



## OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION

WASHINGTON, D.C. 20460

February 19, 2026

Kayla Ward  
Regulatory Associate  
Atticus, LLC  
940 NW Cary Parkway, Suite 200  
Cary, NC 27513

Subject: Label Amendment - Registration Review Mitigation for Bifenthrin  
Product Name: A110.03  
EPA Registration Number: 91234-117  
Case Number: 672902  
Application Dates: December 22, 2020

Dear Kayla Ward:

The Agency, in accordance with the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), as amended, has completed reviewing all the information submitted with your application to support the Registration Review of the above referenced product in connection with the Bifenthrin Interim Decision, and has concluded that your submission is acceptable. The label referred to above, submitted in connection with registration under FIFRA, as amended, is acceptable.

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 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 Assurance.

A stamped copy of your labeling is enclosed for your records. This labeling supersedes all previously accepted labeling and must be used at your next label printing. 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 12 months from the date of this letter. After 12 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.

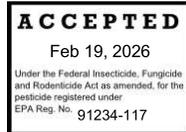
If you have any questions about this letter, please contact Antoine Gremaud by phone at 919-541-5067, or via email at [Gremaud.antoine@epa.gov](mailto:Gremaud.antoine@epa.gov).

Sincerely,

A handwritten signature in black ink, appearing to read "Kevin Costello". The signature is written in a cursive style with a large initial "K".

Kevin Costello, Branch Chief  
Risk Management and Implementation Branch 2  
Pesticide Re-Evaluation Division  
Office of Pesticide Programs

ENCLOSURE: Stamped label



[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 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.

**BIFENTHRIN    GROUP 3A    INSECTICIDE**

# A110.03 [™]

[Alternate Brand Name: Batallion 10 WSP]

Contains bifenthrin, the active ingredient used in Bifenture® 10DF Insecticide/Miticide.

<b>ACTIVE INGREDIENT:</b>	<b>(% by weight)</b>
Bifenthrin* (2 methyl[1,1'-biphenyl]-3-yl) methyl 3-(2-chloro-3,3,3-trifluoro-1-propenyl)-2, 2-dimethylcyclopropanecarboxylate .....	10.0%
<b>OTHER INGREDIENTS:</b> .....	90.0%
<b>TOTAL</b> .....	100.0%

\*Cis isomers 97% minimum, trans isomers 3% maximum

## KEEP OUT OF REACH OF CHILDREN CAUTION/PRECAUCIÓN

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.)

<b>FIRST AID</b>	
<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>If in eyes:</b>	<ul style="list-style-type: none"> <li>Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li> <li>Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li> <li>Call a poison control center or doctor for treatment advice.</li> </ul>
<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>NOTE TO PHYSICIAN:</b> This product is a pyrethroid. If large amounts have been ingested the stomach and intestines should be evacuated. Treatment is systematic and supportive. Digestible fats, oils, or alcohol may increase absorption and so should be avoided.	
<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 <b>1-844-685-9173</b> 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)**

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

**[A110.03™]** is not manufactured, or distributed by United Phosphorus Inc., seller of Bifenture® 10DF  
Insecticide/Miticide.

**EPA Reg. No.: 91234-117**

**EPA Est. No.:**

Manufactured for:  
**Atticus, LLC**  
940 NW Cary Parkway, Suite 200  
Cary, NC 27513

## {LANGUAGE INSIDE BOOKLET}

### **PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS**

#### **CAUTION**

Harmful if swallowed or absorbed through skin. Causes moderate eye irritation. 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. Remove and wash contaminated clothing before reuse.

#### **PERSONAL PROTECTIVE EQUIPMENT (PPE)**

**Applicators and other handlers (other than mixers and loaders) must wear:**

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

**Mixers and Loaders must wear:**

- Long-sleeved shirt and long pants
- Waterproof gloves
- Shoes plus socks
- Protective eyewear

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. 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.
- Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. Wash outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

{Please note the following language is ONLY to be printed when this product is formulated for WSB packaging:}

#### **[ENGINEERING CONTROLS STATEMENT**

Water soluble packets, when used correctly, qualify as a closed mixing/loading system under the Worker Protection Standard [40 CFR 170.607 (d)]. Mixers and loaders handling this product while it is enclosed in intact water-soluble packets may elect to wear reduced PPE of long-sleeved shirt, long pants, shoes, socks. When reduced PPE is worn because a closed system is being used, handlers must be provided all PPE specified above for "applicators and other handlers" and have such PPE immediately available for use in an emergency, such as a spill or equipment breakdown.]

#### **ENVIRONMENTAL HAZARDS**

This pesticide is extremely toxic to fish and aquatic invertebrates. Use with care when applying in areas adjacent to any body of water. 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 make applications when weather conditions favor drift from treated areas. Drift and runoff from treated areas may be hazardous to aquatic organisms in neighboring areas. Do not contaminate water when disposing of equipment wash waters.

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. **Protect pollinating insects by following label directions intended to minimize drift and to reduce risk to these organisms.**

The use of bifenthrin is prohibited in areas that may result in exposure of endangered species to bifenthrin. Prior to use in a particular county contact the local extension service for procedures and precautions to use to protect endangered species.

### **PHYSICAL OR CHEMICAL HAZARDS**

Do not mix or allow contact with oxidizing agents, as a hazardous chemical reaction may occur.

## **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 through any type of irrigation system.

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 intervals. 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.

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
- Waterproof gloves
- Shoes plus socks.

### **PRODUCT INSTRUCTIONS**

Unless otherwise directed by registered supplemental labeling, follow the Directions for Use in each crop group section.

The product in this outer package is a wettable powder formulation of the insecticide bifenthrin packaged in a translucent water-soluble bag. Do not allow the inner bag to become wet before adding it to the spray or nurse tank. Do not handle the inner bag with wet hands or wet gloves. Avoid rough handling which may cause breakage. Do not store at temperatures below 32°F (0°C). Allow to warm above 50°F (10°C) before use. Cooler water temperatures increase the time needed for the inner bag to dissolve completely.

**A110.03** insecticide must be diluted with water before spray application. Do not use nozzle screens (e.g. strainers) greater than 50 mesh size. Determine the number of water-soluble bag(s) to make up necessary spray suspension.

Calculate the number of bags needed for the recommended rate and number of acres to be treated by using the following equation:

$$\frac{\text{Rate for Pest (Active/Acre)} \times \text{Number of Acres to be Treated}}{0.05 \text{ (amount of ai in each bag)}} = \text{Number of A110.03 Water Soluble Bags to use for acres to be treated}$$

**Do not break bags.** When the equation equals less than a whole number of bags, use the next higher whole number of bags.

Fill the spray tank 1/2 full with water. Add required amount of A110.03. Open the outer wrapper of this product and immediately dump required number of water-soluble bags into the spray tank. Allow the bag(s) to dissolve completely. Start agitation in the tank. Air agitation is not recommended. Mix thoroughly to fully disperse and suspend the wettable powder. Fill the spray tank with the required amount of water. Maintain agitation during storage in nurse or supply tank and during application.

Mix as needed; do not store diluted material.

#### **WATER SOLUBLE PACKAGING**

**Multiple Packaging:** This bag contains multiple water-soluble packets of this product. Do not handle the packets with wet gloves or allow the packets to become wet prior to addition to spray tank. Do not break open packets. Refer to the Tables of Equivalents to calculate the number of packets to use. If all are not used, close and reseal outer container to protect remaining packet(s).

