Plant-Incorporated Protectant Label

MON 89034 × TC1507 × MON 87411 × DAS-59122-7 Seed Blend

Insect-Protected, Herbicide-Tolerant Corn
(OECD Unique Identifier: MON-89Ø34-3 × DAS-Ø15Ø7-1 × MON-87411-9 × DAS-59122-7)

Active Ingredients:

dsRNA transcript comprising a DvSnf7 inverted repeat sequence derived from Diabrotica virgifera virgifera, and the genetic material (vector PV-ZMIR10871) necessary for its production in MON 89034 × TC1507 × MON 87411 × DAS-59122-7 (OECD Unique Identifier MON-89Ø34-3 × DAS-Ø15Ø7-1 × MON-87411-9 × DAS-59122-7) ............ ≤ 0.00000044%*

*Bacillus thuringiensis* Cry1A.105 protein and the genetic material (vector PV-ZMIR245) necessary for its production in MON 89034 × TC1507 × MON 87411 × DAS-59122-7 (OECD Unique Identifier MON-89Ø34-3 × DAS-Ø15Ø7-1 × MON-87411-9 × DAS-59122-7) ............ ≤ 0.0088%*

*Bacillus thuringiensis* Cry2Ab2 protein and the genetic material (vector PV-ZMIR245) necessary for its production in MON 89034 × TC1507 × MON 87411 × DAS-59122-7 (OECD Unique Identifier MON-89Ø34-3 × DAS-Ø15Ø7-1 × MON-87411-9 × DAS-59122-7) ............ ≤ 0.0048%*

*Bacillus thuringiensis* Cry1F protein and the genetic material (vector PHP8999) necessary for its production in MON 89034 × TC1507 × MON 87411 × DAS-59122-7 (OECD Unique Identifier MON-89Ø34-3 × DAS-Ø15Ø7-1 × MON-87411-9 × DAS-59122-7) ............ ≤ 0.00096%*

*Bacillus thuringiensis* Cry3Bb1 protein and the genetic material (vector PV-ZMIR10871) necessary for its production in MON 89034 × TC1507 × MON 87411 × DAS-59122-7 (OECD Unique Identifier MON-89Ø34-3 × DAS-Ø15Ø7-1 × MON-87411-9 × DAS-59122-7) ............ ≤ 0.0041%*

*Bacillus thuringiensis* Cry34Ab1 protein and the genetic material (vector PHP17662) necessary for its production in MON 89034 × TC1507 × MON 87411 × DAS-59122-7 (OECD Unique Identifier MON-89Ø34-3 × DAS-Ø15Ø7-1 × MON-87411-9 × DAS-59122-7) ....... ≤ 0.012%*

*Bacillus thuringiensis* Cry35Ab1 protein and the genetic material (vector PHP17662) necessary for its production in MON 89034 × TC1507 × MON 87411 × DAS-59122-7 (OECD Unique Identifier MON-89Ø34-3 × DAS-Ø15Ø7-1 × MON-87411-9 × DAS-59122-7) ..... ≤ 0.0026%*

Other Ingredients:
The marker protein CP4 EPSPS and the genetic material (vector PV-ZMIR10871) necessary for its production in MON 89034 × TC1507 × MON 87411 × DAS-59122-7 (OECD Unique Identifier MON-89034-3 × DAS-Ö15Ö7-1 × MON-87411-9 × DAS-59122-7) ≤ 0.036%*

The marker protein PAT and the genetic material (vector PHP17662) necessary for its production in MON 89034 × TC1507 × MON 87411 × DAS-59122-7 (OECD Unique Identifier MON-89034-3 × DAS-Ö15Ö7-1 × MON-87411-9 × DAS-59122-7) ≤ 0.0001%*

*Percentage (wt/wt) on a dry weight basis for forage tissue

KEEP OUT OF REACH OF CHILDREN

CAUTION

NET CONTENTS _______

EPA Registration No. 524-631

EPA Establishment No. 524-MO-002

Monsanto Company
800 North Lindbergh Blvd.
St. Louis, MO 63167

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in any manner inconsistent with its labeling. This product must be used as specified in the terms and conditions of the registration.

This Plant-Incorporated Protectant (PIP) may be combined or produced 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 × MON 87411 × DAS-59122-7 seed blend protects corn crops from leaf, stalk, and ear damage caused by lepidopteran corn pests listed on this label and root damage caused by corn rootworm larvae listed on this label. In order to minimize the risk of these pests developing resistance to MON 89034 × TC1507 × MON 87411 × DAS-59122-7 seed blend, an insect resistance management plan must be implemented as defined in the registration terms and conditions.
Grower agreements will specify that growers must adhere to the refuge requirements that will be described on the bag or bag/tag for MON 89034 × TC1507 × MON 87411 × DAS-59122-7 seed blend or other applicable product use documents.

Sales of corn hybrids that contain Monsanto’s Bt corn plant-incorporated pesticide(s) must be accompanied by either an IRM/Grower Guide or information on the bag or bag-tag 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 B.t. proteins is planted.

Corn seed bags or bag tags for products containing MON 89034 × TC1507 × MON 87411 × DAS-59122-7 seed blend must include the refuge size requirement in text and graphical format.

