

## OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION

WASHINGTON, D.C. 20460

October 31, 2024

## **SENT BY EMAIL**

Kristen Cianni kristen.cianni@atticusllc.com ATTICUS, LLC

Subject: Labeling Notification per Pesticide Registration Notice (PRN) 98-10 - Addition of the

"RESTRICTED USE PESTICIDE" text under the DFU header.

Product Name: A152.02 Admin Number: 91234-95 EPA Receipt Date: 11/07/2022 Action Case Number: 00606178

## Dear Kristen Cianni:

The U.S. Environmental Protection Agency is in receipt of your application for notification under Pesticide Registration Notice 98-10 for the above referenced product. The EPA has conducted a review of this request for its applicability under PRN 98-10 and finds that the action requested falls within the scope of PRN 98-10.

The labeling submitted with this application has been stamped "Notification" and will be placed in our records.

Should you wish to add/retain a reference to your 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 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 statements or claims substantially differing from statements or claims made in connection with obtaining a FIFRA section 3 registration, the website will be referred to the EPA's Office of Enforcement and Compliance Assurance.

If you have questions, please contact Ralph Narain by telephone at 202-566-2853 or via email at narain.ralph@epa.gov.

Sincerely,

Ralph Marain for Melissa Bridges, Product Manager 07

IVB3, RD

Office of Pesticide Programs

[Note to reviewer: [Text] in brackets denotes optional or explanatory language [Note to reviewer: {Text} in braces denotes where in the final label text will appear

**{BOOKLET FRONT PANEL LANGUAGE}** 

## RESTRICTED USE PESTICIDE

## TOXIC TO FISH, MAMMALS, AND AQUATIC ORGANISMS

FOR RETAIL SALE TO AND USE ONLY BY CERTIFIED APPLICATORS OR PERSONS UNDER THEIR DIRECT SUPERVISION, AND ONLY FOR THOSE USES COVERED BY THE CERTIFIED APPLICATOR'S CERTIFICATION.

EMAMECTIN BENZOATE GROUP 6 INSECTICIDE

## A152.02 [TM]

[For control or suppression of certain lepidopterous larvae (worms/caterpillars), leafminers, and spider mites on Fruiting Vegetables, Leafy Vegetables including Brassica (cole crops), Pome Fruit, Tree Nuts including Pistachios, and Turnip Greens (tops, leaves)]

ACTIVE INGREDIENT:	(% by weight)
Emamectin benzoate (CAS No. 155569-91-8)	5.0%
OTHER INGREDIENTS:	<u>95.0%</u>
TOTAL	100.0%
Contains 5% of emamectin benzoate	

Contains emamectin benzoate, the active ingredient used in Proclaim.

# KEEP OUT OF REACH OF CHILDREN CAUTION

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand the label, find someone to explain it to you in detail.)

See inside label booklet for First Aid, Precautionary Statements and Directions for Use.

EPA Reg. No.: 91234-95 NOTIFICATION

91234-95

EPA Est. No.: The applicant has certified that no

**Net Weight:** 

changes, other than those reported to the Agency have been made to the labeling. The Agency acknowledges

Batch No.: this notification by letter dated:

10/31/2024

Manufactured for: Atticus, LLC

5000 CentreGreen Way, Suite 100

Cary, NC 27513

[A152.02] is not distributed by Syngenta Crop Protection, LLC., seller of [Proclaim].

## **{LANGUAGE INSIDE BOOKLET}**

	FIRST AID
If swallowed:	Call poison control center or doctor immediately for treatment advice.
	Have person sip glass of water if able to swallow.
	Do not induce vomiting unless told to do so by the poison control center or doctor.
	Do not give anything by mouth to an unconscious person.
If in eyes:	Hold eye open and rinse slowly and gently with water for 15-20 minutes.
	• Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.
	Call a poison control center or doctor for treatment advice.
If on skin or	Take off contaminated clothing.
clothing:	Rinse skin immediately with plenty of water for 15-20 minutes.
	Call a poison control center or doctor for treatment advice.
If inhaled:	Move person to fresh air.
	If person is not breathing, call 911 or an ambulance, then give artificial respiration,      The person is not breathing, call 911 or an ambulance, then give artificial respiration,      The person is not breathing, call 911 or an ambulance, then give artificial respiration,      The person is not breathing, call 911 or an ambulance, then give artificial respiration,      The person is not breathing, call 911 or an ambulance, then give artificial respiration,      The person is not breathing, call 911 or an ambulance, then give artificial respiration,      The person is not breathing, call 911 or an ambulance, then give artificial respiration,      The person is not breathing, call 911 or an ambulance, then give artificial respiration,      The person is not breathing, call 911 or an ambulance, then give artificial respiration,      The person is not breathing artificial respiration.      The person is not breathing artificial respiration are person in the person is not breathing artificial respiration.      The person is not breathing artificial respiration are person in the person in
	preferably by mouth-to-mouth, if possible.
	Call a poison control center or doctor for further treatment advice.

#### **NOTE TO PHYSICIAN**

Early signs of intoxication include dilation of pupils, muscular incoordination, and muscular tremors. Vomiting within one-half hour of exposure can minimize toxicity following accidental ingestion of the product; rapidly after exposure (< 15 minutes) administer repeatedly medical charcoal in a large quantity of water or ipecac.

If toxicity from exposure has progressed to cause severe vomiting, the extent of resultant fluid and electrolyte imbalance should be gauged. Appropriate supportive parenteral fluid replacement therapy should be given, along with other required supportive measures (such as maintenance of blood pressure levels and proper respiratory functionality) as indicated by clinical signs, symptoms, and measurements.

