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Re-evaluation Decision

RVD2022-12

# Trinexapac-ethyl and Its Associated End-use Products

*Final Decision*

*(publié aussi en français)*

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## Re-evaluation decision for trinexapac-ethyl and associated end use products

Under the authority of the *Pest Control Products Act*, all registered pesticides must be re-evaluated by Health Canada's Pest Management Regulatory Agency (PMRA) to ensure that they continue to meet current health and environmental standards and continue to have value. The re-evaluation considers data and information from pesticide manufacturers, published scientific reports and other regulatory agencies, as well as comments received during public consultations. Health Canada applies internationally accepted risk assessment methods as well as current risk management approaches and policies.

Trinexapac-ethyl is a plant growth regulator that inhibits the biosynthesis of gibberellin, a phytohormone that promotes growth of various plant organs. Trinexapac-ethyl is used on turf grown on commercial sod farms and golf courses to reduce the frequency of mowing and the amount of grass clippings. It also manages the growth of perennial ryegrass grown for seeds to reduce lodging and thus, improve seed yield and quality. Currently registered products containing trinexapac-ethyl can be found in the [Pesticide Product Information Database](#) and in Appendix I.

This document presents the final re-evaluation decision<sup>1</sup> for the re-evaluation of trinexapac-ethyl, including the required risk mitigation measures to protect human health and the environment, as well as label amendments required to bring labels to current standards. All pest control products containing trinexapac-ethyl that are registered in Canada are subject to this re-evaluation decision.

Prior to finalizing this decision, Health Canada published the Proposed Re-evaluation Decision, PRVD2022-01, *Trinexapac-ethyl and Its Associated End-use Products*,<sup>2</sup> for a 90-day consultation period, which ended on 25 April 2022. PRVD2022-01 proposed that products containing trinexapac-ethyl are acceptable for continued registration in Canada, provided that the additional proposed risk mitigation measures are in place. The proposed risk mitigation measures included updating restricted-entry interval (REI), adding the standard drift mitigation label statement, updating the personal protective equipment (PPE) label statements to reflect current standards, environmental precautionary label statements, and spray buffer zones.

No comments were received during the consultation period. Therefore, this decision is consistent with the proposed re-evaluation decision stated in PRVD2022-01, which lists all information used as the basis for the re-evaluation decision.

A reference list of data used as the basis for the re-evaluation decision is included in PRVD2022-01.

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<sup>1</sup> "Decision statement" as required by subsection 28(5) of the *Pest Control Products Act*.

<sup>2</sup> "Consultation statement" as required by subsection 28(2) of the *Pest Control Products Act*.

## **Re-evaluation decision for trinexapac-ethyl**

Health Canada has completed the re-evaluation of trinexapac-ethyl. Under the authority of the *Pest Control Products Act*, Health Canada has determined that continued registration of products containing trinexapac-ethyl is acceptable with label amendments. Following a scientific review of the available information, Health Canada has determined that the health and environmental risks and the value of trinexapac-ethyl continue to be acceptable provided the required mitigation measures and label updates are implemented. Label amendments, as summarized below and listed in Appendix II, are required.

### **Risk mitigation measures**

Registered pesticide product labels include specific directions for use. Directions include risk mitigation measures to protect human health and the environment and must be followed by law. The required amendments, including any revised/updated label statements and/or mitigation measures, as a result of the re-evaluation of trinexapac-ethyl, are summarized below. Refer to Appendix II for details.

#### **Human health**

The following risk-reduction measures are proposed:

To protect mixer/loader/applicators:

- For use on perennial ryegrass grown for seed, require closed mixing/loading systems and closed cab groundboom application when handling more than 70 kg a.i./day.
- For all uses, update PPE label statements to reflect current standards.

To protect workers entering treated sites:

- For use on perennial ryegrass grown for seed, require an REI of 10 days for all postapplication activities.
- For use on sod farm, require an REI of 12 hours for all postapplication activities.
- For use on golf courses, restrict entry until residues have dried.

To protect/prevent bystander exposure:

- Prohibit the use of trinexapac-ethyl golf course treatment products from being used on turf in other residential areas (which includes lawns, gardens, parks, playing fields, cemeteries and schools).
- Add standard drift statement.