**Single Packaging:** This bag contains one water soluble packet of this product. Do not handle the packet with wet gloves or allow the packet to become wet prior to addition to spray tank. Do not break open packet. Refer to the Tables of Equivalents to calculate the number of packets to use. Open outer bag and drop the unopened inner packet of this product into spray tank.

**Preparation of Spray Solution:** Do not add any liquid fertilizers, micronutrients or adjuvants to the spray solution until after the packet and its contents have completely dissolved. Water soluble packet(s) should completely dissolve in approximately five minutes. Dissolution rate may be slowed by cold water, lack of agitation or water containing high concentrations of boron or sulfur.

#### **INSTRUCTIONS FOR USING WATER SOLUBLE PACKAGES DIRECTLY INTO SPRAY TANKS**

Water Soluble Packages (WSPs) are designed to dissolve in water. Agitation may be used, if necessary, to help dissolve the WSP. Failure to follow handling and mixing instructions can increase your exposure to the pesticide products in WSPs. WSPs, when used properly, qualify as a closed mixing/loading system under the Agricultural Worker Protection Standard [40 CFR 170.607 (d)].

#### **Handling Instructions**

Follow these steps when handling pesticide products in WSPs.

1. Mix in spray tank only.
2. Handle WSP(s) in a manner that protects package from breakage and/or unintended release of contents. If package is broken, put on PPE required for clean-up and then continue with mixing instructions.
3. Keep the WSP(s) in outer packaging until just before use.
4. Keep the WSP dry prior to adding to the spray tank.

5. Handle with dry gloves and according to the label instructions for PPE.
6. Keep WSP intact. Do not cut or puncture WSP.
7. Reseal the WSP outer packaging to protect any unused WSP(s).

### **Mixing Instructions**

Follow the steps below when mixing this product, including if tank mixed with other pesticide products. If being tank mixed, the mixing directions 1 through 9 below take precedence over the mixing directions of the other tank mix products. WSPs may, in some cases, be mixed with other pesticide product so long as the directions for use of all mixed products do not conflict. Do not tank mix this product with products that prohibit tank mixing or have conflicting mixing directions.

1. If a basket or strainer is present in the tank hatch, remove prior to adding the WSP to the tank.
2. Fill tank with water to approximately one-third to one-half of the desired final volume of spray.
3. Stop adding water and stop any agitation.
4. Place intact/unopened WSP(s) into the tank.
5. Do not spray water from a hose or fill pipe to break or dissolve the WSP(s).
6. Start mechanical and recirculation agitation from the bottom of tank without using any overhead recirculation, if possible. If overhead recirculation cannot be turned off, close the hatch before starting agitation.
7. Dissolving the WSP(s) may take up to 5 minutes or longer, depending on water temperature, water hardness and intensity of agitation.
8. Stop agitation before tank lid is opened.
9. Open the lid to the tank, exercising caution to avoid contact with dusts or spray mix, to verify that the WSPs have fully dissolved and the contents have been thoroughly mixed into the solution.
10. Do not add other allowed products or complete filling the tank until the bags have fully dissolved and pesticide is thoroughly mixed.
11. Once the WSP has fully dissolved and any other products have been added to the tank, resume filling the tank with water to the desired level, close the tank lid, and resume agitation.
12. Use the spray solution when mixing is complete.
13. Maintain agitation of the diluted pesticide mix during transport and application.
14. It is unlawful to use any registered pesticide, including WSPs, in a manner inconsistent with its label

### **TANK-MIXTURE**

**A110.03** may be applied in tank mixtures with other products approved for use on registered crops. Observe all restrictions and precautions which appear on the labels of these products. Test for compatibility of products before mixing using a standard jar test or other similar method.

### **RESISTANCE MANAGEMENT**

For resistance management, **A110.03** contains a Group 3 insecticide. Any insect population may contain individuals naturally resistant to **A110.03** and other Group 3 insecticides/acaricides. The resistant individuals may dominate the insect/mite population if this group of insecticides /acaricides are used repeatedly in the same fields. Appropriate resistance-management strategies should be followed.

To delay insecticide/acaricide resistance, take the following steps:

- Rotate the use of **A110.03** or other Group 3 insecticides /acaricides within a growing season, or among growing seasons, with different groups that control the same pests.
- Use tank mixtures with insecticides/acaricides 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):
  - 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.
  - 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/acaricides 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 resistance-management and/or IPM recommendations for the specific site and pest problems in your area.
- For further information or to report suspected resistance contact Atticus, LLC at (984) 465-4800.

#### **ROTATIONAL CROPS**

Crops for which bifenthrin tolerances exist may be rotated at any time. All other crops may be rotated 30 days following the final application of bifenthrin.

#### **VEGETATIVE FILTER STRIPS**

Construct and maintain a vegetative filter strip, according to the width specified below, of grass or other permanent vegetation between the field edge and nearby down gradient aquatic habitat (such as, but not limited to, lakes; reservoirs; rivers; streams; marshes or natural ponds; estuaries; and commercial fish farm ponds).

Only apply products containing bifenthrin onto fields where a maintained vegetative buffer strip of **at least 25 feet** exists between the field and where a down gradient aquatic habitat exists. This minimum required width of 25 feet may be reduced or removed under the following conditions:

- For Western irrigated agriculture, a maintained vegetative filter strip of at least 10 feet wide is required. Western irrigated agriculture is defined as irrigated farmland in the following states: WA, OR, CA, ID, NV, UT, AZ, MT, WY, CO, NM, and TX (west of I-35).
  - For Western irrigated agriculture, if a sediment control basin is present, a vegetative filter strip is not required.
- In all other areas, a vegetative filter strip with a minimum width of 25 feet is required, unless the following conditions are met. The vegetative filter strip requirement may be reduced from 25 feet to 15 feet if at least one of the following applies:
  - The area of application is considered prime farmland (as defined in 7 CFR § 657.5).
  - Conservation tillage is being implemented on the area of application. Conservation tillage is defined as any system that leaves at least 30% of the soil surface covered by residue after planting. Conservation tillage practices can include mulch-till, no-till, or strip-till.
  - A functional terrace system is maintained on the area of application.

- Water and sediment control basins for the area of application are functional and maintained.
- The area of application is less than or equal to 10 acres.

For further guidance on vegetated filter strips, refer to the following publication for information on constructing and maintaining effective buffers: Conservation Buffers to Reduce Pesticide Losses. Natural Resources Conservation Services. <https://www.regulations.gov/document?D=EPA-HQ-OPP-2008-0331-0175>.

For further guidance on vegetated filter strips, refer to the following publication for information on constructing and maintaining effective buffers: Conservation Buffers to Reduce Pesticide Losses. Natural Resources Conservation Services. <https://www.regulations.gov/document?D=EPA-HQ-OPP-2008-0331-0175>

## **BUFFER ZONES**

### **Ground Application**

Do not apply within 25 feet of aquatic habitats (such as, but not limited to, lakes, reservoirs, rivers, streams, marshes, ponds, estuaries, and commercial fish ponds).