In severe cases, observations should continue for at least several days until clinical condition is stable and normal. Since emamectin benzoate is believed to enhance GABA activity in animals, it is probably wise to avoid drugs that enhance GABA activity (barbiturates, benzodiazepines, valproic acid) in patients with potentially toxic emamectin benzoate exposure.

## **HOT LINE NUMBER**

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact SafetyCall at **1-844-685-9173** for emergency medical treatment information.

For Chemical Emergency
Spill, Leak, Fire, Exposure, or Accident
Call CHEMTREC Day or Night

Within USA and Canada: 1-800-424-9300 or +1 703-527-3887 (collect calls accepted)

## PRECAUTIONARY STATEMENTS

## Hazards to Humans and Domestic Animals CAUTION

Harmful if swallowed, inhaled, or absorbed through skin. Causes moderate eye irritation. Avoid contact with the skin, eyes, or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, or using tobacco. Remove and wash contaminated clothing before reuse. Avoid breathing dust or spray mist. Prolonged or frequently repeated exposure may cause allergic skin reactions in some individuals.

## Personal Protective Equipment (PPE)

## Ground Application (except airblast sprayers):

#### Applicators, mixers, loaders, and other handlers must wear:

- Long-sleeved shirt and long pants
- Chemical-resistant gloves made of polyvinyl chloride ≥ 14 mils, nitrile rubber ≥ 14 mils, or butyl rubber ≥ 14 mils
- Shoes plus socks

#### Airblast Application:

## Mixers, loaders, and other handlers must wear:

- Long-sleeved shirt and long pants
- Chemical-resistant gloves made of polyvinyl chloride ≥ 14 mils, nitrile rubber ≥ 14 mils, or butyl rubber ≥ 14 mils
- Shoes plus socks

## Applicators using OPEN CAB airblast sprayers must wear:

- Coveralls over long-sleeved shirt and long pants
- Chemical-resistant gloves made of polyvinyl chloride ≥ 14 mils, nitrile rubber ≥ 14 mils, or butyl rubber ≥ 14 mils
- Shoes plus socks

### Applicators using ENCLOSED CAB airblast sprayers

#### While inside the cab must wear:

- Long-sleeved shirt and long pants
- Shoes plus socks

#### When entering or leaving the cab must also wear:

 ○ Chemical-resistant gloves made of polyvinyl chloride ≥ 14 mils, nitrile rubber ≥ 14 mils, or butyl rubber ≥ 14 mils

**NOTE:** Once inside the cab, applicator must remove gloves and store them in a chemical-resistant container such as a plastic bag.

## Aerial application:

## Mixers, loaders, and other handlers must wear:

- Coveralls over long-sleeved shirt and long pants
- Shoes plus socks
- Chemical-resistant gloves made of polyvinyl chloride ≥ 14 mils, nitrile rubber ≥ 14 mils, or butyl rubber ≥ 14 mils
- Wear a minimum of a NIOSH-approved particulate filtering facepiece respirator with any N, R or P filter; OR a NIOSH-approved elastomeric particulate respirator with any N, R or P filter; OR a NIOSHapproved powered air purifying respirator with HE filters.

## **Applicators (Enclosed Cockpit)**

## While inside the cockpit must wear:

- Long-sleeved shirt and long pants
- Shoes plus socks

## When entering or leaving the cockpit must also wear:

 ○ Chemical-resistant gloves made of polyvinyl chloride ≥ 14 mils, nitrile rubber ≥ 14 mils, or butyl rubber ≥ 14 mils

**NOTE:** Once inside the cockpit, applicator must remove gloves and store them in a chemical-resistant container such as a plastic bag.

#### Flaggers must wear:

- o Long-sleeved shirt and long pants
- Shoes plus socks
- Chemical-resistant gloves made of polyvinyl chloride ≥ 14 mils, nitrile rubber ≥ 14 mils, or butyl rubber ≥ 14 mils

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

### **Engineering Controls**

When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170-240(d)(4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

## **User Safety Recommendations**

#### **Users should:**

- Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.
- Remove clothes immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.

#### **Environmental Hazards**

This pesticide is toxic to fish, birds, mammals, and aquatic invertebrates. Drift and runoff may be hazardous to aquatic organisms in neighboring areas. Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when cleaning equipment or disposing of equipment wash water or rinsate.

This product is highly toxic to bees exposed to direct treatment or residues on blooming trees. Do not apply this product to blooming trees if bees are foraging the treatment area.

## **Physical or Chemical Hazards**

Do not use or store near heat or open flame.

## **DIRECTIONS FOR USE**

#### **RESTRICTED USE PESTICIDE**

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

**A152.02** must be used only in accordance with directions on this label.

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

#### AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR Part 170. This standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE) and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI). The REI and any prohibitions are listed in the directions for use associated with each crop on this label.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water is:

- Coveralls
- Chemical-resistant gloves made of polyvinyl chloride ≥ 14 mils, nitrile rubber ≥ 14 mils, or butyl rubber ≥ 14 mils
- Shoes plus socks
- Protective eyewear

FAILURE TO FOLLOW DIRECTIONS AND PRECAUTIONS ON THIS LABEL MAY RESULT IN POOR INSECT CONTROL, AND/OR ILLEGAL RESIDUES.

#### **GENERAL INFORMATION**

**A152.02** is a selective insecticide for use on: *Brassica* Leafy Vegetables (cole crops), Fruiting Vegetables, Leafy Vegetables, Pome Fruit, Tree Nuts including Pistachios, and Turnip Greens (tops, leaves).

**A152.02** controls the larval stages (worms/caterpillars) of certain lepidopteran species. **A152.02** has contact activity but is most efficacious when ingested by the pest. Shortly after exposure to **A152.02**, affected larvae are paralyzed, stop feeding, and subsequently die after 2-4 days.

