



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, DC 20460

OFFICE OF CHEMICAL SAFETY  
AND POLLUTION PREVENTION

August 14, 2020

Atticus, LLC  
c/o  
Nicole O'Loughlin  
Pyxis Regulatory Consulting, Inc.  
4110 136TH ST CT NW  
GIG HARBOR, WA 98332

Subject: Label and CSF Amendment – Revising the Basic CSF, and making corresponding label changes  
EPA Registration Number: 91234-51  
Application Date: June 25, 2018  
Decision Number: 542749, 542748

Dear Ms. O'Loughlin:

The amended label and CSF referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide and Rodenticide Act, as amended, are acceptable. This approval does not affect any conditions that were previously imposed on this registration. You continue to be subject to existing conditions on your registration and any deadlines connected with them.

A stamped copy of your labeling is enclosed for your records. This labeling supersedes all previously accepted labeling. You must submit one copy of the final printed labeling before you release the product for shipment with the new labeling. In accordance with 40 CFR 152.130(c), you may distribute or sell this product under the previously approved labeling for 18 months from the date of this letter. After 18 months, you may only distribute or sell this product if it bears this new revised labeling or subsequently approved labeling. "To distribute or sell" is defined under FIFRA section 2(gg) and its implementing regulation at 40 CFR 152.3.

Please note that the record for this product currently contains the following CSF:

- Basic CSF dated 06/22/2018

Should you wish to add/retain a reference to the 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 Agency. If the website is false or misleading, the product would be misbranded and unlawful to sell or distribute under FIFRA section 12(a)(1)(E). 40 CFR 156.10(a)(5) list examples of statements 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 Agency find or if it is brought to our attention that a website contains false

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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.

Your release for shipment of the product constitutes acceptance of these conditions. If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA section 6. If you have any questions, please contact Gene Benbow by phone at 703-347-0235, or via email at [Benbow.Gene@epa.gov](mailto:Benbow.Gene@epa.gov).

Sincerely,

A handwritten signature in blue ink, appearing to read "Gene Benbow".

Gene Benbow, Product Manager 7  
Invertebrate & Vertebrate Branch 3  
Registration Division (7505P)  
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

ABAMECTIN	GROUP	6	INSECTICIDE
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**A131.01<sup>[TM]</sup>**

[Alternate Brand Name: Akrenyx]

<b>Active Ingredient:</b>	(% by weight)
Abamectin (CAS: 65195-55-3 and 65195-56-4).....	2.0%
<b>Other Ingredients:</b> .....	<b>98.0%</b>
<b>Total</b> .....	<b>100.0%</b>

Contains 0.15 lb. of abamectin per gallon.

Contains abamectin, the active ingredients used in [Agri-Mek® 0.15 EC] [&] [Avid® 0.15 EC].

**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.: 91234-51**

**EPA Est. No.:**

**Net Contents:**

**Manufactured For:**  
Atticus, LLC  
5000 CentreGreen Way, Suite 100  
Cary, NC 27513

ACCEPTED
08/14/2020
Under the Federal Insecticide, Fungicide and Rodenticide Act as amended, for the pesticide registered under EPA Reg. No. 91234-51

A131.01 is not manufactured, or distributed by Syngenta Crop Protection, LLC, seller of [Agri-Mek® 0.15 EC] [&] [Avid® 0.15 EC].

## {LANGUAGE INSIDE BOOKLET}

<b>FIRST AID</b>	
<b>If on skin or clothing:</b>	<ul style="list-style-type: none"><li>• Take off contaminated clothing.</li><li>• Rinse skin immediately with plenty of water for 15-20 minutes.</li><li>• Call a poison control center or doctor for treatment advice.</li></ul>
<b>If swallowed</b>	<ul style="list-style-type: none"><li>• Call a poison control center or doctor immediately for treatment advice.</li><li>• Have person sip a glass of water if able to swallow.</li><li>• Do not induce vomiting unless told to do so by the poison control center or doctor.</li><li>• Do not give anything by mouth to an unconscious person.</li></ul>
<b>HOT LINE NUMBER</b> 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 absorbed through skin. Harmful if swallowed. Avoid contact with skin, eyes or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet.

**PERSONAL PROTECTIVE EQUIPMENT (PPE):**

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants,
- Shoes plus socks,
- Chemical resistant gloves such as barrier laminate, nitrile rubber, neoprene rubber, or Viton.

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product. Do not reuse them.

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

### **USER SAFETY RECOMMENDATIONS**

Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet. Wash hands thoroughly with soap and water after handling.
- Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

### **ENVIRONMENTAL HAZARDS:**

This pesticide is toxic to fish and wildlife. 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 apply when weather conditions favor drift from target areas. Do not contaminate water when disposing of equipment wash water or rinsate. This product is highly toxic to bees exposed to direct treatment or residues on blooming crops or weeds. Do not apply this product or allow it to drift to blooming crops or weeds if bees are visiting the treatment area.

Use of this product may pose a risk to threatened and endangered species of fish, amphibians, crustaceans (including fresh water shrimp), and insects. All use of this product in the state of California should comply with the recommendations of the California Endangered Species Project. Before using this product in California, consult with your county agriculture commissioner to determine use limitations that apply in your area.

This product may impact surface water quality due to runoff of rain water. This is especially true for poorly draining soils and soils with shallow ground water. This product is classified as having a medium potential for reaching both surface water and aquatic sediment via runoff for several weeks to months after application. A level, well-maintained vegetative buffer strip between areas to which this product is applied and surface water features such as ponds, streams, and springs will reduce the potential loading of abamectin from runoff water and sediment. Runoff of this product will be reduced by avoiding applications when rainfall is forecast to occur within 48 hours.

### **Physical or Chemical Hazards:**

Do not use or store near heat or open flame.

Do not use with or store near any oxidizing or reducing agents.

This product contains chemicals known to the state of California to cause birth defects or other reproductive harm.

### **DIRECTIONS FOR USE Restricted Use Pesticide**

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

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 State or Tribal 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) of 12 hours. Exception: For grape girdling, cane turning, and tying in grapes, do not enter or allow worker entry into treated areas during the restricted-entry interval (REI) of 4 days**

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:

- Long-sleeve shirt and long pants,
- Shoes plus socks,
- Chemical resistant gloves made out of: barrier laminate or butyl rubber  $\geq 14$  mils.

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

### PRODUCT INFORMATION

Thorough coverage is essential for good mite and insect control on crops.

**Do not apply A131.01 by aerial application in New York State.**

**A131.01** is an emulsifiable concentrate that will control certain pests on the crops listed on this label when applied according to the Directions for use.

**A131.01** has been tested for phytotoxicity and has a wide margin of safety on a variety of crops. **A131.01** has also been shown to be compatible with many commonly used pesticides, crop oils, and nutritional sprays. However, since it is not possible to test a large number of possible mixtures, the user should pre-test to assure the physical compatibility and lack of phytotoxicity effect of any proposed mixtures with **A131.01**.

### CHEMIGATION:

Do not apply this product through any type of irrigation system.

### SPRAY DRIFT:

#### Responsibility

Avoiding spray drift at the application site is the responsibility of the applicator.

The interaction of many equipment and weather-related factors determine the potential for spray drift. The applicator is responsible for considering all of these factors when making application decisions.