### **Ultra Low Volume (ULV) Aerial Application**

Do not apply within 450 feet of aquatic habitats (such as, but not limited to, lakes, reservoirs, rivers, streams, marshes, ponds, estuaries, and commercial fish ponds). Applications made by mosquito control districts and other public health officials are exempt from this requirement.

### **Non-ULV Aerial Application**

Do not apply within 150 feet of aquatic habitats (such as, but not limited to, lakes, reservoirs, rivers, permanent streams, marshes, natural ponds, estuaries, and commercial fish ponds).

## **MANDATORY SPRAY DRIFT MANAGEMENT**

### **Aerial Applications:**

- Do not release spray at a height greater than 10 feet above the vegetative canopy, unless a greater application height is necessary for pilot safety.
- Applicators are required to select nozzle and pressure that deliver medium or coarser droplets (ASABE S641).
- Do not apply when wind speeds exceed 15 mph at the application site. If the wind speed is greater than 10 mph, the boom length must be 65% or less of the wingspan for fixed wing aircraft and 75% or less of the rotor diameter for helicopters. Otherwise, the boom length must be 75% or less of the wingspan for fixed-wing aircraft and 90% or less of the rotor diameter for helicopters.
- If the windspeed is 10 miles per hour or less, applicators must use ½ swath displacement upwind at the downwind edge of the field. When the windspeed is between 11-15 miles per hour, applicators must use ¾ swath displacement upwind at the downwind edge of the field.
- Do not apply during temperature inversions.

### **Airblast Applications:**

- Sprays must be directed into the canopy.
- Do not apply when wind speeds exceed 15 mph 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.

### **Ground Boom Applications:**

- User must only apply with the nozzle height recommended by the manufacturer, but no more than 4 feet above the ground or crop canopy.
- Applicators are required to select nozzle and pressure that deliver medium or coarser droplets (ASABE

S572).

- Do not apply when wind speeds exceed 15 mph at the application site.
- 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.

**Handheld Technology Applications:**

Take precautions to minimize spray drift.

**Non-Target Organism Statement**

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. **Protect pollinating insects by following label directions intended to minimize drift and to reduce risk to these organisms.**

Following best management practices can help reduce risk to terrestrial pollinators. Examples of best management practices include applying pesticides in the evening and at night when pollinators are not foraging and checking to confirm hive locations before spraying. For additional resources on pollinator best management practices, visit <https://www.epa.gov/pollinator-protection/find-best-management-practices-protect-pollinators>.

Managed pollinator protection plans are developed by states/tribes to promote communication between growers, landowners, farmers, beekeepers, pesticide users, and other pest management professionals to reduce exposure of bees to pesticides. If available, visit state plans for additional information on how to protect pollinators.

**How to Report Bee Kills**

It is recommended that users contact both the state lead agency and the U.S. Environmental Protection Agency to report bee kills due to pesticide application. Bee kills can be reported to EPA at [beekill@epa.gov](mailto:beekill@epa.gov). To contact your state lead agency, see the current listing of state pesticide regulatory agencies at the National Pesticide Information Center's website: [http://npic.orst.edu/reg/state\\_agencies.html](http://npic.orst.edu/reg/state_agencies.html).

**RAIN-RELATED STATEMENTS**

Do not make applications during rain. Avoid making applications when rainfall is expected before the product has sufficient time to dry (minimum 4 hours).

Rainfall within 24 hours after application may cause unintended runoff of pesticide application.

### APPLICATION INSTRUCTIONS

Rate of application is variable according to pest pressure, timing of sprays, and field scouting. Use lower rates under light to moderate infestation; higher rates under heavy insect pressure and for mite control. Arid climates generally require higher rates.

In New York State this product may not be applied within 100 feet (using ground equipment) to 300 feet (using aerial equipment) of coastal marshes or streams that drain into coastal marshes.

#### ARTICHOKE

Pests	Rate (Oz/A)	Instructions
Artichoke Plume Moth Cribrate Weevil	16.0 (0.10 lb. ai)	Apply when pest populations reach damaging thresholds and repeat as necessary to maintain control, but not more often than 15-day intervals.  <b>Ground Application:</b> Apply in a minimum of 75 gallons per acre.  <b>Air Application:</b> Apply in a minimum of 10 gallons per acre.  [1 bag 0.05 lb. ai 8 oz formulated product]
<b>Restrictions:</b> <ul style="list-style-type: none"> <li>Do not apply more than 16 oz product (0.10 lb. ai)/A between bud formation and harvest of an individual fruit.</li> <li>Do not apply more than 80 oz product (0.5 lb. ai) per acre per season.</li> <li>Preharvest interval: 5 days.</li> </ul>		

#### BRASSICAS

Broccoli, Chinese Broccoli, (gailon, white flowering broccoli), Brussels Sprouts, Cauliflower, Cavalo broccolo, Kohlrabi, Cabbage, Chinese Cabbage (napa), Chinese Mustard Cabbage (gai choy)

Pests	Rate (Oz/A)	Instructions
Grubs Maggots Wireworms	8.0 - 16.0 (0.05 - 0.10 lb. ai)	<b>Planting Time Use:</b> For Wireworms, maggots or grubs, apply in-furrow with the seed or transplant.
Aphids Armyworms Crickets Corn Earworm Cucumber Beetles Cutworms Diamondback Moth Flea Beetles Ground Beetles Imported Cabbageworm Leafhoppers Loopers Tobacco Budworm Saltmarsh Caterpillar Stink Bugs Thrips Wireworm (Adults)	5.3 - 16.0 (0.033 - 0.10 lb. ai)	<b>Foliar Use:</b> Apply in a minimum of 5 gallons per acre by air or in a minimum of 20 gallons per acre with ground equipment. Thorough coverage is essential to achieve control.  [1 bag 0.05 lb. ai 8 oz formulated product]

Banks Grass Mite Carmin Mite <i>Lygus</i> Spp. Pacific Spider Mite Twospotted Spider Mite Whiteflies	12.8 - 16.0 (0.08 - 0.10 lb. ai)	
<b>Restrictions:</b>		
<ul style="list-style-type: none"> <li>Do not apply more than 32 oz product (0.2 lb. ai) per acre per season, including at-plant applications.</li> <li>Do not make applications less than 7 days apart.</li> <li>Do not make more than 5 applications after bloom.</li> <li>Preharvest interval: 7 days.</li> </ul>		

### BUSHBERRIES

Blueberry (highbush and lowbush), Currant, Elderberry, Gooseberry, Huckleberry

Pests	Rate (oz/A)	Instructions
Aphids Blueberry Maggot Fruitworms Leafhoppers Lecanium Scale (crawlers) Obliquebanded Leafroller Plum Curculio Redbanded Leafroller Spanworm Thrips <i>Drosophila</i> spp. (adults & larvae, including Spotted Winged <i>Drosophila</i> ) Variegated Leafroller	5.3 - 16.0 (0.033 - 0.10)	Apply in at least 2 gallons per acre by air or in at least 10 gallons per acre with ground equipment. Thorough coverage is essential to achieve control.  [1 bag 0.05 lb. ai 8 oz formulated product]
Banks Grass Mite Carmin Mite <i>Lygus</i> spp. Pacific Spider Mite Twospotted Spider Mite	12.8 - 16.0 (0.08 - 0.10)	
<b>Restrictions:</b>		
<ul style="list-style-type: none"> <li>Do not apply more than 80 oz product (0.5 lb. ai) per acre per season.</li> <li>Do not make applications less than 7 days apart.</li> <li>Preharvest interval: 1 day.</li> </ul>		