A152.02 has been tested for phytotoxicity and has a wide margin of safety on the crops listed on this label.

- Apply **A152.02** to plant foliage when larvae first appear, but before populations reach damaging levels. Target **A152.02** applications at small (1/4 inch in length) larvae.
- Thorough spray coverage is essential for optimum performance. Apply A152.02 in sufficient water to ensure
  good coverage of all plant surfaces. The use of greater water volumes will generally result in better
  coverage, especially under adverse conditions (e.g., hot, dry) or when the plant canopy is dense. See the
  CROP USE DIRECTIONS section of this label for specific spray volume recommendations for different crops.
- The use of a penetrating type spray adjuvant, at the manufacturer's suggested rate, is recommended for all
  applications of A152.02. The use of an adjuvant typically improves coverage and penetration and results in
  optimum insect control, especially in crops with hard-to-wet leaf surfaces. However, do not use
  sticker/binder type adjuvants because they may reduce translaminar movement of the active ingredient
  into the plant.

#### **Resistance Management**

For resistance management, **A152.02** contains a Group 6 insecticide. Any insect population may contain individuals naturally resistant to **A152.02** and other Group 6 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.

To delay insecticide resistance, take the following steps:

- Rotate the use of **A152.02** or other Group 6 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 cross-resistance 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):
  - o 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.
  - o 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 resistancemanagement and/or IPM recommendations for the specific site and pest problems in your area.
- For further information or to report suspected resistance contact your Atticus, LLC representative at 984-465-4800.

## **Rotational Restrictions**

There are no rotational (plant back) restrictions with **A152.02**. Treated areas may be replanted with any crop as soon as practical following the last application.

See specific "Use Restrictions" in each crop section.

#### **APPLICATION PROCEDURES**

## **Application Prohibitions:**

- Chemigation: Do not apply this product through any type of irrigation system.
- State Restriction: Do not apply A152.02 with aircraft in New York State.

## **Spray Equipment**

Spray equipment configuration should be arranged to provide accurate, uniform, and thorough coverage of the target crop and minimize potential for spray drift. Use spray nozzles that provide medium to fi ne-sized droplets. To ensure accuracy, calibrate sprayer before each use. For spray equipment and calibration information, consult sprayer manufacturers and/or state recommendations. All ground and aerial application equipment must be properly maintained and calibrated using appropriate carriers.

## **Spray Volume**

• Applications using sufficient water volume for thorough and uniform coverage of the target crop provide

the most effective pest control.

• Avoid application when uniform coverage is not possible or if excessive spray drift or inversion is possible.

Minimum Gal. of Water	Comments
10 gal./A	If the crop canopy is dense or worm infestation is high, increase the amount of water.
40 gal./A See Comments	Concentrate sprays: Minimum gal./A for concentrate spray application (i.e., an application method providing uniform spray coverage of all plant parts but not to the point of runoff.)  Dilute sprays: The rate of A152.02 per 100 gal. is based on a volume of 400 gal./A of dilute spray. Dilute spray volume per acre will vary by orchard depending on tree size, tree spacing
5 gal./A	and canopy density. Dilute sprays are applied just to the point of runoff.  Increase spray volume to 10-20 gal./A under adverse conditions (i.e., high temperature, low relative humidity, or dense canopy).
	10 gal./A 40 gal./A See <b>Comments</b>

## **SPRAY DRIFT**

**NOTE:** When states have more stringent regulations, they must be observed.

#### **SPRAY DRIFT**

#### Airblast applications:

- Sprays must be directed into the canopy.
- Do not apply when wind speeds exceed 15 miles per hour at the application site.
- User must turn off outward pointing nozzles at row ends and when spraying outer row.
- Do not apply during temperature inversions

#### **SPRAY DRIFT ADVISORIES**

THE APPLICATOR IS RESPONSIBLE FOR AVOIDING OFF-SITE SPRAY DRIFT. BE AWARE OF NEARBY NON-TARGET SITES AND ENVIRONMENTAL CONDITIONS.

## **IMPORTANCE OF DROPLET SIZE**

An effective way to reduce spray drift is to apply large droplets. Use the largest droplets that provide target pest control. While applying larger droplets will reduce spray drift, the potential for drift will be greater if applications are made improperly or under unfavorable environmental conditions.

### **Controlling Droplet Size - Ground Boom**

- Volume Increasing the spray volume so that larger droplets are produced will reduce spray drift. Use the highest practical spray volume for the application. If a greater spray volume is needed, consider using a nozzle with a higher flow rate.
- Pressure Use the lowest spray pressure recommended for the nozzle to produce the target spray volume and droplet size.
- Spray Nozzle Use a spray nozzle that is designed for the intended application. Consider using nozzles designed to reduce drift.

## **Controlling Droplet Size – Aircraft**

• Adjust Nozzles - Follow nozzle manufacturers recommendations for setting up nozzles. Generally, to reduce fine droplets, nozzles should be oriented parallel with the airflow in flight.

#### **BOOM HEIGHT - Ground Boom**

For ground equipment, the boom should remain level with the crop and have minimal bounce.

#### **RELEASE HEIGHT - Aircraft**

Higher release heights increase the potential for spray drift.

#### **SHIELDED SPRAYERS**

Shielding the boom or individual nozzles can reduce spray drift. Consider using shielded sprayers. Verify that the shields are not interfering with the uniform deposition of the spray on the target area.

#### TEMPERATURE AND HUMIDITY

When making applications in hot and dry conditions, use larger droplets to reduce effects of evaporation.