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

### Spray Drift Precautions for Application with Aircraft or Ground Application Equipment

- Apply **A131.01** only when wind velocity favors on target product deposition (approximately 3 to 10 mph).
- Do not apply with ground application equipment within 25 ft. of or with aircraft within 150 ft. of lakes, reservoirs, rivers, permanent streams, marshes, pot holes, natural ponds, estuaries, or commercial fish farm ponds.
- Do not cultivate within 25 ft. of the aquatic area to allow growth of a vegetative filter strip.
- Do not allow this product to drift onto non-target areas. Drift may result in illegal residues or injury to non-target species. Risk of exposure to sensitive areas can be reduced by applying this product when the wind direction is away from the sensitive area.
- Do not apply when the weather conditions may cause drift.
- Avoid application when the temperature is high and/or the humidity is low. These conditions increase the evaporation of spray droplets and the likelihood of drift to aquatic areas.
- Do not apply when wind speed or wind gusts are greater than 15 mph.
- Do not apply when wind speed is below 2 mph because wind direction will vary and there is a high potential for inversion.
- Observe the following precautions when using ground application to spray tree crops or hops in the vicinity of aquatic areas such as lakes, reservoirs, permanent streams, marshes, potholes, natural ponds, estuaries, or commercial fish ponds:
  - Do not apply **A131.01** when weather conditions favor drift to aquatic areas.
  - Do not apply within 110 ft. upwind of aquatic areas or when wind speed is above 8 mph.
  - Spray last 3 rows windward of aquatic areas using nozzles on one side only, with spray directed away from the aquatic areas.
  - Avoid spray going over tops of trees by adjusting or turning off top nozzles. Shut off nozzles on the side away from the grove/orchard when spraying the outside row. Shut off nozzles when turning at ends of row and passing tree gaps in rows.

### Spray Drift Precautions for Aerial Application

#### Drift Management Requirements

The following drift management requirements must be followed to avoid off-target movement from aerial applications to agricultural field crops.

- **Outermost Nozzle Distance:** The distance of the outermost nozzles on the boom must not exceed 3/4 the length of the wingspan or rotor.
- **Nozzle Directions:** Nozzles must always point backward parallel with the air stream and never be pointed downwards more than 45 degrees.
- **Maximum Wind Speed:** Do not apply when wind speed is greater than 15 mph.
- **Droplet Size:** The most effective way to reduce drift potential is to apply large droplets. The best drift management strategy is to apply the largest droplets that provide sufficient coverage and control. Applying larger droplets reduces drift potential but will not prevent drift if applications are made improperly, or under unfavorable environmental conditions (see **Wind, Temperature and Humidity, and Temperature Inversions**).
- **Controlling Droplet Size:**
  - **Volume:** Use high flow rate nozzles to apply the highest practical spray volume. Nozzles with higher rated flows produce larger droplets.
  - **Pressure:** Do not exceed the nozzle manufacturer's recommended pressures. For many nozzle types, lower pressure produces larger droplets. When higher flow rates are needed, use higher flow rate nozzles instead of increasing pressure.
  - **Number of Nozzles:** Use the minimum number of nozzles that provide uniform coverage.
  - **Nozzle Orientation:** Orienting nozzles so that the spray is released parallel to the air stream produces larger droplets than other orientations and is the recommended practice. Significant deflection from horizontal will reduce droplet size and increase drift potential.
  - **Nozzle Type:** Use a nozzle type that is designed for the intended application. With most nozzle

types, narrower spray angles produce larger droplets. Consider using low-drift nozzles. Solid stream nozzles oriented straight back produce the largest droplets and the lowest drift.

- **Boom Length:** For some use patterns, reducing the effective boom length to less than 3/4 of the wingspan or rotor length may further reduce drift without reducing swath width.
- **Application Height:** Applications should not be made at a height greater than 10 ft. above the top of the target plants unless a greater height is required for aircraft safety. Making applications at the lowest height that is safe reduces exposure of droplets to evaporation and wind.
- **Swath Adjustment:** When applications are made with a cross wind, the swath will be displaced downwind. Therefore, on the up and downwind edges of the field, the applicator must compensate for this displacement by adjusting the path of the aircraft upwind.
- **Wind:** Drift potential is lowest between wind speeds of 2-10 mph. However, many factors, including droplet size and equipment type determine drift potential at any given speed. Application must be avoided below 2 mph due to variable wind direction and high inversion potential.  
**Note:** Local terrain can influence wind patterns. Every applicator should be familiar with local wind patterns and how they affect spray drift.
- **Temperature and Humidity:** To compensate for evaporation when applying **A131.01** in low relative humidity, set up equipment to produce larger droplets. Evaporation of droplets is most severe when conditions are both hot and dry.
- **Temperature Inversions:** **A131.01** must not be applied during a temperature inversion because the potential for drift is high. Temperature inversions restrict vertical air mixing, and this causes small, suspended droplets to remain in a concentrated cloud. This cloud can move in unpredictable directions due to the light variable winds that are common during inversions. Temperature inversions are characterized by temperatures that increase with altitude and are common on nights with limited cloud cover and light to no wind. Inversions begin to form as the sun sets and often continue into the morning. Their presence can be indicated by ground fog; however, if fog is not present, the movement of smoke from a ground source or an aircraft smoke generator can also identify inversions. 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.

#### **Resistance Management:**

Because of the inherent risks of resistance development to any product, **A131.01** should be used in a sound resistance management program that includes rotation with other products with different modes of action.



## CROP USE DIRECTIONS

### APPLE

**For control of white apple leafhopper, tentiform leafminers, European ret mites, two-spotted spider mites, and McDaniel spider mites (Ground Application Only)**

Pests	For Dilute Sprays <sup>1</sup> Fl. Oz. A131.01/100 gals.	For Concentrate Sprays <sup>2</sup> Fl. Oz. A131.01/A
Two-spotted spider mite McDaniel spider mite European red mite Tentiform leafminers White apple leafhopper	2.5 – 5.0	10 – 20
Horticultural Spray Oil (For best results, use oil with <b>A131.01</b> )	0.25% or 1 gal./A	Minimum of 1 gal./A

\*Not a dormant oil

<sup>1</sup> The rate of **A131.01** per 100 gals. is based on a volume of 400 gals./A dilute spray.

<sup>2</sup> To determine the amount of product per acre for concentrate sprays, first determine the amount that would be required in a full cover dilute spray. Use the same amount of product per acre in concentrate sprays as would be required for the dilute sprays to the same orchard/grove. This may result in use of less than 10 fl. oz./A on small trees.

#### Application Instructions:

- Apply **A131.01** using conventional dilute or concentrate ground sprayers calibrated to deliver sufficient water for thorough coverage. Gallonage of spray will vary with size and number of trees per acre and density of foliage. In any case, thorough coverage is essential for good spider mite and insect control.
- For best results, apply in combination with horticultural spray oil (not a dormant oil) as directed. Applications without horticultural spray oil\* may result in reduced efficacy and/or residual control.
- Do not graze treated orchards.
- For best results, use **A131.01** in combination with a horticultural spray oil\* approved for use on apples. Apply **A131.01** when spider mite or insect thresholds are reached. A second application may be made if necessary to maintain control.
- **White Apple Leafhopper (Not for use west of the Rocky Mountains):** Application of **A131.01** is limited only to first generation white apple leafhopper. Apply soon after petals fall in combination with horticultural spray oil\*.
- **Spider Mites:** For best results, apply before a threshold of 5 spider mites per leaf is reached. Residual spider mite control with **A131.01** in combination with Horticultural spray oil\* is greater from spray deposits on newer leaves compared to older. Limit applications of **A131.01** for spider mite control to a period extending from petal fall through six weeks following petal fall.
- **Tentiform Leafminers:** For best results, apply against egg (to control new hatch) and early sap feeder stages of first and second generation tentiform leafminers when locally established thresholds have been reached. Do not apply during bloom.

#### Use Restrictions – Apples:

- Do not exceed 20 fl. oz. of **A131.01** per acre per application or 40 fl. oz./A in a growing season of this or any other foliarly applied Abamectin containing product.
- Do not make more than 2 applications per growing season of this or any other foliarly applied Abamectin containing product.
- Do not apply in less than 40 gals. of water per acre.
- If a second application is necessary, do not retreat within 21 days.
- Do not apply within 28 days of harvest.
- Do not apply by aircraft.