## CANE BERRIES

Including: Blackberries, Bingleberries, Dewberries, Lowberries, Marionberries, Olallieberries, Youngberries, Loganberries, Raspberries

Pests	Rate oz/A (lb. ai)	Instructions
Black Vine Weevil Drosophila spp. (Including Spotted Winged Drosophila) Leafrollers Lygus spp. Orange Tortrix Root Weevils Thrips Vinegar Flies (adults)	8.0 - 16.0 (0.05 – 0.1)	Apply by air or ground equipment using sufficient water to obtain full coverage of the canopy. Use a minimum of 10 gallons per acre by air and 50 gallons per acre by ground.  One application may be made pre-bloom and a second application may be made post bloom.  For Crown Borer: apply 16 oz product (0.1 lb. ai) per acre, post-harvest (fall) or pre-bloom (spring), as a drench application directed at the crown of plants in a minimum of 200 gallons water/acre. Greater efficacy is observed at higher water gallonages (up to 400 gallons/A) or in an application prior to a significant rainfall event. Do not make both pre-bloom foliar and pre-bloom drench applications.
Carmine Mite Raspberry Crown Borer Twospotted Spider Mite	16.0 (0.1)	[1 bag 0.05 lb. ai 8 oz formulated product]
<b>Restrictions:</b>		
<ul style="list-style-type: none"> <li>Do not apply more than 32 oz product (0.2 lb. ai) per acre per season.</li> <li>Preharvest interval: 3 days.</li> </ul>		

## CANOLA, CRAMBE, RAPESEED

Pests	Rate oz/A (lb. ai)	Instructions
Aphids Armyworms Cutworms Diamondback Moth Flea Beetle Flea Hopper Grasshopper Loopers Other Lepidopterous Larvae Plant Bug Stink Bugs Seedpod Weevil Thrips	5.3 - 6.4 (0.033 - 0.04)	Apply in a minimum of 2 gallons per acre by air or in a minimum of 10 gallons per acre with ground equipment.  Thorough coverage is essential to achieve control.  [1 bag 0.05 lb. ai 8 oz formulated product]
<b>Restrictions:</b>		
<ul style="list-style-type: none"> <li>Do not apply more than 12.8 oz product (0.08 lb. ai) per acre per season.</li> <li>Do not make applications less than 14 days apart.</li> <li>Preharvest interval: 35 days.</li> </ul>		

**CITRUS**

Pests	Rate oz/A (lb. ai)	Instructions
Blue-Green Citrus Root Weevil Brown Leaf Notcher Diaprepes Root Weevil Fuller Rose Beetle Green Citrus Root Weevil Little Leaf Notcher Southern Blue-Green Citrus Weevil	40.0 - 80.0 (0.25 - 0.50)	<p>Apply <b>A110.03</b> by ground equipment to bare soil beneath citrus trees. <b>A110.03</b> must be uniformly applied from the trunk to the drip line of tree; apply in a minimum of 40 gallons of dilute spray per acre. Greater spray volume will insure greater uniformity of coverage. A pre- and post-application irrigation may aid in the uniformity of coverage as well.</p> <p><b>A110.03</b> protects citrus tree roots from Diaprepes and other citrus root weevils feeding by forming a barrier which provides contact activity on newly hatched larvae (neonates). As eggs hatch in new foliage, neonates fall to the soil surface <b>BELOW</b> the tree and come in contact with <b>A110.03</b> as they attempt to burrow into the root zone.</p>
Asian Cockroach Fire Ants	16.0 - 40.0 (0.1 - 0.25)	<p>Minimize disturbance of the soil beneath trees.</p> <p>Timing of <b>A110.03</b> applications is critical. Current information suggests that peak emergence of adult Diaprepes Weevil varies by citrus growing region and these emergence peaks can be dramatically affected by environmental factors, such as soil moisture. Typically, two peaks are observed for Diaprepes, first in spring then late summer or early fall. Southern Blue-Green and Blue-Green Citrus Weevils and Fuller Rose Beetle typically exhibit a single emergence peak in the spring. Brown and Little Leaf Notchers typically exhibit three emergence peaks, spring, summer and fall. Since emergence varies seasonally and by location, timing of A110.03 application can be accurately forecast by observing adults. Adults are most active early morning and late afternoon; numbers can be estimated by trapping throughout spring and summer (emergence periods). Egg laying will occur for 8 to 10 weeks following adult emergence from the soil; larval invasion of the soil will begin 2-3 weeks following adult emergence. It is critical to have the <b>A110.03</b> soil barrier in place prior to drop of the neonates.</p> <p><b>A110.03</b> is one of several effective tools in an integrated pest management program for Citrus Root Weevils. Apply in conjunction with good cultural practices, biological control of larvae and foliar control of adults. Consult local university extension personnel for current information to protect citrus trees from Citrus Root Weevils and other pests.</p> <p><b>Additional Instructions:</b>                      Apply to individual citrus resets, when not in solid planted rows, using handgun or shielded sprayer.</p> <p>Peak emergence of Diaprepes root weevil generally occurs in the spring. Depending on weather conditions, a minor emergence of Diaprepes root weevil may also occur in the fall.</p> <p>If the citrus grove to be treated is in an area where weather conditions are conducive to primary emergence occurring in the spring, use 80 oz product (0.50 lb. ai) to obtain the longest residual management of</p>

		<p>Diaprepes root weevil.</p> <p>If the citrus grove to be treated is in an area where weather conditions will promote more than one peak of pest emergence, 40 oz product (0.25 lb. ai) can be applied early season and 0.25 pound active can be applied later in the season.</p> <p>Apply in a minimum of 40 gallons of finished spray per acre.</p>
<p><b>Restrictions:</b></p> <ul style="list-style-type: none"> <li>• Do not apply through irrigation systems.</li> <li>• Do not allow any application of A110.03 to contact fruit or foliage.</li> <li>• Do not apply more than a total of 80 oz product (0.5 lb. ai ) per acre per year.</li> <li>• Ground application only. Do not apply by air.</li> <li>• Preharvest interval: 1 day.</li> </ul>		

**COTTON**

Pests	Rate oz/A (lb. ai)	Instructions
European Corn Borer Soybean (Banded) Thrips Tobacco Thrips	3.2 - 16.0 (0.02 - 0.10)	This product may be applied in water.  Apply in a minimum of 10 gallons per acre with ground equipment or 2 gallons per acre by air.
Boll Weevil Bollworm Cabbage Looper Cotton Aphid Cotton Fleahopper Cotton Leafperforator Cutworms Fall Armyworm Plant Bugs Saltmarsh Caterpillar Southern Garden Leafhopper Stink Bugs Tobacco Budworm	6.4 - 16.0 (0.04 - 0.10)	<b>To control Boll Weevil:</b> apply at an interval of 3 to 4 days until pest numbers are reduced to acceptable levels.  <b>To control Mites and Aphids:</b> apply when pests first appear. Repeat as necessary to maintain control. Higher rates will be required once a damaging threshold is established.  [1 bag 0.05 lb. ai 8 oz formulated product]
Beet Armyworm Carmine Spider Mite <i>Lygus</i> spp. Pink Bollworm Twospotted Spider Mite Whiteflies	9.6 - 16.0 (0.06 - 0.10)	
<p><b>Restrictions:</b></p> <ul style="list-style-type: none"> <li>• Do not apply more than 80 oz product (0.5 lb. ai) per acre per season.</li> <li>• Do not graze livestock in treated areas or cut treated crops for feed.</li> <li>• Do not make more than 10 synthetic pyrethroid applications (of one product or combination of products) to a cotton crop in one growing season.</li> <li>• Preharvest interval: 14 days.</li> </ul>		