#### **TEMPERATURE INVERSIONS**

Drift potential is high during a temperature inversion. Temperature inversions are characterized by increasing temperature with altitude and are common on nights with limited cloud cover and light to no wind. The presence of an inversion can be indicated by ground fog or by the movement of smoke from a ground source or an aircraft smoke generator. Smoke that layers and moves laterally in a concentrated cloud (under low wind conditions) indicates an inversion, while smoke that moves upward and rapidly dissipates indicates good vertical air mixing. Avoid applications during temperature inversions.

#### WIND

Drift potential generally increases with wind speed. AVOID APPLICATIONS DURING GUSTY WIND CONDITIONS. Applicators need to be familiar with local wind patterns and terrain that could affect spray drift.

## **MIXING PROCEDURES**

- 1. Thoroughly clean spray equipment before using this product.
- 2. Prepare no more spray mixture than is needed for the immediate application.
- 3. Keep product container tightly closed when not in use.
- 4. Agitate the spray solution before and during application.
- 5. Do not let the spray mixture stand overnight in the spray tank.
- 6. Flush the spray equipment thoroughly following each use and apply rinsate to a previously treated area.

#### Mixing Instructions: A152.02 Alone

- 1. Add 1/3 of the required amount of water to the spray or mixing tank.
- 2. With the agitator running, add **A152.02** into the spray tank.
- 3. Continue agitation while adding the remainder of the water.
- 4. Begin application of the solution after A152.02 has completely dispersed into the mix water.
- 5. Maintain agitation until all of the mixture has been applied.

Note: Do not use liquid fertilizer as a carrier for A152.02.

#### A152.02 - Tank Mixtures

## Compatibility

**A152.02** is compatible with most insecticide, fungicide, and foliar nutrient products. However, before tank mixing **A152.02** use a jar test, as described below, to test the physical compatibility of **A152.02** with tank mix partners.

- 1. Using a quart jar, add the proportionate amounts of the products to 1 qt. of water. Add wettable powders and water-dispersible granular products first, then liquid flowables, and emulsifiable concentrates last.
- 2. After thoroughly mixing, let the mixture stand for at least 5 minutes. If the combination remains mixed or can be remixed readily, it is physically compatible.

3. If compatibility is acceptable, follow the instructions in Mixing Instructions: A152.02 Tank Mixtures.

#### NOTE:

- The safety of all potential tank mixes on all crops may not have been tested. Before applying any tank mixture not specifically recommended on this label, the safety to the target crop should be confirmed.
- If using **A152.02** in a tank mixture:
  - Do not mix with any product that prohibits such mixing.
  - Observe all directions for use, crop/sites, use rates, dilution ratios, precautions, and limitations that appear on the tank mix product label.
  - Do not exceed any labeled use rate.
  - o Follow the most restrictive label precautions and limitations.
- Tank mixtures or other applications of products referenced on this label are permitted only in those states in which the referenced products are labeled.

**IMPORTANT:** Do not tank mix **A152.02** with Bravo® Weather Stik®, Dithane® Rainshield™, or any other pesticide containing a sticker component in its formulation because this may drastically reduce **A152.02**'s control of pests.

## Mixing Instructions: A152.02 Tank Mixtures

- 1. Add 1/3 of the required amount of water to the mix tank.
- 2. Start the agitator running before adding any tank mix partners.
- 3. When using **A152.02** in tank mixtures:
  - a. All products in water-soluble packaging should be added to the tank before any other tank mix partner, including **A152.02**.
  - b. Allow the water-soluble packaging to completely dissolve and the product(s) to completely disperse before adding any other tank mix partner to the tank.
  - c. Then add other tank mix partners in this order: wettable powders, wettable granules (dry flowables), liquid flowables, liquids and emulsifiable concentrates. Always allow each tank mix partner to become fully dispersed before adding the next product.
- 4. Provide sufficient agitation while adding the remainder of the water.
- 5. Maintain agitation until all the mixture has been applied.

### **CROP USE DIRECTIONS**

#### **VEGETABLES**

#### **Use Restrictions for All Vegetables**

- **Location Prohibition:** Do not use **A152.02** in greenhouses, nurseries, in plant propagation houses, or on any plants grown for use as transplants.
- Minimum Application Rates: Do not apply A152.02 at rates lower than the rates specified on this label.
- **Number of Applications:** Do not apply more than 2 sequential applications of **A152.02**. Rotate to another insect control product with a different mode of action.
- Adjuvant Recommendation: Thorough spray coverage of plant foliage is essential for optimum control. To provide optimum coverage and insect control, the use of a penetrating type spray adjuvant at the manufacturer's suggested rate is recommended. Do not use a sticker/binder type adjuvant.
- Application following failure of another insecticide: Do not apply A152.02 following the failure of another product if the larvae are large (>1/4 inch long).
- **Grazing:** Do not allow livestock to graze in treated areas.
- If rotating crops in a calendar year and one of the crops is Brassica, the total annual maximum application rate of all emamectin benzoate foliar applications in a calendar year is 0.06 lb a.i./A.