- **A131.01**, in combination with horticultural spray oil\*, may cause fruit injury to certain varieties of apples, e.g.; russetting on light-skinned varieties such as Golden Delicious, when used alone or when other products are applied sequentially. The Directions for Use and Precautions on horticultural spray oil labels, as well as precautions in official spray guides should be followed carefully when using **A131.01** in combination with horticultural spray oil (not a dormant oil). Do not graze treated orchards.

**Avocados**

For control of Avocado thrips.

Application Rates	
Pests	Fl. Oz. A131.01/A
Avocado thrips ( <i>Scirtothrips perseae</i> )	10.0 – 20.0 Do not use less than 10 fl. oz. of <b>A131.01/A</b>
Horticultural oil (not a dormant oil)	Minimum 1 – 4 % v/v

**Application Instructions:**

**Note:** **A131.01** may be applied using ground application equipment or aircraft. Aerial application is permitted because of its importance to the avocado growing industry. However, aerial application is not the preferred method of application for the best control of thrips. With aerial application, spray coverage and the resulting control of thrips is less than with ground application. For this reason, the user accepts all liability for the level and duration of control of thrips when **A131.01** is aerially applied.

Gallons of spray will vary with size and number of trees per acre and density of foliage. In any case, thorough coverage is essential for good mite and insect control.

- For best results, apply when immature thrips are first observed but before numbers exceed 5 immature thrips per leaf/fruit. Use 10-15 fl. oz. of product/A for low\* to moderate\* infestations and 15-20 fl. oz. of product/A for high\* or severe\* infestations. Add a 1.0% - 4% NR (narrow range) 415 oil in combination with a horticultural spray oil (not a dormant oil) approved for use on avocados.
- Make a second application, if needed, to maintain control, but wait at least 30 days after the first application to retreat. **(See Use Restrictions)**
- **For Ground Application:** If spray volume is greater than 400 gals./A, apply **A131.01** at a rate of 2.5 fl. oz. per 100 gals. of water plus 1.0% - 4.0% of an NR 415 oil.

**Note:** To prevent crop injury, observe all precautions and restrictions on the oil label. When using oil concentrations above 2.0% treat a small test area before making a large-scale application.

*Thrips Infestation Level	Number of Immature Thrips per Leaf/Fruit
Low	1 – 2
Moderate	3 – 4
High/Severe	More than 5

**Use Restrictions – Avocados:**

- Do not apply within 14 days of harvest.
- Ground and aerial application permitted.
- Do not apply in less than 100 gals. of water with ground equipment or 50 gals. of water with aircraft.
- Do not apply more than 20 fl. oz./A per application.
- Wait at least 30 days before repeating application.
- Do not make more than 2 applications per season of this or any other foliarly applied Abamectin containing product.
- Do not apply more than 40 fl. oz./A per season of this or any other foliarly applied Abamectin containing product.
- Do not allow livestock to graze in treated orchards.

## Celeriac (*Apium graveollens*)

For control of two-spotted spider mites.

Application Rate	
Pests	Fl. Oz. A131.01/A
Two-spotted spider mites	16.0

### Application Instructions:

- **A131.01** may be applied using conventional or concentrate sprayers calibrated to deliver sufficient water for thorough coverage of the foliage.
- For best results, use in combination with a non-ionic surfactant.
- Apply when mites first appear and repeat as necessary to maintain control.

### Use Restrictions – Celeriac:

- Do not apply at less than 7-day intervals.
- Do not exceed 48 fl. oz./A after transplanting.
- Do not apply within 7 days of harvest.
- Do not apply in less than 20 gals. of water per acre.
- For resistance management purposes, use no more than 2 sequential applications.

## Citrus Fruit Crops (Crop Group 10)

For control of Asian citrus psyllid, Broad mite, Citrus bud mite, Citrus leafminer, Citrus rust mite, Citrus thrips, and Two-spotted spider mite (Ground Application Only).

Crops in this group are: Calamondin, Citrus citron, Citrus hybrids (includes chironja, tangelo, tangor), Grapefruit, Kumquat, Lemon, Lime, Mandarin (tangerine), Sour orange, Sweet orange, Pummelo, and Satsuma mandarin.

Pests	Application Rates	
	For Dilute Sprays <sup>1</sup> Fl. Oz. A131.01/100 gals.	For Concentrate Sprays <sup>2</sup> Fl. Oz. A131.01/A
Asian citrus psyllid	-	10-20 <sup>3</sup>
Broad mite	1.0 – 2.0	10-20 <sup>3</sup>
Citrus bud mite	1.0 – 2.0	10-20 <sup>4</sup>
Citrus leafminer	-	5-20 <sup>3</sup>
Citrus rust mite	0.5 – 2.0	5-20 <sup>3</sup>
Citrus thrips	-	10-20 <sup>5</sup>
Two-spotted spider mite	1.0 – 2.0	10-20

<sup>1</sup> The rate of **A131.01** per 100 gals. is based on a volume of 1,000 gals./A dilute spray.

<sup>2</sup> For concentrate sprays, adjust the dosage to apply an amount/A equal to that used in full cover dilute spray.

<sup>3</sup> Ground Application: For best results, use 150 - 300 gals./A of spray mix with a minimum of 3 gal/A of horticultural spray oil\* and apply at a ground speed of 1 to 1.5 mph.

<sup>4</sup> For best results, use 500 gals./A of spray mix with a minimum of 0.5% horticultural spray oil\*.

<sup>5</sup> For best results, use 100-250 gals./A of spray mix applied to achieve outside coverage.

\* Not a dormant oil.

### Application Instructions:

- Apply **A131.01** with a minimum of 0.20% horticultural spray oil\* in the spray mixture or not less than 1.0 gal. of oil/A (except when specified directly below).
- **Asian Citrus Psyllid:** Apply **A131.01** to protect newly expanding foliage flush during the spring, summer or fall. **A131.01** will only control adults and nymphs present at the time of application.

- **Mites:** Apply when mites first appear during spring, summer, and/or fall.
- **Citrus Bud Mite:** For best results, time the spray at “bud swell”.
- **Citrus Leafminer:** Apply to protect new growth during spring, summer or fall.
- **Citrus Thrips:** Application targeted for citrus thrips will only control the current generation and must be correctly times. Apply when economic thresholds have been reached (after egg hatch has begun – preferably early to mid-hatch).

**Ground Instructions:**

Apply using conventional dilute or concentrate. ground sprayers calibrated to deliver sufficient water for thorough coverage (or outside coverage for citrus leafminers and citrus thrips).

**Aerial Application:**

Thorough spray coverage is essential for good mite and insect control. Spray gallonage may vary depending on size and number of trees per acre as well as density of foliage.

**Use Restrictions – Citrus Fruit Crops:**

- **PHI:** Do not apply within 7 days of harvest.
- **Application Method:**
  - **To control citrus leafminer** – Ground or aerial application is permitted, hwoever, do not apply with aircraft to citrus in California. For aerial application use a minimum of 10 gallons of finished spray volume per acre. Under conditions such as high pest populations, dense foliage, or adverse application conditions (such as high temperatures) use a greater volume of water to insure adequate coverage.
  - **All other pests** – Ground application only. Do not apply with aircraft.
- **Prohibited Use:** To manage resistance do not use in citrus nurseries.
- **Application Interval:** Wait at least 30 days before repeating application.
- **Maximum Amount per Season:**
  - **DO NOT** apply more than 40 fl. oz./A (or 0.047 lb. a.i./A) of **A131.01** or any other foliarly-applied abamectin containing product in any growing season.
  - **DO NOT** make more than 3 applications in any growing season.
- **Grazing:** Do not allow livestock to graze in treated orchards.