**CUCURBITS**

Chayote (fruit); Chinese waxgourd (Chinese preserving melon); Citron melon; Cucumber; Gherkin; Gourd, edible (includes hyotan, cucuzza); (*Luffa* spp.) (includes hechima, Chinese okra); (*Momordica* spp.) (includes balsam apple, balsam pear, bitter melon, Chinese cucumber); Muskmelon (hybrids and/or cultivars of *Cucumis melo*) (includes true cantaloupe, cantaloupe, casaba, creshaw melon, golden pershaw melon, honeydew melon, honey balls, mango melon, Persian melon, pineapple melon, Santa Claus melon, and snake melon); Pumpkin (*Cucurbita* spp.); Squash, summer (includes crookneck squash, scallop squash, straightneck squash, vegetable marrow, zucchini); Squash, winter (includes butternut squash, calabaza, hubbard squash (*C. mixta*; *C. pepo*) includes acorn squash, spaghetti squash); Watermelon (includes hybrids and/or varieties of *Citrullus* spp.)

Pests	Rate oz/A (lb. ai)	Instructions
Grubs Maggots Wireworms	8.0 - 16.0 (0.05 - 0.10)	<b>Planting Time Use:</b> For Wireworms, maggots or grubs, apply in-furrow with the seed or transplant.
Aphids Armyworms Cabbage Looper Corn Earworm Cucumber Beetles Cutworms Grasshopper Leafhoppers Plant Bug Pickleworm Melonworm Rindworm Squash Bugs Squash Vine Borer Stink Bugs Tobacco Budworm	8.0 - 16.0 (0.05 - 0.10)	<b>Foliar Use:</b> Apply in a minimum of 5 gallons per acre by air or in a minimum of 20 gallons per acre with ground equipment.  Thorough coverage is essential to achieve control.  [1 bag 0.05 lb. ai 8 oz formulated product]
Banks Grass Mite Carmin Mite <i>Lygus</i> Spp. Twospotted Spider Mite Whiteflies	12.8 - 16.0 (0.08 - 0.10)	
<b>Restrictions:</b> <ul style="list-style-type: none"> <li>• Do not apply more than 48 oz product (0.3 lb. ai) per acre per season.</li> <li>• Do not make more than two applications after bloom.</li> <li>• Do not make applications less than 7 days apart.</li> <li>• Preharvest interval: 3 days.</li> </ul>		

**FRUITING VEGETABLES**

Eggplant, Pepper (Bell & Non-Bell), Groundcherry, Pepino

Pests	Rate oz/A (lb. ai)	Instructions
Armyworms Cabbage Looper Colorado Potato Beetle Corn Earworm Cucumber Beetle Cutworms European Corn Borer Flea Beetle Leafminers Loopers Pepper Weevil Plant Bug Stink Bug Thrips Tomato Pinworm Tomato Hornworm Vegetable Leafminer Whiteflies	5.3 - 12.8 (0.033 - 0.08)	Apply in a minimum of 2 gallons per acre by air or in a minimum of 10 gallons per acre with ground equipment. When applying by air, 1-2 quarts of emulsified oil may be substituted for 1-2 quarts of water in the finished spray.  Thorough coverage is essential to achieve control.  [1 bag 0.05 lb. ai 8 oz formulated product]
Banks Grass Mite Broad Mite Carmine Mite Lygus Spp. Pacific Spider Mite Two Spotted Spider Mite	12.8 (0.08)	
<b>Restrictions:</b> <ul style="list-style-type: none"> <li>Do not make applications less than 7 days apart.</li> <li>Do not apply more than 32 oz product (0.2 lb. ai) per acre per season.</li> <li>Preharvest interval: 7 days.</li> </ul>		

**FRUITING VEGETABLES**

Tomato, Tomatillo

Pests	Rate oz/A (lb. ai)	Instructions
Grubs Maggots Wireworms	8.0 - 12.8 (0.05 to 0.08)	Apply in-furrow with the seed or transplant.
Aphids Armyworms Including: Beet Armyworm, Fall Armyworm, Southern Yellowstriped Armyworm Bean Leaf Beetle Cabbageworm Carmine Mite Cloverworm Corn Earworm Corn Rootworm	5.3 - 12.8 (0.033 to 0.08)	Apply as necessary for insect control using a minimum of 15 gallons per acre with ground.  Thorough coverage is essential to achieve control.  [1 bag 0.05 lb. ai 8 oz formulated product]

Cucumber Beetles Cutworms Diamondback Moth European Corn Borer Flea Beetles Flea Hopper Grasshopper Japanese Beetle (Adult) Leafhoppers Loopers Lygus Spp. Melonworm Pea Weevil Pea Leaf Weevil Pickleworm Plant Bug Rindworm Saltmarsh Caterpillar Sap Beetle Seedpod Weevil Squash Bugs Stink Bug Spp. Tobacco Budworm Tarnished Plant Bug Thrips Tomato Hornworms Two Spotted Spider Mite Whiteflies		
--	--	--

**Restrictions:**

- Do not make applications less than 10 days apart.
- Do not apply more than 32 oz. product (0.2 lb. ai) per acre per season.
- Preharvest interval: 1 day.
- A maximum of 4 applications may be applied per season.

**GRAPES**

Pests	Rate oz/A (lb. ai)	Instructions
Cutworms Eastern Grape Leafhopper Grape Berry Moth Japanese Beetles Adults Variegated Leafhopper Western Grape Leafhopper	8.0 to 16.0 (0.05 -0.10)	Apply in a minimum of 10 gallons by air or in a minimum of 25 gallons with ground equipment.  Thorough coverage is essential to achieve control.  When pest pressure is moderate to severe, use higher rate.
Black Vine Weevil Glassywinged Sharpshooter Twospotted Spider Mite	16.0 (0.10)	[1 bag 0.05 lb. ai 8 oz formulated product]

**Restrictions:**

- Do not apply more than 16 oz product (0.10 lb. ai) per acre per season.
- Preharvest interval: 30 days.