## **Brassica Head and Stem Vegetables Crop Subgroup**

Crops in this group are: Broccoli, Brussels sprouts, Cabbage, Caulifl ower, Cavalo broccolo, Chinese broccoli (gai lon), Chinese (napa) cabbage, Chinese mustard cabbage (gai choy), and kohlrabi

## **Brassica Leafy Vegetables Crop Subgroup**

Crops in this group are: Broccoli raab (rapini), Chinese (bok choy) cabbage, Collards, Kale, Mizuna, Mustard greens, Mustard spinach, Rape greens, and Turnip greens (tops, leaves)<sup>1</sup>

Pest	oz. Product/A per Application	Instructions
Beet armyworm	2.4-4.8 oz./A	Apply when larvae are first observed. Application
Cabbage webworm		may be repeated to maintain control; see <b>Use</b>
Corn earworm		Restrictions-Brassica Leafy, Head, and
Cross-striped		Stem Vegetables Crop Groups.
cabbageworm		
Diamondback moth		Use 2.4 oz./A for low to moderate infestations and
Fall armyworm		4.8 oz./A for high infestations.
Imported cabbageworm		
Cabbage looper	3.2-4.8 oz./A	Apply when larvae are first observed. Application
Soybean looper		may be repeated to maintain control; see Use
Liriomyza leafminers <sup>2</sup>		Restrictions-Brassica Leafy, Head, and Stem
		Vegetables Crop Groups
		Use 3.2 oz./A for low to moderate infestations and
		4.8 oz./A for high infestations.

<sup>&</sup>lt;sup>1</sup> **Turnip greens (top, leaves) only:** For use on turnip varieties grown for leaves only. Do not use on turnip varieties grown for roots or dual-purpose varieties grown for roots and leaves.

#### Use Restrictions – Brassica Leafy, Head, and Stem Vegetables Crop Groups

- REI: 12 hours
- PHI: Brassica head and stem vegetables Allow a minimum of 7 days between the last application and harvest.
- Brassica leafy vegetables & turnip greens Allow a minimum of 14 days between the last application and harvest.
- Application Method: Ground or aerial application is permitted.
- Amount of Water: Apply in sufficient water to ensure good coverage.
- **Ground Application Equipment:** Use a **minimum of 10 gal. water /A**. If the crop canopy is dense or the worm infestation is high, increase the amount of water.
- Aircraft: Use a minimum of 5 gal. water /A. Increase the amount of water to 10-20 gal. water/A under adverse conditions (high humidity, low relative humidity, or dense canopy).
- Maximum Amount per Application: Do not apply more than 4.8 oz./A per application.
- Application Interval: Allow a minimum of 7 days between applications.
- Maximum Annual Rate: 19.2 oz/A/calendar year (0.06 lb ai/A/calendar year of emamectin benzoate-containing products).
- **Grazing:** Do not allow livestock to graze in treated areas.

<sup>&</sup>lt;sup>2</sup> **A152.02** provides suppression of *Liriomyza trifolii* and *Liriomyza sativae* populations. Suppression means either erratic control ranging from good to poor or consistent control at a level below that which is generally considered acceptable for commercial control.

## Fruiting Vegetables (except cucurbits) Crop Group

Crops in this group are: Eggplant; Ground-cherry; Pepino; Peppers: bell, chili, cooking, pimento, and sweet; Tomatillo; and Tomato

Pest	oz. Product/A per Application	Instructions
Beet armyworm	2.4-4.8 oz./A	Apply when larvae are first observed. Application
Cabbage looper		may be repeated to maintain control; see <b>Use</b>
Fall armyworm		Restrictions – Fruiting Vegetables.
Southern armyworm		
Tobacco budworm		Use 2.4 oz./A for low to moderate infestations and
Tobacco hornworm		4.8 oz./A for high infestations.
Tomato hornworm		
Tomato fruitworm		
Tomato pinworm		
Yellowstriped armyworm		
Alfalfa looper	3.2-4.8 oz./A	Apply when larvae are first observed. Application
Soybean looper		may be repeated to maintain control; see <b>Use</b>
Liriomyza leafminers <sup>1</sup>		Restrictions – Fruiting Vegetables.
		Use 3.2 oz./A for low to moderate infestations and 4.8 oz./A for high infestations.

<sup>&</sup>lt;sup>1</sup>A152.02 provides suppression of *Liriomyza trifoilii* and *Liriomyza sativae* populations. Suppression means either erratic control ranging from good to poor or consistent control at a level below that which is generally considered acceptable for commercial control.

## **Use Restrictions – Fruiting Vegetables (except cucurbits) Crop Group**

- REI: 12 hours
- PHI: Allow a minimum of 7 days between the last application and harvest.
- Application Method: Ground or aerial application is permitted.
- Amount of Water: Apply in sufficient water to ensure good coverage.
- **Ground Application Equipment:** Use a **minimum of 10 gal. water/A**. If the crop canopy is dense or the worm infestation is high, increase the amount of water.
- Aircraft: Use a minimum of 5 gal. water/A. Increase the amount of water to 10-20 gal. water/A under adverse conditions (high humidity, low relative humidity, or dense canopy).
- Maximum Amount per Application: Do not apply more than 4.8 oz./A per application.
- Application Interval: Allow a minimum of 7 days between applications.
- Maximum Annual Rate: 14.4 oz/A/calendar year (0.045 lb ai/A/calendar year of emamectin benzoatecontaining products).
- **Grazing:** Do not allow livestock to graze in treated areas.

## Leafy Vegetables (except Brassica) Crop Group

Crops in this group are: Amaranth (leafy amaranth, Chinese spinach, tampala); Arugula (roquette); Cardoon; Celery; Celtuce; Chervil; Chinese celery; Chrysanthemum, edible-leaved and garland; Corn salad; Cress, garden and upland (yellow rocket and winter cress); Dandelion; Dock (sorrel); Endive (escarole); Fennel, Florence (fi nochio); Lettuce, head and leaf; Orach; Parsley; Purslane (garden and winter); Radicchio (red chicory); Rhubarb; Spinach; New Zealand spinach; Vine spinach (Malabar spinach, Indian spinach); and Swiss chard

Pest	oz. Product/A per Application	Instructions
Beet armyworm	2.4-4.8 oz./A	Apply when larvae are first observed. Application
Corn earworm		may be repeated to maintain control; see <b>Use</b>
Fall armyworm		Restrictions – Leafy Vegetables.
Tobacco budworm		
		Use 2.4 oz./A for low to moderate infestations and
		4.8 oz./A for high infestations.
Cabbage looper	3.2-4.8 oz./A	Apply when larvae are first observed. Application
Soybean looper		may be repeated to maintain control; see <b>Use</b>
<i>Liriomyza</i> leafminers <sup>1</sup>		Restrictions – Leafy Vegetables.
		Use 3.2 oz./A for low to moderate infestations and
		4.8 oz./A for high infestations.