**COTTON**

For control of two-spotted spider mites, carmine spider mites, Pacific spider mites, and strawberry spider mites.

Application Rates		
Spider Mites	Fl. Oz. A131.01/A	
	Mid-season/Lay-by	Early Season
Two-spotted	8 – 16	4 - 6
Carmine		
Pacific		
Strawberry		

**Application Instructions:**

**A131.01** is an emulsifiable concentrate which, when mixed with water according to the Directions for Use will control spider mites (two-spotted, carmine, Pacific and strawberry) on cotton.

- Use 8-16 fl. oz. of **A131.01** per acre depending on size of the plant and density of the foliage.
- Apply with ground sprayers or aerially by fixed-wing aircraft or helicopter in a minimum of 5 gals. of water per acre to provide thorough coverage.
- Begin application when mites are first noticed and repeat if necessary.
- For use on early season cotton, apply when cotton is under 10 inches in height. Apply at a rate of 4-6 fl.

oz. of **A131.01** per acre by ground equipment only. Do not use less than 4 fl. oz./A.

**Use Restrictions – Cotton:**

- **PHI:** Do not apply within 20 days of harvest.
- **Application Method:** Ground or aerial application is permitted.
- **Minimum Amount of Water:** Do not apply in fewer than 5 gallons of water per acre. Use sufficient volume to insure thorough coverage.
- **Maximum Amount per Application:** Do not apply more than 16 fl. oz/A (0.019 lb a.i./A) of **A131.01** or any other foliarly applied abamectin containing product.
- **Application Interval:** Wait at least 21 days before repeating application.
- **Maximum Amount per Season:** Do not apply more than 32 fl. oz/A (0.038 lb a.i./A) of **A131.01** or any other foliarly applied abamectin containing product per season.
- **Grazing Restriction:** Do not feed or allow livestock to graze treated cotton.

**Cucurbits (Crop Group 9)**

For control of spider mites and leafminers.

Crops in this group are: Chayote, Chinese Waxgourd, Citron Melon, Cucumbers, Gherkin, Edible Gourds (including: hyotan, cucuzza, hechima, Chinese okra); *Momordica spp.* (including: balsam, apple, balsam pear, bittermelon, Chinese cucumber); Muskmelon, Cantaloupe, Pumpkin, Summer Squash, Winter Squash, (Squash includes: butternut squash, calabaze, hubbard squash, acorn squash, spaghetti squash); Watermelon

**Application Rates**

<b>Pests</b>	<b>Fl. Oz. A131.01/A</b>
Spider mites Leafminers	8.0 – 16.0

**Application Instructions:**

- Mix with water as indicated below and apply thoroughly by ground or air as a foliar spray to ensure good upper and lower leaf coverage.
- Use 8 fl. oz./A for low to moderate infestations and 16 fl. oz./A for severe infestations.
- Apply when adult leafminer flies or spider mites are first observed and repeat applications as necessary to maintain control within constraints of a sound resistance management program.

**Use Restrictions - Cucurbits:**

- Do not exceed 48 fl. oz./A in a growing season of this or any other foliarly applied Abamectin containing product.
- Do not apply within 7 days of harvest. Do not apply at less than 7 day intervals.
- Do not apply in less than 20 gals. of water per acre by ground or less than 5 gals. of water by air.
- Do not make more than 2 sequential applications of this or any other foliarly applied Abamectin containing product.
- Do not apply by aircraft in New York State.

## Dry Beans

### For control of *Liriomyza* Leafminers and Spider Mites

Crops in this group are: *Cicer arietinum* (chickpea, garbanzo bean), *Lupinus* spp. (including sweet lupine, white sweet lupine, white lupine, and grain lupine), *Phaseolus* spp. (including kidney bean, lima bean, mung bean, navy bean, pinto bean, snap bean, and waxbean), *Vicia faba* (broad bean, fava bean), and *Vigna* spp. (including adzuki bean, asparagus bean, blackeyed pea, catjang, Chinese longbean, cowpea\*, crowder pea, moth bean, mung bean, rice bean, southern pea, urd bean, and yardlong bean)

**\*For use on cowpeas that are grown only for dry seed. Do not allow livestock to graze cowpea forage and do not harvest cowpea forage or haw for use as livestock feed.**

Mix with water as indicated below. Thorough coverage of the crop canopy is essential for optimum results. Inadequate coverage can result in reduced control.

#### Note:

- Apply **A131.01** with ground equipment or aircraft.
- For best control apply **A313.0** with ground application equipment. With aerial application, the resulting control of leafminers and spider mites could be less than with ground application.

#### Application Rates

Pest	Fl. Oz./A
<i>Liriomyza</i> leafminers	8.0 – 16.0
Spider mites	

#### Application Instructions:

- Use 8 – 12 fl. oz./A for low to moderate infestations and 13 – 16 fl. oz./A for high infestations.
- **Leafminers and Spider Mites:** Apply when adult leafminers flies or spider mites are first observed and repeat application, as needed, to maintain control within constraints of a sound resistance management program (See **Use Restrictions**).

#### Use Restrictions – Dry Beans:

- **PHI:** Do not apply within **7 days** of harvest (7-day PHI).
- **Application Method:** Ground or aerial application permitted; however, do not apply with aircraft in New York State.
- **Amount of Water:** Do not apply in less than 10 gal. of water/A with ground application equipment. Do not apply in less than 5 gal. of water/A with aircraft. Under conditions such as high pest populations, dense foliage, or adverse application conditions (such as high temperatures), use a greater volume of water to ensure adequate coverage.
- **Maximum Amount per Application:** Do not apply more than 16 fl. oz./A (or 0.019 lb. a.i./A) of this product or any other foliarly applied abamectin-containing product per application.
- **Application Interval:** Wait at least 6 days before repeating application.
- **Number of Applications:** Do not make more than 2 sequential applications of this product or any other foliarly applied abamectin-containing product.
- **Maximum Amount per Season:** Do not apply more than 48 fl. oz./A (or 0.056 lb. a.i./A) of this product or any other foliarly applied abamectin-containing product in a growing season.

## Fruiting Vegetables Crop (Crop Group 8)

For control of Broad mite, Colorado potato beetle, *Liriomyza* leafminers, Spider mites, *Thrips palmi*, Tomato psyllid, Tomato pinworm, and Tomato russet mite.

Crops in this group are: Eggplant, Groundcherry, Pepino, Peppers (includes bell pepper, chili pepper, cooking pepper, pimento, sweet pepper), Tomatillo, and Tomato

Mix with water as indicated below. Thorough coverage of the crop canopy is essential for optimum results. Inadequate coverage may result in reduced control.

**Note: A131.01** may be applied with ground application equipment or aircraft. For best control of mites, apply **A131.01** with ground application equipment. With aerial application, spray coverage and the resulting control of mites is less than with ground application. For this reason, the user accepts all liability for the level and duration of control of mites when **A131.01** is aerially applied.

Application Rates			Fl. Oz. A131.01/A
Pests			
Broad mite	Spider mites	Tomato russet mite	8.0 – 16.0
Colorado potato beetle	Thrips palmi		
<i>Liriomyza</i> leafminers	Tomato psyllid		
Tomato pinworm			16.0

### Application Instructions:

- **Broad, russet, and spider mites:** Apply when mites first appear.
- **Thrips palmi:** Apply when thrips are first observed.
- **Tomato pinworm:** Application may be made from the time moth activity is detected up to, but no later than, the time when newly emerged larvae are present.
- **Leafminers:** Apply when adult flies are first observed.
- **Mites, leafminers, Thrips palmi, and Colorado potato beetle:** Use 8 fl. oz./A for low to moderate infestations and 16 fl. oz./A for severe infestations.
- Repeat application as necessary to maintain control (see **Use Restrictions**).
- **Note: A131.01** may be used without a wetting agent. Spreading and penetrating surfactants can improve insect control when necessary to improve the wetting of foliage and to smooth out spray deposits, a nonionic surfactant is recommended. Do not use binder or sticker-type surfactants.