## HOPS

Pests	Rate oz/A (lb. ai)	Instructions
Aphids Armyworms Cutworms Leafrollers Loopers	9.6 - 16.0 (0.06 to 0.10)	<p><b>Ground Application:</b> For best results, full coverage is essential. For early season applications use 100-150 gallons per acre. For late season applications use 200- 250 gallons per acre.</p> <p>For Root Weevil control, make a directed spray to the base of the plant. Spray up the vine 3 feet and the soil surface 1.5 to 2 feet on either side of the plant.</p> <p><b>Air Application (for late season control of Twospotted Spider Mites):</b> Apply a minimum of 16 oz product (0.10 lb. ai) per application in a minimum of 10 gallons per acre.</p> <p>[1 bag 0.05 lb. ai 8 oz formulated product]</p>
Root Weevils	8.0 - 16.0 (0.05 to 0.10)	
Twospotted Spider Mite	16.0 (0.10)	
<p><b>Restrictions</b></p> <ul style="list-style-type: none"> <li>Do not apply more than 16 oz product (0.10 lb. ai) per acre per application.</li> <li>Do not apply more than 48 oz product (0.3 lb. ai) per acre per season.</li> <li>A spray interval of 21 days between applications must be maintained.</li> <li>Preharvest interval: 14 days.</li> </ul>		

## LEAFY PETIOLE VEGETABLES

Celery, Cardoon, Chinese celery, Celtuce, Florence fennel, Rhubarb, Swiss chard

Pests	Rate oz/A (lb. ai)	Instructions
Aphids Armyworms Crickets Corn Earworm Cucumber Beetles Cutworms Diamondback Moth Flea Beetles Ground Beetles Imported Cabbageworm Leafhoppers Loopers Saltmarsh Caterpillar Stink Bugs Thrips Tobacco Budworm Whiteflies Wireworm (Adults)	5.3 to 16.0 (0.033 to 0.10)	<p>Apply in at least 2 gallons per acre by air or at least 10 gallons per acre with ground equipment.</p> <p>Thorough coverage is essential to achieve control.</p> <p>[1 bag 0.05 lb. ai 8 oz formulated product]</p>
Banks Grass Mite Carmine Mite Lygus spp. Pacific Spider Mite Twospotted Spider Mite	12.8 to 16.0 (0.08 to 0.10)	

**Restrictions:**

- Do not apply more than 80 oz product (0.5 lb. ai) per acre per season.
- Do not make applications less than 7 days apart.
- Preharvest interval: 7 days.

**LETTUCE, HEAD**

Pests	Rate oz/A (lb. ai)	Instructions
Aphids Armyworms Corn Earworm Cucumber Beetles Cutworms Diamondback Moth Flea Beetles Imported Cabbageworm Leafhoppers Loopers Saltmarsh Caterpillar Stink Bug Spp. Tobacco Budworm	5.3 - 16.0 (0.033 - 0.10)	Apply as necessary for insect control using a minimum of 20 gallons per acre with ground equipment and 5 gallons per acre by air.  Thorough coverage is essential to achieve control.  [1 bag 0.05 lb. ai 8 oz formulated product]
Carmine Mite Lygus Spp. Two Spotted Spider Mite Whiteflies	12.8 - 16.0 (0.08 - 0.10)	

**Restrictions:**

- Do not make applications less than 7 days apart.
- Do not apply more than 80 oz product (0.5 lb. ai) per acre per season.
- Preharvest interval: 7 days.

**MAYHAW**

Pests	Rate oz/A (lb. ai)	Instructions
Plum Curculio	12.8 - 16.0 (0.08 - 0.10)	Make foliar applications in at least 28 gallons per acre. [1 bag 0.05 lb. ai 8 oz formulated product]

**Restrictions:**

- Do not apply more than once every 7 days.
- Do not apply more than 32 oz product (0.2 lb. ai) per acre per season.
- Preharvest interval: 30 days.

**PEANUT**

Pests	Rate oz/A (lb. ai)	Instructions
Beet Armyworm Corn Earworm Cutworm Spp. Fall Armyworm Grasshoppers Green Cloverworm Leafhoppers Lesser Cornstalk Borer Loopers Redneck Peanut Worm Southern Armyworm Southern Corn Rootworm Stink Bugs Threecornered Alfalfa Hopper Velvetbean Caterpillar Yellowstriped Armyworm	5.3 - 16.0 (0.033 - 0.10)	Make foliar applications in at least 10 gallons per acre at the rate of 16.0 oz product (0.10 lb. ai) per acre at a minimum of 14-day intervals.  [1 bag 0.05 lb. ai 8 oz formulated product]
Aphids Spider Mites Thrips Whiteflies	5.12 - 16.0 (0.032 - 0.10)	
<p><b>Restrictions:</b></p> <ul style="list-style-type: none"> <li>• Do not apply more than 80 oz product (0.5 lb. ai) per acre per season.</li> <li>• Preharvest interval: 14 days.</li> </ul>		

**PEARS**

Pests	Rate oz/A (lb. ai)	Instructions
Aphids Codling Moth Cutworms Green Fruitworm Leafhoppers Leafminers Leafrollers Lygus Spp. Plant Bugs Plum Curculio San Jose Scale (Crawlers) Stink Bugs Tarnished Plant Bugs	6.4 - 32.0 (0.04 - 0.2)	<p><b>Ground Application:</b> Apply as a dilute (minimum of 200 gallons per acre) or concentrate (minimum of 50 gallons per acre) spray in sufficient water to provide thorough coverage.</p> <p><b>Air Application:</b> Apply in a minimum of 10 gallons per acre by air. Apply as needed to maintain control using a minimum of 30-day spray interval.</p> <p>[1 bag 0.05 lb. ai 8 oz formulated product]</p>
Yellow Spider Mite	9.6 - 32.0 (0.06 - 0.2)	
European Red Mite Twospotted Spider Mite	12.8 - 32.0 (0.08 - 0.2)	
<p><b>Restrictions:</b></p> <ul style="list-style-type: none"> <li>Do not apply more than 80 oz product (0.5 pound ai) per acre per season with no more than 0.45 pound ai per acre applied after petal fall.</li> <li>Do not graze livestock in treated orchards or cut treated cover crops for feed.</li> <li>Preharvest interval: 14 days.</li> </ul>		

**ROOT CROPS (EXCEPT SUGARBEETS)**

Crops	Pests	Rate oz/A (lb. ai)	Instructions
Burdock, edible Carrot Celeriac Chervil, turnip rooted Chicory Ginseng Horseradish Parsley, turnip rooted Parsnip Radish Radish, oriental Rutabaga Salsify Salsify, black Salsify, Spanish Skirret Turnip	Aphids Beet Armyworm Celery Leaf-tier Corn Earworm Cross-striped Cabbageworm Cutworms Diamondback Moth European Corn Borer Fall Armyworm Fire Ants Green Cloverworm Hornworms Imported Cabbageworm Loopers Southern Armyworm Tobacco Budworm Velvetbean Caterpillar Yellowstriped Armyworm Spider Mites Whiteflies	12.8 - 16.0 (0.08 - 0.10)	<p>Make foliar applications in at least 25 gallons per acre.</p> <p>[1 bag 0.05 lb. ai 8 oz formulated product]</p>
<p><b>Restrictions:</b></p> <ul style="list-style-type: none"> <li>Apply no more than once every 7 days.</li> <li>Do not apply more than 80 oz product (0.5 lb. ai) per acre per season.</li> <li>Preharvest interval: 21 days.</li> </ul>			

Crop	Pests	Rate oz/A (lb. ai)	Instructions
Garden Beet	Aphids Fire Ants Flea Beetles Lepidopterous Larvae Spider Mites Whitefly	12.8 - 16.0 (0.08 - 0.10)	Make foliar applications in at least 25 gallons per acre.
<b>Restrictions:</b>			
<ul style="list-style-type: none"> <li>Apply no more than once every 7 days.</li> <li>Do not apply more than 64 oz product (0.4 lb. ai) per acre per season.</li> </ul> Preharvest interval: 1 day.			