## Environment

To protect terrestrial non-target plants and freshwater aquatic habitats, the following risk-reduction measures are required:

- A buffer zone of 1 meter is proposed for the protection of terrestrial non-target plants and freshwater aquatic habitats.
- Update Environmental precautions (spray drift) and disposal label statements to protect terrestrial non-target plants and freshwater aquatic habitats to reflect current standards.

## Next steps

To comply with this decision, the required amendments (mitigation measures and label updates) must be implemented on all product labels no later than 24 months after the publication date of this decision document. Accordingly, both registrants and retailers will have up to 24 months from the date of this decision document to transition to selling the product with the newly amended labels. Similarly, users will also have the same 24-month period from the date of this decision document to transition to using the newly amended labels, which will be available on the Public Registry.

Refer to Appendix I for details on specific products impacted by this decision.

## Other information

Any person may file a notice of objection<sup>3</sup> regarding this decision on trinexapac-ethyl and its associated end-use products within 60 days from the date of publication of this Re-evaluation Decision. For more information regarding the basis for objecting (which must be based on scientific grounds), please refer to the Pesticides section of the Canada.ca website (Request a Reconsideration of Decision) or contact Health Canada's [Pest Management Information Service](#).

The relevant confidential test data on which the decision is based (as referenced in PRVD2022-01) are available for public inspection, upon application, in Health Canada's Reading Room. For more information, please contact Health Canada's [Pest Management Information Service](#).

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<sup>3</sup> As per subsection 35(1) of the *Pest Control Products Act*.

## Appendix I Registered products containing trinexapac-ethyl in Canada

**Table 1 Products containing trinexapac-ethyl requiring (label) amendments<sup>1</sup>**

Registration number	Marketing class	Registrant	Product name	Formulation type	Active ingredient
26988	Technical Grade Active Ingredient	Syngenta Canada Inc.	Trinexapac-Ethyl Technical	Liquid	97%
26989	Commercial		Primo Maxx Plant Growth Regulator	Emulsifiable Concentrate	11.3%
31214	Commercial		Parlay	Emulsifiable Concentrate	11.3%
33930	Commercial		Moddus	Micro-Emulsifiable Concentrate	11.3%
30635	Technical Grade Active Ingredient	Adama Agricultural Solutions Canada Ltd.	Adama Trinexapac Technical	Suspension	97.2%
30683	Commercial		Quali-Pro T-Nex 11.3 Me	Micro-Emulsifiable Concentrate	11.3%
33385	Commercial		Quali-Pro T-Nex 12 Me	Micro-Emulsifiable Concentrate	120 g/L
33358	Technical Grade Active Ingredient	Sharda Cropchem Limited	Sharda Trinexapac-Ethyl Technical	Liquid	99%
33883	Commercial		Next 11.2 ME	Micro-Emulsifiable Concentrate	11.3%
34056	Technical Grade Active Ingredient	Maxunitech North America, Inc.	Maxunitech Trinexapac-ethyl Technical	Liquid	98.6%
34065	Commercial		Maxunitech Trinexapac-ethyl 11.3% ME	Micro-Emulsifiable Concentrate	11.3%

<sup>1</sup> as of 30 May 2022, excluding discontinued products or products with a submission for discontinuation

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## Appendix II Label amendments for products containing trinexapac-ethyl

Information on approved labels of currently registered products should not be removed unless it contradicts the label statements provided below.

### Label amendments for technical class products containing trinexapac-ethyl

#### 1. General label improvements

##### Add to ENVIRONMENTAL PRECAUTIONS

Toxic to aquatic organisms.

### Label amendments for commercial class products containing trinexapac-ethyl

#### 1. General label improvements

“In order to promote best practices, and to minimize human exposure from spray drift or from spray residues resulting from drift due to the agricultural use of trinexapac-ethyl, the following label statement is proposed for all commercial-class labels:”

##### Add to PRECAUTIONS:

“Apply only when the potential for drift beyond the area to be treated is minimal. Take into consideration wind speed, wind direction, temperature inversions, application equipment, and sprayer settings.”