### Use Restrictions – Fruiting Vegetables Crop (Crop Group 8):

- **PHI:** Do not apply within 7 days of harvest.
- **Application Method:** Ground or aerial application permitted; however, do not apply with aircraft in New York State.
- **Prohibited Use:** For resistance management, do not use on fruiting vegetables grown for transplanting.
- **Amount of Water:** Do not apply in less than 20 gals. of water/A with ground application equipment. Do not apply in less than 5 gals. of water/A with aircraft. Under conditions such as high pest populations, dense foliage, or adverse application conditions (such as high temperatures) use a greater volume of water to insure adequate coverage.
- **Maximum Amount per Application:** Do not apply more than 16 fl. oz./A (or 0.019 lb. a.i./A) of **A131.01**, or any other foliarly-applied abamectin containing product per application.
- **Application Interval:** Wait at least 7 days before repeating application.
- **Number of Applications:** Do not make more than 2 sequential applications of **A131.01** or any other foliarly-applied abamectin containing product.
- **Maximum Amount per Season:** Do not apply more than 48 fl. oz./A (or 0.056 lb. a.i./A) of **A131.01** or any other foliarly-applied abamectin containing product in a growing season.

## Grapes

For control of Pacific spider mite, Two-spotted spider mite, Variegated leafhopper, Western grape leafhopper, Western grapeleaf skeletonizer, and Willamette spider mite.

Apply **A131.01** using conventional ground sprayers calibrated to deliver sufficient water for thorough coverage. Thorough coverage is essential for good spider mite and insect control. Do not spray alternate rows. **A131.01** must be applied to both sides of each row for maximum coverage.

Application Rates	
Pests	Fl. Oz. A131.01/A
Pacific spider mite	8.0 - 16.0 Plus a nonionic surfactant
Two-spotted spider mite	
Variegated leaf hoppers	
Wester grape leafhopper	
Western grapeleaf skeletonizer	
Willamette spider mite	

### Application Instructions:

- Use 8 - 12 fl. oz./A for low to moderate infestations and 16 fl. oz. for severe infestations.
- Repeat application, if needed. (See **Use Restrictions**).
- **Note: A131.01** must be applied in combination with a nonionic surfactant to improve wetting of foliage and to smooth out spray deposits. Spreading and penetrating surfactants can improve insect control. Do not use binder or sticker-type surfactants. Although **A131.01** has been tested in combination with a nonionic surfactant for safety to grapes, it is impossible to test on all grape varieties under the variety of conditions that may cause crop injury. Therefore, when using **A131.01** in combination with a nonionic surfactant, carefully follow the **Directions for Use** and **Precautions** on the nonionic surfactant label and in official spray guides.
- **Spider mites:** Apply when mites first appear but before motiles exceed 5 per leaf.
- **Western grapeleaf skeletonizer:** Apply **A131.01** plus a nonionic For optimum control, apply shortly after egg hatch.
- **Leafhoppers:** Apply **A131.01** plus a nonionic surfactant using thorough spray coverage for contact knock-down only.

### Use Restrictions – Grapes:

- **PHI:** Do not apply within **28 days** of harvest.
- **Application Method:** Ground application only.
- **Amount of Water:** Do not apply in less than 50 gals. of water/A with conventional ground application equipment. When using an electro-static sprayer, less than 50 gals. of water/A may be used, however do not use less than 5 gals. of water/A.
- **Maximum Amount per Application:** Do not apply more than 16 fl. oz./A (or 0.019 lb. a.i./A) of **A131.01** or any other foliarly-applied abamectin containing product per application.
- **Application Interval:** If a second application is necessary, wait at least 21 days before repeating application.
- **Number of Applications:** Do not make more than 2 applications of **A131.01** or any other foliarly-applied abamectin containing product per growing season.
- **Maximum Amount per Season:** Do not apply more than 32 fl. oz./A (0.038 lb. a.i./A) of **A131.01** or any other foliarly-applied abamectin containing product in a growing season.
- **Grazing:** Do not allow livestock to graze in treated vineyards.



## Herb Crop Subgroup (Crop Subgroup 19A)

For control of *Liriomyza* Leafminers and Spider Mites.

Crops in this subgroup are: Angelica, Balm, Basil, Borage, Burnet, Camomile, Catnip, Chervil (dried), Chives, Chives (Chinese), Clary, Coriander (leaf), Cilantro (leaf), Costmary, Culantro (leaf), Curry (leaf), Dill weed, Horehound, Hyssop, Lavender, Lemongrass, Lovage (leaf), Marigold, Marjoram (*Organum* species), Nasturtium, Parsley (dried), Pennyroyal, Rosemary, Rue, Sage, Summer and Winter savory, Sweet bay, Tansy, Tarragon, Thyme, Wintergreen, Woodruff, and Wormwood.

Mix with water as indicated below. Apply thoroughly with ground application equipment as a foliar spray and ensure good upper and lower leaf coverage.

**Application Rates**

Pests	Fl. Oz./A
<i>Liriomyza</i> leafminers Spider mites	8.0 – 16.0

### Application Instructions:

- Use 8 fl. oz./A for low to moderate infestations and 16 fl. oz./A for severe infestations.
- Apply when adult leafminer flies or spider mites are first observed and repeat application, as necessary to maintain control. (See Use Restrictions.)
- **A131.01** may be used without a wetting agent. When necessary to improve the wetting of foliage and to smooth out spray deposits, a nonionic surfactant is recommended for all crops in the Herb Crop Subgroup except chives. Do not use a surfactant when applying this product to chives.
- **Note:** Although **A131.01** has been tested in combination with a nonionic surfactant for safety to herbs, it is impossible to test on all herb types and varieties under the variety of conditions that may cause crop injury. Therefore, when using **A131.01** in combination with a nonionic surfactant, carefully follow the Directions for Use and Precautions on the nonionic surfactant label and in official spray guides.

### Use Restrictions – Herb Crop Subgroup (Crop Subgroup 19A):

- **PHI:** Do not apply within 14 days of harvest. For chives, do not apply within 7 days of harvest.
- **Application Method:** Apply with ground application equipment.
- **Amount of Water:** Use a minimum of 20 gal. of water/A.
- **Maximum Amount per Application:** Do not apply more than 16 fl. oz./A (or 0.019 lb. a.i./A) of **A131.01** or any other foliarly applied abamectin-containing product per application.
- **Application Interval:** Wait at least 7 days before repeating application.
- **Number of Applications:** Do not make more than 2 applications of this product or any other foliarly applied abamectin containing product per single cutting (harvest).
- **Maximum Amount per Season:** Do not apply more than 48 fl. oz./A (or 0.056 lb. a.i./A) of this product or any other foliarly applied abamectin containing product per year.

## Hops

For control of two-spotted spider mites (Not registered for use in California).

**Application Rates**

Pests	Fl. Oz. A131.01/A
Two-spotted spider mites	8.0 – 16.0

**Application Instructions:**

- Apply **A131.01** when two-spotted spider mites reach treatment thresholds.
- Mix with water as indicated below and apply by ground equipment as a foliar spray to assure good upper and lower coverage.
- Gallonage of spray may vary with the size of plants and density of foliage. In any case, thorough coverage is essential for good control of two-spotted mites. When using concentrate sprays, the amount of water is reduced, but the amount of **A131.01** per acre should remain the same as for dilute sprays.
- If a second application is necessary for control, do not retreat within 21 days of the first application and only after an alternative miticide with a different mode of action has been used.