<sup>&</sup>lt;sup>1</sup> **A152.02** provides suppression of *Liriomyza trifoilii* and *Liriomyza sativae* populations. Suppression means either erratic control ranging from good to poor or consistent control at a level below that which is generally considered acceptable for commercial control.

## **Use Restrictions - Leafy Vegetables Crop Group:**

- REI: 12 hours
- **PHI:** Allow a minimum of **7 days** between the last application and harvest.
- Application Method: Ground or aerial application is permitted.
- Amount of Water: Apply in sufficient water to ensure good coverage.
- **Ground Application Equipment:** Use a **minimum of 10 gal. water/A**. If the crop canopy is dense or the worm infestation is high, increase the amount of water.
- Aircraft: Use a minimum of 5 gal. water/A. Increase the amount of water to 10-20 gal. water/A under adverse conditions (high humidity, low relative humidity, or dense canopy).
- Maximum Amount Per Application: Do not apply more than 4.8 oz./A per application.
- Application Interval: Allow a minimum of 7 days between applications.
- Maximum Annual Rate: 14.4 oz/A/calendar year (0.045 lb ai/A/calendar year of emamectin benzoate-containing products).
- **Grazing:** Do not allow livestock to graze in treated areas.

## **Pome Fruit Crop Group**

Crops in this group are: apple, crabapple, loquat, mayhaw, oriental pear, pear and quince

	For	For Dilute	
	Concentrate	Sprays	
	Sprays (oz.	(oz. product/100	
Pest	product/A)	gal.)	Instructions
Pest  Apple pandemis Bud moths: eyespotted tufted apple Cankerworm species Common winter moth Fruitworms: cherry green species laconobia Leafminers: blister moth species tentiform species Leafrollers: fruittree obliquebanded omnivorous redbanded variegated Orange tortrix  Codling moth <sup>1,2</sup> Lesser appleworm <sup>1,2</sup> Oriental fruit moth <sup>1,2</sup> Pear psylla <sup>1</sup>	product/A) 3.2 – 4.8 oz.	gal.)  0.8 – 1.2 oz.	<ul> <li>Apply as needed using locally recommended scouting and monitoring techniques. Timing and frequency of applications should be based on target insect populations reaching locally determined economic thresholds. Application may be repeated to maintain control – typically at 7-14 day intervals; see Use Restrictions – Pome Fruit.</li> <li>A152.02 should be applied at or immediately after hatch of the target insect to ensure treatment of small larvae. Treatments must be made before larvae penetrate fruit or stems or before larvae begin webbing and sheltering.</li> <li>Thorough spray coverage of plant foliage is essential for optimum control. Apply in sufficient water to ensure good coverage. See Use Restrictions – Pome Fruit below for minimum gals/.A.</li> <li>For best results, it is recommended that A152.02 be applied in combination with a Horticultural spray oil (not a dormant oil) or a nonionic surfactant as directed by the product manufacturer. Do not use a sticker/binder type adjuvant.</li> <li>Use 3.2 oz./A for low to moderate infestations and 4.8 oz./A for high infestations.</li> <li>Bee Precautions: See Environmental Hazards section on this label.</li> </ul>
Spider mites <sup>1,3</sup>			See Resistance Management section on this label for
			guideline statements.

<sup>&</sup>lt;sup>1</sup>**A152.02** provides suppression. Suppression means either erratic control ranging from good to poor or consistent control at a level below that which is generally considered acceptable for commercial control.

## **Use Restrictions – Pome Fruit**

- REI: 12 hours for activities not specified below in "Prohibitions"
   Prohibitions: (Notify workers of these prohibitions.)
  - Do not allow workers to perform the following tasks until 48 hours after application: propping,
  - pruning, training, thinning, and tying.
- **Location Prohibitions:** Do not use **A152.02** in greenhouses, nurseries or in plant propagation houses, or on any plants grown for use as transplants.
- **PHI:** Allow a minimum of **14 days** between the last application and harvest.
- Application Method: Ground application equipment only. Aerial application is not permitted.
- Amount of Water:
  - o **Concentrate sprays:** Apply in sufficient water to provide uniform spray coverage of all plant parts but not to the point of runoff.
    - For airblast sprayers use a minimum of 40 gal. of water per acre.

<sup>&</sup>lt;sup>2</sup>**A152.02** may be used at 4.8 ounces per acre to control first generation only of codling moth, lesser appleworm and oriental fruit moth east of the Rocky Mountains.

<sup>&</sup>lt;sup>3</sup>Refers to phytophagous mites in the Acari subfamily Tetranychinae.

- Dilute sprays: The rate of A152.02 per 100 gal. is based on a volume of 400 gal./A of dilute spray.
   Dilute spray volume per acre will vary by orchard depending on tree size, tree spacing and canopy density. Dilute sprays are applied to the point of runoff.
- Amount per Application: Do not apply at rates lower than those recommended on this label. Maximum: Do not apply more than 4.8 oz./A per application.
- Application Interval: Allow a minimum of 7 days between applications.
- Maximum Annual Rate: 14.4 oz/A/calendar year (0.045 lb ai/A/calendar year of emamectin benzoate-containing products).
- Grazing: Do not allow livestock to graze in treated areas.