**INSECT RESISTANCE MANAGEMENT**

Growers are instructed to read information on insect resistance management in the bag and/or bag-tag.

For the sole purpose of manufacturing and small scale research trials for observation, 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 seed producer must ensure a minimum of 5% non-PIP refuge seed is included with MON 89034 × TC1507 × MON 87411 × DAS-59122-7 in each lot of seed corn. The refuge seed in the seed mixture may not be treated with seed-applied insecticides for corn rootworm (CRW) control unless the MON 89034 × TC1507 × MON 87411 × DAS-59122-7 seed in the seed mixture receives the same treatment.

The IRM/Grower Guide for MON 89034 × TC1507 × MON 87411 × DAS-59122-7 seed blend or comparable information presented on the product bag or bag-tag must contain the following information:

This product is a seed mixture containing MON 89034 × TC1507 × MON 87411 × DAS-59122-7 and a minimum of 5% non-B.t. seed that when planted creates an interspersed refuge within the field. There are no requirements for a separate structured refuge for MON 89034 × TC1507 × MON 87411 × DAS-59122-7 seed blend when planted in the U.S. corn-growing region, including Alaska and Hawaii, because the refuge seed is contained within the bag/container.

The interspersed refuge can only be used by planting seed corn specifically generated by qualified seed producers/conditioners licensed by the registrant. Insecticidal treatments labeled for adult CRW control are discouraged during the time of adult CRW emergence.
The seed mix refuge option for MON 89034 × TC1507 × MON 87411 × DAS-59122-7 seed blend satisfies the refuge requirements in all regions other than in the cotton-growing region where corn earworm is a significant pest as defined below.

Additional refuge requirements in the cotton-growing region where corn earworm is a significant pest

In the cotton-growing region where corn earworm is a significant pest, as defined below, MON 89034 × TC1507 × MON 87411 × DAS-59122-7 seed blend requires the planting of an additional 20% structured refuge (i.e., 20 acres of non-\textit{B.t.} corn for every 80 acres of MON 89034 × TC1507 × MON 87411 × DAS-59122-7 seed blend planted).

The 20% refuge must be planted with corn hybrids that do not contain \textit{B.t.} technologies for the control of corn rootworms or corn borers. The refuge and the MON 89034 × TC1507 × MON 87411 × DAS-59122-7 seed blend should be sown on the same day or with the shortest window possible between planting dates to ensure that corn root development is similar among varieties. The structured refuge may be planted as an in-field or adjacent (e.g., across the road) refuge or planted as a separate block that is within \( \frac{1}{2} \) mile of the MON 89034 × TC1507 × MON 87411 × DAS-59122-7 seed blend field. In-field refuge options include blocks, perimeter strips (i.e., strips around the field), or in-field strips. If perimeter or in-field strips are implemented, the strips must be at least four (4) consecutive rows wide. The refuge can be protected from lepidopteran damage by use of non-\textit{B.t.} insecticides if the population of one or more target lepidopteran pests of MON 89034 × TC1507 × MON 87411 × DAS-59122-7 seed blend in the refuge exceeds economic thresholds. In addition, the refuge can be protected from CRW damage by an appropriate seed treatment or soil insecticide; however, insecticides labeled for adult CRW control must be avoided in the refuge during the period of CRW adult emergence. Economic thresholds will be determined using methods recommended by local or regional professionals (e.g., Extension Service agents, crop consultants).

The cotton-growing region requiring the additional 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

<table>
<thead>
<tr>
<th>Insect</th>
<th>Scientific Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>European corn borer (ECB)</td>
<td><em>Ostrinia nubilalis</em></td>
</tr>
<tr>
<td>Southwestern corn borer (SWCB)</td>
<td><em>Diatraea grandiosella</em></td>
</tr>
<tr>
<td>Southern cornstalk borer (SCSB)</td>
<td><em>Diatraea crambidoides</em></td>
</tr>
<tr>
<td>Corn earworm (CEW)</td>
<td><em>Helicoverpa zea</em></td>
</tr>
<tr>
<td>Fall armyworm (FAW)</td>
<td><em>Spodoptera frugiperda</em></td>
</tr>
<tr>
<td>Stalk borer</td>
<td><em>Papaipema nebris</em></td>
</tr>
<tr>
<td>Lesser corn stalk borer</td>
<td><em>Elasmopalpus lignosellus</em></td>
</tr>
<tr>
<td>Sugarcane borer (SCB)</td>
<td><em>Diatraea saccharalis</em></td>
</tr>
<tr>
<td>Black cutworm</td>
<td><em>Agrotis ipsilon</em></td>
</tr>
<tr>
<td>Western corn rootworm (WCRW)</td>
<td><em>Diabrotica virgifera virgifera</em></td>
</tr>
<tr>
<td>Northern corn rootworm (NCRW)</td>
<td><em>Diabrotica barberi</em></td>
</tr>
<tr>
<td>Mexican corn rootworm (MCRW)</td>
<td><em>Diabrotica virgifera zeae</em></td>
</tr>
</tbody>
</table>

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MON 89034 × TC1507 × MON 87411 × DAS-59122-7 seed blend is a product of Monsanto’s research program offering unique genetic characteristics for specific grower needs and may be protected by one or more of the following U.S. patents that can be found at [http://www.monsantotechnology.com](http://www.monsantotechnology.com)