**Use Restrictions – Hops:**

- Do not use less than 16 fl. oz. per application or exceed 32 fl. oz./A per growing season of this or any other foliarly applied Abamectin containing product.
- Do not apply within 28 days of harvest.
- Do not apply in less than 40 gals. of water per acre.
- If a second application is necessary to maintain control, do not retreat within 21 days of the first application.
- Do not apply by aircraft.
- Do not permit livestock to graze treated hop yards.

**Note:** **A131.01** may be used without any wetting agent. When necessary to improve the wetting of foliage and to smooth out spray deposits, use a nonionic surfactant.

**Leafy Vegetables (except *Brassica* vegetables) Crop Group (Crop Group 4)**

For Control of Carmine spider mite, *Liriomyza* leafminers, and Two-spotted spider mite.

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

**Application Rates**

<b>Pests</b>	<b>Fl. Oz. A131.01/A</b>
<i>Carmine spider mite</i>	8.0 - 16.0 Plus a nonionic surfactant
<i>Liriomyza</i> leafminers	
Two-spotted spider mite	

**Application Instructions:**

- Mix with water as indicated below. Thorough coverage of the crop canopy is essential for optimum results. Inadequate coverage may result in reduced control.
- **Note:** **A131.01** may be applied with ground application equipment or aircraft. For best control of mites, apply **A131.01** with ground application equipment. With aerial application, spray coverage and the resulting control of mites is less than with ground application. For this reason, the user accepts all liability for the level and duration of control of mites when **A131.01** is aerially applied.
- Use 8 – 12 oz./A for low to moderate infestations and 16 fl. oz./A for severe infestations.
- **Spider Mites:** Apply when mites first appear, and repeat as needed to maintain control (See **Use Restrictions**).
- **Leafminers:** Apply when adult flies are first observed and repeat applications as needed to maintain control (See **Use Restrictions**).

**Use Restrictions – Leafy Vegetables:**

- Do not apply within 7 days of harvest.
- Ground or aerial application permitted; however do not apply with aircraft in New York State.
- For resistance management, do not use on leafy vegetables grown for transplanting.
- Do not apply in less than 20 gals. of water/A. with ground application equipment. Do not apply in less than 5 gals. of water per acre with aircraft. Under conditions such as high pest populations, dense foliage, or adverse application conditions (such as high temperatures) use a greater volume of water to insure adequate coverage.
- Wait at least 7 days before repeating application.
- Do not make more than 2 sequential applications of this or any other foliarly applied Abamectin containing product.
- Do not apply more than 48 fl. oz./A. per growing season of this or any other foliarly applied Abamectin containing product.
- Maximum application rate: 16 fl. oz./A of this or any foliarly applied abamectin containing product.

**Mint (Peppermint and Spearmint)**

For control of Two-spotted spider mite.

**Application Rates**

<b>Pests</b>	<b>Fl. Oz. A131.01/A</b>
Two-spotted spider mite	8.0 – 12.0

**Application Instructions:**

- Mix with water as indicated below. Thorough coverage of the crop canopy is essential for optimum results. Inadequate coverage may result in reduced control.
- Treat when mites first appear.
- For optimum control, a nonionic surfactant or organosilicone-based surfactant should be used at the manufacturer's specified rate.

**Use Restrictions – Mint:**

- Do not apply within 28 days of harvest.
- Ground or aerial application permitted; however **do not apply with aircraft in New York State.**
- Do not apply in less than 20 gals. of water/A with ground application equipment. Do not apply in less than 5 gals. of water/A with aircraft. Under conditions such as high pest populations, dense foliage, or adverse application conditions such as high temperatures, use a greater volume of water to insure adequate coverage.
- Do not apply more than 12 fl. oz/A per application of this or any other foliarly applied Abamectin containing product.
- Wait at least 7 days before repeating application.
- Do not make more than 2 sequential applications and do not apply more than 3 applications per season of this or any other foliarly applied Abamectin containing product.
- Do not apply more than 36 fl. oz./A per crop per season of this or any other foliarly applied Abamectin containing product.
- Do not allow livestock to graze or feed treated foliage to livestock.

## Onion, bulb (Crop Subgroup 3-07A)

For control of *Liriomyza* Leafminers and Thrips.

Crops in this group are: onion, bulb, including daylily, bulb; fritillaria, bulb; garlic, bulb; garlic, great-headed, bulb; garlic, serpent, bulb; lily, bulb; onion, Chinese, bulb; onion, pearl; onion, potato, bulb; shallot, bulb; cultivars, varieties, and/or hybrids of these.

Mix with water as indicated below. Thorough coverage of the crop canopy is essential for optimum results. Inadequate coverage can result in reduced control.

### Note:

- Apply **A131.01** with ground application equipment or aircraft.
- For best control apply **A131.01** with ground application equipment. With aerial application, the resulting control of leafminers and thrips could be less than with ground application.

Application Rates

Pests	Fl. Oz./A
<i>Liriomyza</i> leafminers Thrips	8.0 – 16.0

### Application Instructions:

- Use 8 - 12 fl. oz./A for low to moderate infestations and 13 - 16 fl. oz./A for high infestations.
- **Leafminers:** Apply when adult leafminer flies are first observed and repeat application, as needed, to maintain control within constraints of a sound resistance management program (See **Use Restrictions**).
- **Thrips:** Apply in a thrips management program and when thrips are at economic threshold. Repeat application, as needed, to maintain control within constraints of a sound resistance management program (See **Use Restrictions**). Do not use **A131.01** as a rescue treatment for thrips control.
- **Note:** Add a non-ionic activator type wetting, spreading and/or penetrating adjuvant approved for use on bulb onion. Do not use binder sticker type adjuvants. Tank mixing with products that have binder sticker type formulations can reduce **A131.01** performance (See **Use Information** and **Use Restrictions**).

### Use Restrictions - Onion, Bulb (Crop Subgroup 3-07A)

- **PHI:** Do not apply within **30 days** of harvest.
- **Application Method:** Ground or aerial application permitted; however, do not apply with aircraft in New York State.
- **Amount of Water:** Do not apply in less than 20 gal. of water/A with ground application equipment. Do not apply in less than 5 gal. of water/A with aircraft. Under conditions such as high pest populations, dense foliage, or adverse application conditions (such as high temperatures), use a greater volume of water to ensure adequate coverage.
- **Maximum Amount per Application:** Do not apply more than 16 fl. oz.3A (or 0.019 lb. a.i./A) of this product or any other foliarly applied abamectin containing product per application.
- **Application Interval:** Wait at least 7 days before repeating application.
- **Number of Applications:** Make 2 consecutive applications of **A131.01** then rotate to a chemistry with a different mode of action. Make at least 2 applications of a chemistry with a different mode of action before making additional **A131.01** applications. Do not make more than 2 sequential applications of this product or any other foliarly applied abamectin containing product
- **Maximum Amount per Season:** Do not apply more than 48 fl. oz./A (or 0.056 lb. a.i./A) of this product or any other foliarly applied abamectin containing product in a growing season.

## Pears (including Oriental Pear Trees)

For control of two-spotted spider mites, McDaniel spider mites, European red mites, pear rust mites, yellow mites, and pear psylla (Ground Application Only).

Application Rates		
Pests	For Dilute Sprays <sup>1</sup> Fl. Oz. A131.01/100 gals.	For Concentrate Sprays <sup>2</sup> Fl. Oz. A131.01/A
Two-spotted spider mite McDaniel spider mite European red mite Pear rust mite Yellow mite	2.5 – 5.0	10 – 20
Pear psylla	2.5 – 5.0	10 – 20
Horticultural Spray Oil*	0.25%	Minimum of 1 gal./A

\* Not a dormant oil.