## **Tree Nuts Crop Group and Pistachios**

Crops in the Tree Nuts group are: almond, beechnut, Brazil nut, butternut, cashew, chestnut, chinquapin, fi lbert (hazelnut), hickory nut, macadamia nut (bush nut), pecan, and walnut (black and English/Persian).

	Amount of Pro	oduct to Use	
	For Concentrate	For Dilute	
Pest	Sprays	Sprays	Instructions
Codling moth	3.2 to 4.8 oz./A	0.8 to 1.2 oz.	Use the lowest rate for low to moderate infestations
European winter		in 100 gallons	and the highest rate for high infestations.
moth		of water	Apply, as needed, using locally recommended
Fall webworm			scouting and monitoring techniques.
Filbertworm			Timing and frequency of applications should be based
Hickory shuckworm			on target insect populations reaching locally
Leafrollers:			determined economic thresholds.
filbert			A152.02 should be applied at or immediately after
fruittree			hatch of the target insect to insure treatment of small
obliquebanded			larvae.
Navel orangeworm			Treatments must be made before larvae penetrate
Peach twig borer			fruit or stems or before larvae begin webbing and
Omnivorous leaftier			sheltering.
Oriental fruitmoth			Thorough spray coverage of plant foliage is essential
Pecan bud moth			for optimum control. Apply in sufficient water to ensure
Pecan casebearer			coverage. See <b>Use Restrictions</b> for minimum gals/A.
species			• For best results, it is recommended that A152.02 be
Pecan serpentine			applied in combination with a Horticultural spray oil
leafminer			(not a dormant oil) or a nonionic surfactant as directed
Redhumped			by the product manufacturer. Do not use a
caterpillar			sticker/binder type of adjuvant.
Walnut caterpillar			Application may be repeated to maintain control –
Spider mites <sup>1,2</sup>			typically at 7 to 14-day intervals. See <b>Use Restrictions</b> .

<sup>&</sup>lt;sup>1</sup>Provides suppression only. Suppression means either erratic control ranging from good to poor or consistent control at a level below that which is generally considered acceptable for commercial control.

## **Use Restrictions – Tree Nuts Crop Group and Pistachios**

- **REI: 12 hours** for activities not specifi ed below in "**Prohibitions**"
- **Prohibitions:** (Notify workers of these prohibitions.)
  - Do not allow workers to perform the following tasks until 48 hours after application: poling, pruning, and thinning.
- **Location Prohibitions:** Do not use **A152.02** in greenhouses, nurseries, or in plant propagation houses, or on any plants grown for use as transplants.
- PHI: Allow a minimum of 14 days between the last application and harvest

<sup>&</sup>lt;sup>2</sup>Refers to phytophagous mites in the Acari subfamily Tetranychinae

- Application Method: Ground application equipment only. Aerial application is not permitted.
- Amount of Water:
  - Concentrate sprays: Apply in sufficient water to provide uniform spray coverage of all plant parts but not to the point of runoff. For air blast sprayers use a minimum of 40 gals. of water per acre.
  - Dilute sprays: The rate of A152.02 per 100 gals. is based on a volume of 400 gals./A of dilute spray.
     Dilute spray volume per acre will vary by orchard depending on tree size, tree spacing, and canopy density. Dilute sprays are applied to the point of runoff.
- Amount per Application: Do not apply at rates lower than those recommended on this label.
- Maximum Amount per Application: Do not apply more than 4.8 oz./A per application.
- Application Interval: Allow a minimum of 7 days between applications.
- Maximum Annual Rate: 14.4 oz/A/calendar year (0.045 lb ai/A/calendar year of emamectin benzoate-containing products).
- **Grazing:** Do not allow livestock to graze in treated areas.

## STORAGE AND DISPOSAL

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

**PESTICIDE STORAGE:** Store in a tightly closed container in a cool, dry place.

**PESTICIDE DISPOSAL:** Pesticide spray mixture or rinsate that cannot be used should be disposed of in a landfill approved for pesticides. Improper disposal of excess pesticide spray mixture or rinsate is a violation of Federal law. If these wastes cannot be disposed of by the 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:**

Nonrefillable container. Do not reuse or refill this container. Empty residue into application equipment. Offer container and foil bag for recycling, if available, or dispose of container and/or foil bag in a sanitary landfill or by incineration, if allowed by State and local authorities.

### LIMITATION OF WARRANTY AND LIABILITY

**IMPORTANT: READ BEFORE USE.** Read the entire Directions for Use, Conditions of Warranties and Limitations of Liability before using this product. If these terms and conditions are not acceptable, return the unopened product container at once. By using this product, user or buyer accepts the following Disclaimer of Warranties and Limitations of Liability. **CONDITIONS:** The directions for use of this product are believed to be adequate and must be followed carefully. However, it is impossible to eliminate all risks associated with the use of this product. Ineffectiveness, injury, and other unintended consequences may result because of such factors as manner of use or application (including misuse), the presence of other materials, weather conditions, and other unknown factors, all of which are beyond the control of ATTICUS, LLC. All such risks shall be assumed by the user or buyer.

**DISCLAIMER OF WARRANTIES:** To the extent consistent with applicable law, ATTICUS, LLC makes no other warranties, express or implied, of merchantability or of fitness for a particular purpose or otherwise, that extend beyond statements on this label. **LIMITATIONS OF LIABILITY:** To the extent consistent with applicable law, neither ATTICUS, LLC the manufacturer, nor the Seller shall be liable for any indirect, special, incidental or consequential damages resulting from the use, handling, application, storage, or disposal of this product. To the extent consistent with applicable law, the exclusive remedy of the user or buyer for any and all losses, injuries or damages resulting from the use, handling, application, or storage of this product, whether in contract, warranty, tort, negligence, strict liability or otherwise, shall not exceed the purchase price paid.