#### SOYBEAN

Pest	Rate oz/A (lb. ai)	Instructions
Soybean Aphid	5.3 to 16.0 (0.033 to 0.10)	Make foliar applications in at least 10 gallons per acre at the rate of 16 oz product (0.10 lb. ai) per acre at a minimum of 30-day intervals.  [1 bag 0.05 lb. ai 8 oz formulated product]
Spider Mites	12.8 to 16.0 (0.08 to 0.10)	
<b>Restrictions:</b>		
<ul style="list-style-type: none"> <li>Do not apply more than 48 oz product (0.3 lb. ai) per acre per season.</li> <li>Preharvest interval: 18 days.</li> </ul>		

#### SPINACH

Pests	Rate oz/A (lb. ai)	Instructions
Armyworms Colorado Potato Beetle Corn Earworm Cucumber Beetles Cutworms European Corn Borer Flea Beetles Leafminers Loopers Pepper Weevil Thrips Tomato Pinworm Tomato Hornworm	5.3 - 16.0 (0.033 - 0.10)	For control of fire ants apply <b>A110.03</b> to the soil (at planting) or as a foliar treatment by ground or air at rates of up to 16 oz product (0.10 lb. ai) per acre at minimum 7-day intervals up to a maximum of 4 applications.  Apply in 5-50 gallons per acre by air or 10-50 gallons finished spray per acre by ground.  For control of Whiteflies apply foliar treatments of <b>A110.03</b> by ground or air at rates up to 16 oz product (0.10 lb. ai) per acre at minimum 7-day intervals up to a maximum of 4 applications.  [1 bag 0.05 lb. ai 8 oz formulated product]
Broad Mite Banks Grass Mite Carmin Mite Fire Ants	12.8 - 16.0 (0.08 - 0.10)	

<i>Lygus</i> Spp. Pacific Spider Mite Twospotted Spider Mite Whiteflies		
<b>Restrictions:</b> <ul style="list-style-type: none"> <li>Do not make applications less than 7 days apart.</li> <li>Do not apply more than 64 oz product (0.4 lb. ai) per acre per season.</li> <li>Preharvest interval: 40 days.</li> </ul>		

### STRAWBERRIES

Pests	Rate oz/A (lb. ai)	Instructions
Aphids Armyworms Drosophila spp. (including spotted winged drosophila) Fleabeetles <i>Heliothis</i> Spp. Leafrollers <i>Lygus</i> Spp. Plant Bugs Spittlebugs Stink Bugs Strawberry Clipper Strawberry Sap Beetle Thrips Vinegar Flies (adults)	6.4 - 32.0 (0.04 - 0.2)	Apply when pest populations reach damaging thresholds. Repeat as necessary at 7-14-day intervals.  <b>Ground Application:</b> Apply in a minimum of 50 gallons per acre.  <b>Air Application (prohibited in Florida):</b> Apply in a minimum of 5 gallons per acre.  [1 bag 0.05 lb. ai 8 oz formulated product]
Black Vine Weevil Strawberry Root Weevil	8.0 - 32.0 (0.05 - 0.2)	
Spider Mites	16.0 - 32.0 (0.10 - 0.2)	
<b>Restrictions:</b> <ul style="list-style-type: none"> <li>Do not apply more than 80 oz product (0.5 lb. ai) per acre per season.</li> <li>Preharvest interval: 0 days.</li> </ul>		

**CALIFORNIA SPECIFIC REQUIREMENTS FOR STRAWBERRY HARVESTERS:** Harvesters and other personnel performing tasks with all-day foliage contact in treated fields within five (5) days of application must wear a long-sleeved shirt, long pants, and shoes plus socks.

Following treatment of strawberry fields at rates of **A110.03** greater than 0.10 lb. ai/acre, harvesters must wear gloves for five (5) days following application.

**SUCCULENT PEAS AND BEANS**

Pea (*Pisum* spp.): Dwarf pea, Edible-pod pea, English pea, Garden pea, Green pea, Snow pea, Sugar snap pea; Pigeon pea; Bean (*Phaseolus* spp.): Broadbean (succulent), Lima bean (green), Runner bean, Snap bean, Wax bean; Bean (*Vigna* spp.): Asparagus bean, Blackeyed pea, Chinese longbean, Cowpea, Moth bean, Southern pea, Yardlong bean; Jackbean; Soybean (immature seed); Sword bean

Pests	Rate oz/A (lb. ai)	Instructions
Grubs Maggots Wireworms	8.0 - 16.0 (0.05 - 0.10)	<b>Planting Time Use:</b> For Wireworms, maggots or grubs, apply in-furrow with the seed or transplant.
Aster Leafhopper Flea Beetle Grasshoppers Leafhoppers	4.0 - 16.0 (0.025 - 0.10)	<b>Foliar Use:</b> Apply in a minimum of 2 gallons per acre by air or in a minimum of 10 gallons per acre with ground equipment.
Adult Sap Beetle Alfalfa Caterpillar Aphids Bean Leaf Beetle Beet Armyworm Cloverworm Corn Earworm Corn Rootworm Adult Cucumber Beetles Cutworms European Corn Borer Fall Armyworm Japanese beetle Loopers Pea Leaf Weevil Pea Weevil Plant Bug Southern Armyworm Stink Bugs Tarnished Plant Bug Thrips Yellowstriped Armyworm Webworms Western Bean Cutworm	5.3 - 16.0 (0.033 - 0.10)	Thorough coverage is essential to achieve control.  [1 bag 0.05 lb. ai 8 oz formulated product]
Banks Grass Mite Carmine Mite <i>Lygus</i> Spp. Twospotted Spidermite Whiteflies	12.8 - 16.0 (0.08 - 0.10)	
<b>Restrictions:</b> <ul style="list-style-type: none"> <li>• Do not apply more than 32 oz product (0.2 lb. ai) per acre per season including at plant applications.</li> <li>• Preharvest interval: 3 days.</li> </ul>		

**TREE NUT CROPS**

Almond, Beech nut, Brazil nut, Butternut, Cashew, Chestnut, Chinquapin, Filbert (hazelnut), Hickory nut, Macadamia nut (bush nut), Pecan, Pistachio, Walnut (black and English).