<sup>1</sup> The rate of **A131.01** per 100 gals. is based on a volume of 400 gals./A dilute spray.

<sup>2</sup> To determine the amount of product per acre for concentrate sprays; first determine the amount that would be required in a full cover dilute spray. Use the same amount of product per acre in concentrate sprays as would be required for the dilute sprays to the same orchard/grove. This may result in use of less than 10 fl. oz./A on small trees.

### Application Instructions:

- **A131.01** may be applied using conventional dilute or concentrate ground sprayers calibrated to deliver sufficient water for thorough coverage. Gallonage of spray will vary with size and number of trees per acre and density of foliage. In any case, thorough coverage is essential for good spider mite and insect control.
- Always apply in combination with horticultural spray oil (not a dormant oil) as directed. Do not graze treated orchards.
- Use **A131.01** with a minimum of 0.25% horticultural spray oil (not a dormant oil) in the dilute spray mixture and not less than 1.0 gal. of horticultural spray oil (not a dormant oil) per acre in the final finished spray.

### Use Restrictions – Pear:

- Do not exceed 20 fl. oz. of **A131.01** per acre per application or 40 fl. oz./A in a growing season of this or any other foliarly applied Abamectin containing product.
- Do not make more than 2 applications per growing season of this or any other foliarly applied Abamectin containing product.
- Do not apply less than 40 gals. of water per acre.
- If a second application is necessary, do not retreat within 21 days of the first application.
- Do not apply within 28 days of harvest. Do not apply by aircraft.
- Do not graze treated orchards.

## Stone Fruit Crop Group (Crop Group 12)

For control of European spider mite, Pacific spider mite, and Two-spotted spider mite.

Crops in this group are: apricot, cherry (sweet and tart); nectarine; peach; plum; plum (chickasaw, damson, and Japanese); plumcot, and prune (fresh).

**A131.01** may be applied using conventional dilute or concentrate sprayers calibrated to deliver sufficient water for thorough coverage. Gallons of spray will vary with size and number of trees per acre and density of foliage. In any case, thorough coverage is essential for good spider mite control.

Pests	Application Rates	
	For Dilute Sprays <sup>1</sup> Fl. Oz. <b>A131.01</b> /100 gals.	For Concentrate Sprays <sup>2</sup> Fl. Oz. <b>A131.01</b> /A
European red mite Pacific Spider mite Two-spotted spider mite	2.5 – 5.0	10 – 20
Horticultural Spray Oil (not a dormant oil) OR Nonionic Surfactant	0.25% or 1 gal./A  Labeled Rate	Minimum of 1 gal./A

<sup>1</sup> The rate of **A131.01** per 100 gals. is based on a volume of 400 gals./A dilute spray.

<sup>2</sup> To determine the amount of product per acre for concentrate sprays, first determine the amount that would be required in a full cover dilute spray. Use the same amount of product per acre in concentrate sprays as would be required for the dilute sprays to the same orchard/grove. This may result in use of less than 10 fl. oz./A on small trees.

### Application Instructions:

- Apply when mites first appear.
- A second application may be made, if needed, to maintain control. (See **Use Restrictions**),
- Always apply **A131.01** in combination with a nonionic surfactant that spreads on and/or penetrates the leaf cuticle, or apply with horticultural spray oil (not a dormant oil).
- **Note:**
  - A nonionic surfactant that spreads on and/or penetrates the leaf cuticle can improve insect control. Although **A131.01** has been tested in combination with nonionic surfactants for safety to stone fruit, it is impossible to test on all stone fruit varieties under the variety of conditions that may cause crop injury. Therefore, when using **A131.01** in combination with a non-ionic surfactant, carefully follow the **Directions for Use** and **Precautions** on the surfactant label and in official spray guides.
  - A horticultural oil (not a dormant oil) may improve efficacy and can be used but it may increase the possibility of phytotoxicity to foliage and fruit.
- Use nonionic surfactants at the manufacturer's recommended rate.
- Use a minimum of 0.25% horticultural spray oil (not a dormant oil) in the dilute spray mixture and not less than 1.0 gal. of horticultural spray oil per acre in the final finished spray.

### Use Restrictions – Stone Fruit Crop Group:

- **PHI:** Do not apply within 21 days of harvest
- **Application Method:** Ground application only. Do not apply with aircraft.
- **Amount of Water:** Do not apply in less than 40 gals. of water per acre.
- **Application Interval:** If a second application is necessary, do not retreat within 21 days.
- **Maximum Amount per Application:** Do not apply more than 20 fl. oz./A (or 0.023 lb. a.i./A) of Ab **A131.01** or any other foliarly applied abamectin containing product per application.

- **Applications per Season:** Do not make more than 2 applications of **A131.01** or any other foliarly applied abamectin containing product in a growing season.
- **Maximum Amount per Season:** Do not apply more than 40 fl. oz./A (0.047 lb. a.i./A) of **A131.01** or any other foliarly applied abamectin containing product in a growing season.
- **Grazing:** Do not allow livestock to graze in treated groves/orchards.

## Strawberries

For control of two-spotted spider mites.

Application Rates	
Pests	Fl. Oz. A131.01/A
Two-spotted spider mites	16.0

### Application Instructions

- Adjust spray volume and nozzle placement to assure maximum coverage of tops and undersides of leaves.
- Use 16 fl. oz. of **A131.01** per acre. Make 2 applications 7-10 days apart when mites first appear.
- Repeat this sequence of application if necessary to maintain control.

### Use Restrictions – Strawberries:

- Do not exceed 16 fl. oz./A per application or 64 fl. oz./A in a growing season of this or any other foliarly applied Abamectin containing product.
- Do not apply within 3 days of harvest.
- For resistance management purposes, do not use in strawberry nurseries.
- Do not apply in less than 100 gals. of water per acre.
- Do not repeat treatment within 21 days of second application.
- Do not apply by aircraft.

**Note: A131.01 may be used without any wetting agent. When necessary to improve the wetting of foliage and to smooth out spray deposits, use a nonionic surfactant.**

## Tree Nuts Crop Group (Crop Group 14) and Pistachio

For control of two-spotted spider mite, strawberry spider mite, Pacific spider mite, and European red mite (Ground Application Only).

**Crops in this group are: almond, beech nut, Brazil nut; butternut, cashew, chestnut, chinquapin, filbert (hazelnut), hickory nut, macadamia nut, pecan, and walnuts (black and English)**

**A131.01** may be applied using conventional dilute or concentrate sprayers calibrated to deliver sufficient water for thorough coverage. Gallons of spray will vary with size and number of trees per acre and density of foliage. In any case, thorough coverage is essential for good spider mite and insect control.

Application Rates		
Pests	For Dilute Sprays <sup>1</sup> Fl. Oz. A131.01/100 gals.	For Concentrate Sprays <sup>2</sup> Fl. Oz. A131.01/A
Two spotted spider mite Pacific spider mite Strawberry spider mite European red mite	2.5 – 5.0	10 – 20
Horticultural Spray Oil (not a dormant spray)	0.25% or 1 gal./A	Minimum of 1 gal./A

<sup>1</sup> The rate of **A131.01** per 100 gals. is based on a volume of 400 gals./A dilute spray.

<sup>2</sup> To determine the amount of product per acre for concentrate sprays, first determine the amount that would be required in a full cover dilute spray. Use the same amount of product per acre in concentrate sprays as would be required for the dilute sprays to the same orchard/grove. This may result in use of less than 10 fl. oz./A on small trees.

#### Application Instructions:

- Always use **A131.01** in combination with a horticultural spray oil (not a dormant oil) approved for use on tree nuts.
- Apply **A131.01** when spider mites first appear. Residual spider mite control is greater from spray deposits on newer leaves compared to older leaves.
- A second application may be made, if needed, to maintain control (See **Use Restrictions**).

#### Use Restrictions – Tree Nuts Crop Group and Pistachio:

- **PHI:** Do not apply within 21 days of harvest
- **Application Method:** Ground application only. Do not apply with aircraft.
- **Amount of Water:** Do not apply in less than 40 gals. of water per acre.
- **Application Interval:** If a second application is necessary, do not retreat within 21 days.
- **Maximum Amount per Application:** Do not apply more than 20 fl. oz./A (or 0.023 lb. a.i./A) of **A131.01** or any other foliarly applied abamectin containing product per application.
- **Application per Season:** Do not make more than 2 applications of **A131.01** or any other foliarly applied abamectin containing product in a growing season.
- **Maximum Amount per Season:** Do not apply more than 40 fl. oz./A (0.047 lb. a.i./A) of **A131.01** or any other foliarly applied abamectin containing product in a growing season.
- **Grazing:** Do not allow livestock to graze in treated groves/orchards.

#### Tuberous and Corm Vegetables Crop Subgroup (Crop Subgroup 1C)

For control of Colorado potato beetle, *Liriomyza* leafminers, Potato psyllid, and spider mites.

Crops in this subgroup are: arracacha; arrowroot; artichoke, Chinese; artichoke, Jerusalem; canna, edible; cassava (bitter and sweet); chayote (root); chufa; dasheen; ginger; leren; potato; sweet potato; tanager; tumeric; yam bean; and yam (true).

Mix with water as indicated below. Thorough coverage of the crop canopy is essential for optimum results. Inadequate coverage may result in reduced control.

**Note:** **A131.01** may be applied using ground application equipment or aircraft. For best control of mites, apply **A131.01** with ground application equipment. With aerial application, spray coverage and the resulting control of mites is less than with ground application. For this reason, the user accepts all liability for the level and duration of control of mites when **A131.01** is aerially applied.



### Application Rates

Pests	Fl Oz. A131.01/A
Colorado potato beetles <i>Liriomyza</i> leafminers Potato psyllid Spider mites	8.0 – 16.0

#### Application Instructions:

- Use 8 - 12 fl. oz./A for low to moderate infestations and 16 fl. oz./A for severe infestations.
- The addition of a nonionic surfactant or organosilicone-based surfactant, at the manufacturer's recommended rate, is suggested for optimum spider mite and insect control.
- Insect and spider mite control may be reduced if **A131.01** is used in combination with a sticker or binder type product.
- **Colorado potato beetle:** Make the first application after approximately 50% of the egg masses have hatched and larvae are present. If 2 applications are needed, limit them to a single Colorado potato beetle generation per crop. Do not make more than 2 applications per crop. (See **Use Restrictions**).
- ***Liriomyza* leafminers:** Make the first application when adult flies are first observed. Repeat applications as needed to maintain control. (See **Use Restrictions**).
- **Spider mites:** Make the first application when mites first appear. Repeat application as needed to maintain control. (See **Use Restrictions**).

#### Use Restrictions - Tuberous and Corm Vegetables Crop Subgroup

- **PHI:** Do not apply within **14 days** of harvest.
- **Application Method:** Ground or aerial application permitted; however do not apply with aircraft in New York State.
- **Amount of Water:** Do not apply in less than 20 gals. of water with ground application equipment. Do not apply in less than 5 gals. of water/A with aircraft. Under conditions such as high pest populations, dense foliage, or adverse application conditions (such as high temperatures) use a greater volume of water to insure adequate coverage.
- **Maximum Amount per Application:** Do not apply more than 16 fl. oz./A (or 0.019 lb. a.i./A) per application.
- **Application Interval:** Wait at least 7 days before repeating application.
- **Number of Applications:** Do not make more than 2 sequential applications of **A131.01** or any other foliarly applied abamectin containing product.
- **Maximum Amount per Crop:**
  - For spider mite or Colorado potato beetle control, do not apply more than 32 fl. oz./A (or 0.038 lb. a.i./A) of **A131.01** or any other foliarly applied abamectin containing product per crop.
  - For leafminers control, do not apply more than 48 fl. oz./A. (or 0.056 lb. a.i./A) of **A131.01** or any other foliarly applied abamectin containing product per crop.
- **Grazing:** Do not allow livestock to graze or feed treated foliage to livestock.

## 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 this container to hold materials other than pesticides or dilute pesticides (rinsate). After emptying and cleaning it may be allowable to temporarily hold rinsate or other pesticide-related materials in the container. Contact your state regulatory agency to determine allowable practices in your state. Offer for recycling if available. If not, dispose of in a sanitary landfill.

**Returnable/Refillable Container:** Triple rinse or pressure rinse container (or equivalent) promptly after emptying. **Triple rinse as follows:** Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. **Pressure rinse as follows:** Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 PSI for at least 30 seconds. Drain for 10 seconds after the flow begins to drip.

## 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.

[A131.01] is a trademark of Atticus, LLC

[Agri-Mek®] [&] [Avid® 0.15 EC] is a registered trademark of Syngenta Group Company.

[Internal company code] [EPA approval date]

**{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

**A131.01<sup>[TM]</sup>**

[Alternate Brand Name: Akrenyx]

<b>Active Ingredient:</b>	(% by weight)
Abamectin* .....	2.0%
<b>Other Ingredients</b> .....	<u>98.0%</u>
<b>Total</b> .....	100.0%

\* CAS: 65195-55-3 and 65195-56-4  
Contains 0.15 lb abamectin per gallon.

**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	
<b>If on skin or clothing:</b>	<ul style="list-style-type: none"> <li>Take off contaminated clothing.</li> <li>Rinse skin immediately with plenty of water for 15-20 minutes.</li> <li>Call a poison control center or doctor for treatment advice.</li> </ul>
<b>If swallowed</b>	<ul style="list-style-type: none"> <li>Call a poison control center or doctor immediately for treatment advice.</li> <li>Have person sip a glass of water if able to swallow.</li> <li>Do not induce vomiting unless told to do so by the poison control center or doctor.</li> <li>Do not give anything by mouth to an unconscious person.</li> </ul>
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 absorbed through skin. Harmful if swallowed. Avoid contact with skin, eyes, or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet.

**ENVIRONMENTAL HAZARDS:** This pesticide is toxic to fish and wildlife. 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 apply when weather conditions favor drift from target areas. Do not contaminate water

when disposing of equipment wash water or rinsate. This product is highly toxic to bees exposed to direct treatment or residues on blooming crops or weeds. Do not apply this product or allow it to drift to blooming crops or weeds if bees are visiting the treatment area. Use of this product may pose a risk to threatened and endangered species of fish, amphibians, crustaceans (including fresh water shrimp), and insects. All use of this product in the state of California should comply with the recommendations of the California Endangered Species Project. Before using this product in California, consult with your county agriculture commissioner to determine use limitations that apply in your area. This product may impact surface water quality due to runoff of rain water. This is especially true for poorly draining soils and soils with shallow ground water. This product is classified as having a medium potential for reaching both surface water and aquatic sediment via runoff for several weeks to months after application. A level, well-maintained vegetative buffer strip between areas to which this product is applied and surface water features such as ponds, streams, and springs will reduce the potential loading of abamectin from runoff water and sediment. Runoff of this product will be reduced by avoiding applications when rainfall is forecast to occur within 48 hours.

**PHYSICAL OR CHEMICAL HAZARDS:**

Do not use or store near heat or open flame. Do not use with or store near any oxidizing or reducing agents.

**STORAGE AND DISPOSAL**

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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. 91234-51  
EPA Est. No. \_\_\_\_\_**

**NET CONTENTS:**

[Internal company code] [EPA Approval date]