[A152.02] is a trademark of Atticus, LLC

Proclaim] is a registered trademark of Syngenta Crop Protection, LLC.

Bravo® and Weather Stik® are Trademarks of a Syngenta Group Company Dithane® Rainshield™ is a trademark of Dow Agrosciences LLC

## **{LANGUAGE ON LABEL AFFIXED TO CONTAINER}**

## RESTRICTED USE PESTICIDE

TOXIC TO FISH, MAMMALS, AND AQUATIC ORGANISMS
FOR RETAIL SALE TO AND USE ONLY BY CERTIFIED APPLICATORS OR
PERSONS UNDER THEIR DIRECT

SUPERVISION, AND ONLY FOR THOSE USES COVERED BY THE CERTIFIED APPLICATOR'S CERTIFICATION.

## A152.02™

[For control or suppression of certain lepidopterous larvae (worms/caterpillars), leafminers, and spider mites on Fruiting Vegetables, Leafy Vegetables including Brassica (cole crops), Pome Fruit, Tree Nuts including Pistachios, and Turnip Greens (tops, leaves)]

ACTIVE INGREDIENT:	(% by weight)
Emamectin benzoate (CAS No. 155569-91-8)	5.0%
OTHER INGREDIENTS:	<u>95.0%</u>
TOTAL	100.0%

Contains 5% of emamectin benzoate.

## KEEP OUT OF REACH OF CHILDREN CAUTION

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand the label, find someone to explain it to you in detail.)

	FIRST AID
If swallowed:	Call poison control center or doctor immediately for treatment advice.
	Have person sip glass of water if able to swallow.
	<ul> <li>Do not induce vomiting unless told to do so by the poison control center or doctor.</li> </ul>
	Do not give anything by mouth to an unconscious person.
If in eyes:	Hold eye open and rinse slowly and gently with water for 15-20 minutes.
	<ul> <li>Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li> </ul>
	Call a poison control center or doctor for treatment advice.
lf on skin or	Take off contaminated clothing.
clothing:	Rinse skin immediately with plenty of water for 15-20 minutes.
	• Call a poison control center or doctor for treatment advice.
If inhaled:	Move person to fresh air.
	<ul> <li>If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible.</li> </ul>
	<ul> <li>Call a poison control center or doctor for further treatment advice.</li> </ul>

#### NOTE TO PHYSICIAN

Early signs of intoxication include dilation of pupils, muscular incoordination, and muscular tremors. Vomiting within one-half hour of exposure can minimize toxicity following accidental ingestion of the product; rapidly after exposure (< 15 minutes) administer repeatedly medical charcoal in a large quantity of water or ipecac.

If toxicity from exposure has progressed to cause severe vomiting, the extent of resultant fluid and electrolyte imbalance should be gauged. Appropriate supportive parenteral fluid replacement therapy should be given, along with other required supportive measures (such as maintenance of blood pressure levels and proper respiratory functionality) as indicated by clinical signs, symptoms, and measurements.

In severe cases, observations should continue for at least several days until clinical condition is stable and normal. Since emamectin benzoate is believed to enhance GABA activity in animals, it is probably wise to avoid drugs that enhance GABA activity (barbiturates, benzodiazepines, valproic acid) in patients with potentially toxic emamectin benzoate exposure.

#### HOT LINE NUMBER

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact SafetyCall at **1-844-685-9173** for emergency medical treatment information.

#### For Chemical Emergency

Spill, Leak, Fire, Exposure, or Accident Call CHEMTREC Day or Night Within USA and Canada: 1-800-424-9300 or +1 703-527-3887 (collect calls accepted)

# PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS CAUTION

Harmful if swallowed, inhaled, or absorbed through skin. Causes moderate eye irritation. Avoid contact with the skin, eyes, or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, or using tobacco. Remove and wash contaminated clothing before reuse. Avoid breathing dust or spray mist. Prolonged or frequently repeated exposure may cause allergic skin reactions in some individuals.

**ENVIRONMENTAL HAZARDS:** This pesticide is toxic to fish, birds, mammals, and aquatic invertebrates. Drift and runoff may be hazardous to aquatic organisms in neighboring areas. Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when cleaning equipment or disposing of equipment wash water or rinsate.

This product is highly toxic to bees exposed to direct treatment or residues on blooming trees. Do not apply this product to blooming trees if bees are foraging the treatment area.

## STORAGE AND DISPOSAL

Do not contaminate water, food or feed by storage or disposal. **PESTICIDE STORAGE:** Store in a tightly closed container in a cool, dry place. **PESTICIDE DISPOSAL:** Pesticide spray mixture or rinsate that cannot be used should be disposed of in a landfill approved for pesticides. Improper disposal of excess pesticide spray mixture or rinsate is a violation of Federal law. If these wastes cannot be disposed of by the 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:**

Nonrefillable container. Do not reuse or refill this container. Empty residue into application equipment. Offer container and foil bag for recycling, if available, or dispose of container and/or foil bag in a sanitary landfill or by incineration, if allowed by State and local authorities.

See inside label booklet for additional Precautionary Statements and Directions for Use.

Manufactured for: Atticus, LLC 5000 CentreGreen Way, Suite 100 Cary, NC 27513 EPA Reg. No. 91234-95
EPA Est. No.
NET WEIGHT:
BATCH NO.: