8999) necessary for its production in corn event TC1507 (OECD Unique Identifier: DAS-Ø15Ø7-1) ≤ 0.00122%*

Other Ingredients:

The marker protein, PAT (phosphinothricin acetyl transferase), and the genetic material (vector PHP8999) necessary for its production in corn event TC1507 ≤ 0.00045%*

*Maximum percent (wt/wt) of dry forage

KEEP OUT OF REACH OF CHILDREN

NET CONTENTS

CAUTION

EPA Registration No. 68467-12

Notification Accepted

EPA Establishment No. 62719-IN-1

Date: 12/4/2014

Reviewer:

Hn

Mycogen Seeds c/o Dow AgroSciences LLC 9330 Zionsville Rd. Indianapolis, IN 46268

DIRECTIONS FOR USE

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

This plant-incorporated protectant (PIP) may be combined through conventional breeding with other registered plant-incorporated protectants that are similarly approved for use in combination, through conventional breeding, with other registered plant-incorporated protectants to produce inbred corn lines and hybrid corn varieties with combined pesticidal traits.

MON 89034 × TC1507 PowerCore™ Enlist™ protects corn crops from leaf, stalk, and ear damage caused by lepidopteran corn pests listed on this label. In order to minimize the risk of these pests developing resistance MON 89034 × TC1507 PowerCore™ Enlist™ corn an insect resistance management plan must be implemented which includes planting of a structured refuge. Growers who fail to comply with the IRM requirements risk losing access to Mycogen's corn PIP products that require a separate structured refuge.

These refuge requirements do not apply to seed propagation of inbred and hybrid seed corn up to a total of 20,000 acres per county and up to a combined US total of 250,000 acres per PIP active ingredient per year.

Grower agreements will specify that growers must adhere to the refuge requirements that will be described in the Product Use Guide for MON-89034 × TC1507 PowerCore™ Enlist™ corn or other applicable product use documents.

Sales of corn hybrids that contain Mycogen's-Bt corn plant-incorporated pesticide(s) must be accompanied by a Product Use Guide which includes information on planting, production, and insect resistance management and notes that routine applications of insecticides to control these insects are usually unnecessary when corn containing the Bt proteins is planted.

INSECT RESISTANCE MANAGEMENT

Growers are instructed to read information on insect resistance management.

These refuge requirements do not apply to seed increase/propagation of inbred and hybrid seed corn up to a total of 20,000 acres per county and up to a combined United States (U.S.) total of 250,000 acres per plant-incorporated protectant (PIP) active ingredient per registrant per year.

The following information regarding commercial production must be included in grower guides and bag tags for MON 89034 × TC1507 PowerCore™ Enlist™ corn in cotton and non-cotton growing areas

- 1) Refuge size, Corn-Growing Areas (Corn Belt and other non-corn/cotton-growing regions). The use of MON 89034 × TC1507 PowerCore™ Enlist™ corn requires an accompanying 5% refuge consisting of non-Bt corn and/or non-lepidopteran resistant Bt corn
- 2) Refuge size, Corn/Cotton-Growing Areas*. The use of MON 89034 × TC1507 PowerCore™ Enlist™ corn requires an accompanying 20% refuge consisting of non-Bt corn and/or non-lepidopteran resistant Bt corn.
- 3) Refuge location
- Refuge planting options include: separate fields, blocks within fields (e.g., along the edges or headlands), and strips across the field.
- External refuges must be planted within ½ mile.

POWERCORE™ is a multi-event technology developed by Dow AgroSciences and Monsanto.

POWERCORE™ is a trademark of Monsanto Technology LLC.

Enlist™ is a trademark of The Dow Chemical Company ("Dow") or an affiliated company of Dow

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- When planting the refuge in strips across the field, refuges must be at least 4 rows wide.
- 4) Refuge management
- Insecticide treatments for control of European corn borer, corn earworm, southwestern corn borer and other lepidopteran target pests listed on the label, grower guides, or other educational material may be applied only if economic thresholds are reached for one or more of these target pests. Economic thresholds will be determined using methods recommended by local or regional professionals (e.g., Extension Service agents, crop consultants). Instructions to growers will specify that microbial Bt insecticides must not be applied to non-Bt corn and/or non-lepidopteran resistant Bt corn refuges.

*The cotton-growing region requiring 20% refuge consists of the following states: Alabama, Arkansas, Georgia, Florida, Louisiana, North Carolina, Mississippi, South Carolina, Oklahoma (only the counties of Beckham, Caddo, Comanche, Custer, Greer, Harmon, Jackson, Kay, Kiowa, Tillman, and Washita), Tennessee (only the counties of Carroll, Chester, Crockett, Dyer, Fayette, Franklin, Gibson, Hardeman, Hardin, Haywood, Lake, Lauderdale, Lincoln, Madison, Obion, Rutherford, Shelby, and Tipton), Texas(except the counties of Carson, Dallam, Hansford, Hartley, Hutchinson, Lipscomb, Moore Ochiltree, Roberts, and Sherman), Virginia (only the counties of Dinwiddie, Franklin City, Greensville, Isle of Wight, Northampton, Southampton, Suffolk City, Surrey, and Sussex) and Missouri (only the counties of Dunklin, New Madrid, Pemiscot, Scott, and Stoddard).

Corn Insects Controlled or Suppressed

European corn borer (ECB)
Southwestern corn borer (SWCB)
Southern cornstalk borer (SCSB)
Corn earworm (CEW)
Fall armyworm (FAW)
Stalk borer
Lesser corn stalk borer
Sugarcane borer (SCB)
Western bean cutworm (WBC)
Black cutworm

Ostrinia nubilalis
Diatraea grandiosella
Diatraea crambidoides
Helicoverpa zea
Spodoptera frugiperda
Papaipema nebris
Elasmopalpus lignosellus
Diatraea saccharalis
Richia albicosta
Agrotis ipsilon

PowerCore® is a product of Monsanto's and Dow AgroSciences' research programs, offering unique genetic characteristics for specific grower needs and may be protected by one or more of the following U.S. patents: DAS Patent Rights: 5,510,474; 6,218,188, and 6,943,282

Monsanto Patent Rights: 5,554,798; 5,593,874; 5,641,876; 5,717,084; 5,728,925; 5,859,347, 6,025,545; 6,051,753; 6,083,878; 6,489,542; 6,645,497; 6,713,063; 6,825,400; 6,962,705; 7,064,249; 7,070,982; 7,250,501; 7,304,206; 7,582,434; 7,618,942; 7,700,830; 7,927,598; 8,034,997 and RE39247

POWERCORETM is a multi-event technology developed by Dow AgroSciences and Monsanto. POWERCORETM is a trademark of Monsanto Technology LLC. EnlistTM is a trademark of The Dow Chemical Company ("Dow") or an affiliated company of Dow

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Spodoptera frugiperda
Papaipema nebris
Elasmopalpus lignosellus
Diatraea saccharalis
Richia albicosta
Agrotis ipsilon

EPA Accepted:		/
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