#### 2. Label amendments for commercial end-use products for turfgrass on golf courses and sod farms

##### Under PRECAUTIONS:

##### Replace:

“Wear long sleeved shirt and long pants with coveralls and chemical resistant gloves for all mix/load and application activities and during equipment cleanup and repair activities. In addition, wear goggles during mix/load activities.”

##### With:

“Wear coveralls over a long-sleeved shirt, long pants, chemical-resistant gloves, socks and shoes during mixing, loading, application, clean-up and repair. Gloves are not required during application within a closed cab. In addition, wear protective eyewear (goggles or face shield) during mixing and loading.”

**Replace:**

“**DO NOT** re-enter treated areas until residues have dried. For both sod farms and golf courses, a restricted-entry interval of 3 days postapplication is required for workers who re-enter treated areas for hand or mechanical sod harvesting, sod transplanting, and hand weeding activities.”

**With:**

“For golf courses, **DO NOT** enter or allow entry until residues have dried.”

“For sods farms, **DO NOT** enter or allow worker entry during the restricted-entry interval (REI) of 12 hours.”

“[Product Name] can be applied to golf course greens, tees, fairways, roughs, and sod farms only. **DO NOT** apply to turf in other residential areas including lawns, gardens, parks, playing fields, cemeteries and schools.”

**3. Label amendments for commercial end use products for perennial ryegrass grown for seed****Add to PRECAUTIONS:**

If handling more than 70 kg a.i. per day, use a closed mix/load system and a closed cab tractor during application.

**Under PRECAUTIONS:****Replace:**

“Wear long sleeved shirt and long pants with coveralls and chemical resistant gloves for all mix/load and application activities and during equipment cleanup and repair activities. In addition, wear goggles during mix/load activities.”

**With:**

“Wear coveralls over a long-sleeved shirt, long pants, chemical-resistant gloves, socks and shoes during mixing, loading, application, clean-up and repair. Gloves are not required during application within a closed cab. In addition, wear protective eyewear (goggles or face shield) during mixing and loading.”

**Replace:**

“**DO NOT** re-enter treated areas for 12 hours. A restricted-entry interval of 3 days postapplication is required for workers who re-enter treated areas for hand or mechanical harvesting, transplanting, and hand weeding activities.”

**With:**

“**DO NOT** enter or allow worker entry during the restricted-entry interval (REI) of 10 days for all postapplication activities.”



**4. Label amendments for commercial end-use products with use on turf and perennial ryegrass grown for seed (not for cereal use, in other words, MODDUS):**

**Add to ENVIRONMENTAL PRECAUTIONS:**

“Toxic to non-target terrestrial plants and aquatic organisms. Observe spray buffer zones specified under DIRECTIONS FOR USE.”

**Add to DIRECTIONS FOR USE:**

“**Field sprayer application: DO NOT** apply during periods of dead calm. Avoid application of this product when winds are gusty. **DO NOT** apply with spray droplets smaller than the American Society of Agricultural Engineers (ASAE S572.1) medium classification. Boom height must be 60 cm or less above the crop or ground.

**DO NOT** apply by air.”

**Spray buffer zones**

A spray buffer zone is NOT required for uses with hand-held application equipment permitted on this label.

The spray buffer zones specified in the table below are required between the point of direct application and the closest downwind edge of sensitive terrestrial habitats (such as grasslands, forested areas, shelter belts, woodlots, hedgerows, riparian areas and shrublands) and sensitive freshwater habitats (such as lakes, rivers, sloughs, ponds, prairie potholes, creeks, marshes, streams, reservoirs and wetlands).

Method of application	Crop	Spray buffer zones (metres) required for the protection of:		
		Freshwater habitat of depths		Terrestrial habitat
		Less than 1 m	Greater than 1 m	
Field sprayer	Turf, perennial ryegrass grown for seed	1	1	1

For tank mixes, consult the labels of the tank-mix partners and observe the largest (most restrictive) spray buffer zone of the products involved in the tank mixture and apply using the coarsest spray (ASAE) category indicated on the labels for those tank mix partners.