Pests	Rate oz/A (lb. ai)	Instructions
Black Pecan Aphid Codling Moth Filbert Worm Hickory Shuckworm Leaffooted Bugs Navel Orangeworm Obliquebanded Leafroller Peach Twig Borer Pecan Leaf Casebearer Pecan Nut Casebearer Pecan Phylloxera Plant Bugs Stink Bugs Walnut Aphid Yellow Pecan Aphid	8.0 - 32.0 (0.05 - 0.20)	<p><b>Ground Application:</b> Apply as a dilute (minimum of 200 gallons per acre) or concentrate (minimum of 50 gallons per acre) spray in sufficient water to provide thorough coverage.</p> <p><b>Air Application:</b> Apply in a minimum of 10 gallons of finished spray per acre.</p> <p><b>Minimum Spray Intervals:</b> Apply <b>A110.03</b> as needed to maintain control, but do not apply at intervals sooner than 15 days.</p> <p>[1 bag 0.05 lb. ai 8 oz formulated product]</p>
European Red Mite Pecan Weevil Spider Mites	12.8 - 32.0 (0.08 - 0.20)	
Fire Ants Walnut Husk Fly	16.0 - 32.0 (0.10 - 0.20)	
<p><b>Restrictions:</b></p> <ul style="list-style-type: none"> <li>Do not apply more than 32 oz product (0.2 lb. ai) per acre per application; do not apply more than 80 oz product (0.50 lb. ai) per acre per season.</li> <li>Do not graze livestock in treated orchards or cut treated cover crops for feed.</li> <li>Observe a 21-day PHI for pecans and a 7-day PHI for all other registered tree nut crops.</li> </ul>		

## STORAGE AND DISPOSAL

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

**PESTICIDE STORAGE:** Keep out of reach of children and animals. Store in original containers only. Store in a cool dry place and avoid excess heat. Do not store at temperatures below 32°F (0°C). Rough handling may cause breakage, especially at low temperatures. Allow to warm above 50°F (10°C) before use. Do not allow inner bags to become wet during storage. Do not handle inner bag with wet hands or wet gloves. Do not put concentrate or diluted material into food or drink containers. Do not contaminate other pesticides, fertilizers, water, food or feed by storage or disposal.

In case of spill, avoid contact, isolate area and keep out animals and unprotected persons. Confine spills.

To confine spill: If liquid, dike surrounding area or absorb with sand, cat litter, or commercial clay. If dry material, cover to prevent dispersal. Place damaged package in a holding container. Identify contents.

**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:

[[non-WSB packaging in bags] Nonrefillable container. Do not reuse or refill this container. Completely empty bag into application equipment, then offer for recycling if available, or dispose of empty bag in a sanitary landfill or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.]

[[non-WSB packaging in plastic jugs] Nonrefillable container. Do not reuse or refill this container. Clean container promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. 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. Then offer for recycling if available, or puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.]

[[WSB packaging] Nonrefillable container. Do not reuse or refill this container. When all water-soluble bags are used, the outer package should be clean and may be disposed of in a sanitary landfill, by incineration or if allowed by state and local authorities, by burning. If burned, stay out of smoke. If the outer container contacts formulated product in any way, it must be triple rinsed with clean water. Triple rinse as follows: empty the remaining contents into application equipment or a mix tank. Fill the container ¼ full with water and close tightly. 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.]

[Nonrefillable Container: Do not reuse or refill this 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. Fill the container ¼ full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. Pressure rinse as follows: Empty the remaining contents into application equipment or a mix tank. 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. Offer for recycling, if available.]

### 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.

[A110.03™] is a trademark of Atticus, LLC

[Bifenture] is a registered trademark of United Phosphorus, Inc.

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

**RESTRICTED USE PESTICIDE**

Toxic to fish 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.

BIFENTHRIN	GROUP	3A	INSECTICIDE
------------	-------	----	-------------

**A110.03™**

[Alternate Brand Name: Battalion 10 WSP]

Contains bifenthrin, the active ingredient used in Bifenture® 10DF Insecticide/Miticide

**ACTIVE INGREDIENT:** ( % by weight)  
 Bifenthrin\* (2 methyl[1,1'-biphenyl]-3-yl) methyl 3-(2-chloro-3,3,3-trifluoro-1-propenyl)-2,2 dimethylcyclopropanecarboxylate .....10.0%

**OTHER INGREDIENTS:** .....90.0%  
**TOTAL** ..... 100.0%

\*Cis isomers 97% minimum, trans isomers 3% maximum

**KEEP OUT OF REACH OF CHILDREN  
 CAUTION/PRECAUCIÓN**

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 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>If in eyes:</b>	<ul style="list-style-type: none"> <li>● Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li> <li>● Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li> <li>● Call a poison control center or doctor for treatment advice.</li> </ul>
<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>NOTE TO PHYSICIAN:</b> This product is a pyrethroid. If large amounts have been ingested the stomach and intestines should be evacuated. Treatment is systematic and supportive. Digestible fats, oils, or alcohol may increase absorption and so should be avoided.	
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 or absorbed through skin. Causes moderate eye irritation. 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. Remove and wash contaminated clothing before reuse.

**ENVIRONMENTAL HAZARDS:** This pesticide is extremely toxic to fish and aquatic invertebrates. Use with care when applying in areas adjacent to any body of water. 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 make applications when weather conditions favor drift from treated areas. Drift and runoff from treated areas may be hazardous to aquatic organisms in neighboring areas. Do not contaminate water when disposing of equipment wash waters. 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. **Protect pollinating insects by following label directions intended to minimize drift and to reduce risk to these organisms.** The use of bifenthrin is prohibited in areas that may result in exposure of endangered species to bifenthrin. Prior to use in a particular county contact the local extension service for procedures and precautions to use to protect endangered species.

**PHYSICAL OR CHEMICAL HAZARDS:** Do not mix or allow contact with oxidizing agents, as a hazardous chemical reaction may occur.

**STORAGE AND DISPOSAL**

Do not contaminate water, food or feed by storage or disposal.  
**PESTICIDE STORAGE:** Keep out of reach of children and animals. Store in original containers only. Store in a cool dry place and avoid excess heat. Do not store at temperatures below 32°F (0°C). Rough handling may cause breakage, especially at low temperatures. Allow to warm above 50°F (10°C) before use. Do not allow inner bags to become wet during storage. Do not handle inner bag with wet hands or wet gloves. Do not put concentrate or diluted material into food or drink containers. Do not contaminate other pesticides, fertilizers, water, food or feed by storage or disposal. In case of spill, avoid contact, isolate area and keep out animals and unprotected persons. Confine spills. To confine spill: If liquid, dike surrounding area or absorb with sand, cat litter, or commercial clay. If dry material, cover to prevent dispersal. Place damaged package in a holding container. Identify contents.

**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:**  
 [[non-WSB packaging in bags] Nonrefillable container. Do not reuse or refill this container. Completely empty bag into application equipment, then offer for recycling if available, or dispose of empty bag in a sanitary landfill or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.]

[[non-WSB packaging in plastic jugs] Nonrefillable container. Do not reuse or refill this container. Clean container promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. 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. Then offer for recycling if available, or puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.]  
 [[WSB packaging] Nonrefillable container. Do not reuse or refill this container. When all water-soluble bags are used, the outer package should be clean and may be disposed of in a sanitary landfill, by incineration or if allowed by state and local authorities, by burning. If burned, stay out of smoke. If the outer container contains formulated product in any way, it must be triple rinsed with clean water. Triple rinse as follows: empty the remaining contents into application equipment or a mix tank. Fill the container ¼ full with water and close tightly. 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.]

[Nonrefillable Container: Do not reuse or refill this 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. Fill the container ¼ full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. Pressure rinse as follows: Empty the remaining contents into application equipment or a mix tank. 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. Offer for recycling, if available.]

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

**[A110.03™]** is not manufactured, or distributed by United Phosphorus, Inc., seller of Bifenture® 10DF Insecticide/Miticide.

Manufactured for:  
**Atticus, LLC**  
940 NW Cary Parkway, Suite 200  
Cary, NC 27513

**EPA Reg. No.: 91234-117**  
**EPA Est. No.: \_\_\_\_\_**