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 the uses covered by the certified applicator's certification.

BIFENTHRIN	GROUP	3A	INSECTICIDE

Aceto

bifenthrin 2EC

INSECTICIDE

For use on artichokes, brassica crops, bushberries, caneberries, canola, crambe, rapeseed, Christmas trees, cilantro, conifer seed orchards, coriander, citrus, corn (field, popcorn and sweet), cotton, cucurbits, dried beans and peas, fruiting vegetables, garden beets, grapes, grass forage, fodder and hay groups and grass grown for seed, pasture and rangeland, hops, leafy brassicas and turnip greens, leafy petiole vegetables, lettuce (head), mayhaw, okra, peach subgroup 12-12B, peanut, pomegranate, pome fruit (except mayhaw), roots crops, small fruit vine climbing (except fuzzy kiwi fruit) subgroup 13-07F, sod farms, soybean, spinach, succulent peas and beans, tobacco, tomato subgroup 8-10A, tree nut crops and tuberous and corm vegetables.

For Outdoor Use Only

Active Ingredient:	**By Wt.**
Bifenthrin*	25.1%
Other Ingredients:**	74.9%
TOTAL	100.0%

*Cis isomers 97% minimum, trans isomers 3% maximum.
**Contains petroleum distillates
This product contains 2 pounds active ingredient per gallon.

KEEP OUT OF REACH OF CHILDREN

WARNING AVISO

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.)

This label must be in the possession of the user at the time of application.

EPA Registration No. 2749-556 **EPA Est. No.070989-MO-001**

Manufactured by:

Actylis
4 Tri Harbor Court, Port Washington, NY 11050

NET CONTENTS
1 GALLON (3.78 liters)

Job 240636

FIRST AID	
If swallowed	• Immediately call a poison control center or doctor. • **DO NOT** induce vomiting unless told to do so by the poison control center or doctor. • **DO NOT** give any liquid to the person. • **DO NOT** give anything by mouth to an unconscious person.
If in eyes	• Hold eye open and rinse slowly and gently with water for 15-20 minutes. • Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. • Call a poison control center or doctor for treatment advice.
If inhaled	• Move person to fresh air. • If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. • Call a poison control center or doctor for further treatment advice.
If on skin or clothing	• Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15-20 minutes. • Call a poison control center or doctor for treatment advice.
NOTE TO PHYSICIAN This product is a pyrethroid. If large amounts have been ingested, the stomach and intestine should be evacuated. Treatment is symptomatic and supportive. Digestible fats, oils, or alcohol may increase absorption and so should be avoided. Contains petroleum distillates. Vomiting may cause aspiration pneumonia.	
Have the product container or label with you when calling a poison control center or doctor, or going for treatment. FOR MEDICAL EMERGENCIES INVOLVING THIS PRODUCT, CALL CHEMTREC® TOLL FREE 1-800-424-9300 or 1-703-527-3887 (24 Hours per Day, 7 Days per Week). .	

FOR CHEMICAL SPILL, LEAK, FIRE, EXPOSURE OR MEDICAL EMERGENCY INVOLVING THIS PRODUCT CALL CHEMTREC® TOLL FREE 1-800-424-9300 or 1-703-527-3887 (24 Hours per Day, 7 Days per Week). .

PRECAUTIONARY STATEMENTS
Hazards to Humans and Domestic Animals

WARNING AVISO

WARNING. May be fatal if swallowed. Causes substantial but temporary eye injury. **DO NOT** get into eyes or on clothing. Wear protective eyewear, goggles or safety glasses**.** Harmful if inhaled, or absorbed through skin. Avoid breathing vapor or spray mist. Avoid contact with skin. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet.

Personal Protective Equipment (PPE):
Some materials that are chemical-resistant to this product are listed below.

Applicators and handlers must wear:
- Long-sleeved shirt and long pants
- Chemical-resistant gloves, made of barrier laminate, nitrile rubber (≥ 14 mils), neoprene rubber (≥ 14 mils), or Viton (≥ 14 mils)
- Shoes plus socks
- Protective eyewear

Mixers and loaders supporting aerial applications to cotton must wear at a minimum:
- Long-sleeved shirt and long pants
- Chemical-resistant gloves, made of barrier laminate, nitrile rubber (≥ 14 mils), neoprene rubber (≥ 14 mils) or Viton (≥ 14 mils)
- Shoes plus socks

Mixers, loaders and applicators using mechanically pressurized handguns for applications to tuberous and corm vegetables must wear at a minimum:
- Long-sleeved shirt and long pants
- Chemical-resistant gloves, made of barrier laminate, nitrile rubber (≥ 14 mils), neoprene rubber (≥ 14 mils) or Viton (≥ 14 mils)
- Shoes plus socks

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 are present for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

Engineering Controls:
When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides (40 CFR 170.240(d)(4-6)) the handle PPE requirements may be reduced or modified as specified in the WPS.

USER SAFETY RECOMMENDATIONS

Users should:
Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.
Remove clothing/PPE immediately if drenched or 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 extremely toxic to fish and aquatic invertebrates. Drift and run-off from treated areas may be hazardous to aquatic organisms in neighboring areas. To protect the environment, **DO NOT** allow pesticide to enter run-off into storm drains, drainage ditches, gutters, or surface waters. Applying this product in calm weather when rain is not predicted for the next 24 hours will help ensure that wind or rain does not blow or wash pesticide off the treatment area. Rinsing application equipment over the treated area will help avoid run off to water bodies or drainage systems.
NON-TARGET ORGANISM ADVISORY STATEMENT:
This product is highly toxic to bees and other pollinating insects exposed to direct treatment or to residues in/on blooming crops or weeds. Protect pollinating insects by following label directions intended to minimize drift and reduce pesticide risk to these organisms.

Physical/Chemical Hazards
DO NOT mix or allow contact with oxidizing agents. 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 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.

Apply this product only as specified on this label.

Resistance Management
For resistance management, Aceto Bifenthrin 2EC contains a Group 3A insecticide. Any insect population may contain individuals naturally resistant to Aceto Bifenthrin 2EC and other Group 3A insecticides. The resistant individuals may dominate the insect population if this group of insecticides is used repeatedly in the same fields. Appropriate resistance-management strategies should be followed. To delay insecticide resistance, take the following steps:

- Rotate the use of Aceto Bifenthrin 2EC or other Group 3A insecticides within a growing season, or among growing seasons, with different groups that control the same pests.
- Use tank mixtures with insecticides from a different group that are equally effective on the target pest when such use is permitted. **DO NOT** rely on the same mixture repeatedly for the same pest population. Consider any known cross resistance issues (for the targeted pests) between the individual components of a mixture. In addition, consider the following recommendations provided by the Insecticide Resistance Action Committee (IRAC):
    - 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 pests.

- 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 insecticidal activity may offer an insect resistance management benefit only for the period where both insecticides are active.

- Adopt an integrated pest management program for insecticides 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 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.

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 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, including plants, soil, or water, is: coveralls; chemical-resistant gloves, made of barrier laminate, nitrile rubber (≥ 14 mils), neoprene rubber (≥ 14 mils) or Viton (≥ 14 mils) ; and shoes plus socks.

Application Instructions

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

Chemigation Use Directions

Apply this product only through sprinkler including center pivot, lateral move, end tow, side (wheel) roll, traveler, big gun, solid set, or hand move irrigation systems. **DO NOT** apply this product through any other type of irrigation system. **DO NOT** connect an irrigation system (including greenhouse systems) used for pesticide application to a public water system.

For a Low Energy Precision Application (LEPA) irrigation a minimum of 0.75 inch of water per acre is required. Where non-emulsified oils are used as the diluent, apply 1 to 2 pints per acre.

Results from utilizing chemigation have been variable and depend upon the set up and calibration of equipment. Crop injury, lack of effectiveness, or illegal residues in the crop can result from non-uniform distribution of treated water. Contact your State Agricultural Extension Service specialists, equipment manufacturers or other experts for consultation on the suitability of the equipment set up to obtain effective control of the target insect pests.

A person knowledgeable of the chemigation system and responsible for its operations, or under the supervision of the responsible person, shall shut the system down and make necessary adjustments if the need arises. Failure to cease application during a mechanical stoppage may result in undesirable residues to adjacent areas.

The system must contain a functional check valve, vacuum relief valve, and low pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from backflow.

The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.

The pesticide injection pipeline must also contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.

The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.

The irrigation line or water pump must include a functional pressure switch which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.

Systems must use a metering pump, for example a positive displacement injection pump (e.g. diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.

DO NOT apply when wind speed favors drift beyond the area intended for treatment.

Apply this product continuously for the duration of the water application. Dilute this product in sufficient volume to ensure accurate application over the area to be treated. When using chemigation, a minimum of 0.5 inch per acre of irrigation water is required. Agitation normally is not required when a suitable diluent is used. Conduct a compatibility test to ensure that phase separation will not occur during dilution and application. Failure to achieve a uniform dilution throughout the time of application may result in undesirable residues or less than desirable control.

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 5 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.

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 filter strip of at **least 25 feet** exists between the field edge 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-OPP2008-0331-0175"

BUFFER ZONES to Water Bodies

Buffer Zone for Ground Application (groundboom, overhead chemigation, or airblast)
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).

Buffer Zone for ULV 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).

Buffer Zone for Non-ULV Aerial Application
DO NOT apply within 150 feet of aquatic habitats (such as, but not limited to, lakes, reservoirs, rivers, streams, marshes, ponds, estuaries, and commercial fish ponds)

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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.

Tank-Mixtures
Apply Aceto Bifenthrin 2 EC in combination with other products that are registered for the same crop and application techniques. For current information on the best tank mixture partner in your area, consult with the local dealer, distributor or State Agricultural Extension service.

It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.

The user assumes the responsibility for following all label use directions.

If Aceto Bifenthrin EC is to be tank mixed with other products, conduct a compatibility test prior to mixing. Use a small container and mix all components in a small amount, usually 0.5 to 1qt. of spray mixture. Combine all products in the

same ratio and order of addition as in the proposed spray mixture. Observe the mixture for indication of incompatibility which usual occurs in 10 to 30 minutes after mixing. If incompatibility is observed, try changing the order of addition of the components. The normal guideline on tank mixture partners is driven by formulation type. Start with wettable powders (WP's) including water soluble bags (WSB's), water dispersible granules (WDG's), suspension concentrated (SC's) or flowable (F's), all with very good agitation. Next follow with water miscible concentrates and emulsifiable concentrates (EC's) before adding drift control additives, wetting agents, surfactants or crop oil concentrates (COC's). After vigorous agitation, there should be a homogeneous suspension. Let the final tank mixture stand and observe for any rapid settling or floating of components. If any indications of physical incompatibility develop, **DO NOT** use this mixture for spraying.

Pre-Harvest Interval

The pre-harvest interval (PHI) is the required days between the last application of Aceto Bifenthrin 2 EC and the harvesting of the crop. This is listed next to each crop below as (PHI – Days).

Use Rate Equivalency

The use rate for Aceto Bifenthrin 2 EC is expressed in terms of the fluid ounces (fl. oz.) of product per acre and pounds active ingredient (lb. ai) per acre. This product contains 2 pounds active ingredient per gallon. The following table expresses the use rate equivalency of fl. oz. of this product in terms of lb. ai on per acre basis.

fl. oz. per acre	lb. ai per acre
1.0	0.0156
1.3	0.02
2.1	0.033
2.6	0.04
3.2	0.05
3.8	0.06
4.0	0.062
5.12	0.08
6.4	0.1
12.8	0.2
16	0.25
19.2	0.3
32	0.5

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-bestmanagement-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. 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.

ARTICHOKES (PHI – 5 Days)

PEST	RATE	APPLICATION INSTRUCTIONS AND PRECAUTIONS
artichoke plume moth cribrate weevil	6.4 fl. oz. per acre (0.1 lb. ai per acre)	When pest population reaches damaging threshold apply spray mixture. Repeat as necessary to maintain control, but not more often than 15 day intervals. For spray applications, cover foliage with sufficient water to provide thorough, uniform coverage and distribution of spray mixture. For ground applications, use a minimum of 75 gallons of spray mixture per acre. For air applications, use a minimum of 10 gallons of spray mixture per acre.

RESTRICTIONS

- **DO NOT** apply more than 0.1 lb. ai/A (6.4 fl. oz./A) per application.
- **DO NOT** apply more than 0.5 lb. ai/A (32 fl. oz./A) per year.
- **DO NOT** make more than 5 applications per year.
- Minimum re-treatment interval (RTI) is 15 days.
- **DO NOT** apply within 5 days of harvest.

BUSHBERRIES (PHI – 1 Day)

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

PEST	RATE	APPLICATION INSTRUCTIONS AND PRECAUTIONS
Aphids Codling Moth Cutworms Green Fruitworm Leafhoppers Leafminers Leafrollers Lygus spp. Plant Bugs Plum Curculio San Jose Scale (Crawlers) Stink Bugs Tarnished Plant Bugs	2.1 to 6.4 fl. oz. per acre (0.033 to 0.1 lb.. ai per acre)	Apply in a minimum of 2 gallons of finished spray per acre by air or in a minimum of 10 gallons of finished spray per ace with ground equipment Through coverage is essential to achieve control.
Two spotted Spider Mite Yellow Mite	5.12 to 6.4 fl. oz. per acre (0.08 to 0.1 lb. ai per acre)	
European Red Mite	2.1 to 6.4 fl. oz. per acre (0.033 to 0.1 lb. ai per acre)	

RESTRICTIONS

- **DO NOT** apply more than 0.1 lb. ai/A (6.4 fl. oz./A) per application.
- **DO NOT** apply more than 0.5 pound lb. ai/A (32 fl. oz./A) per year.
- **DO NOT** make more than 5 applications per year.
- **DO NOT** make applications less than 7 days apart.
- **DO NOT** apply within 1 day of harvest.

BRASSICA CROPS (PHI – 7 Days)

head and stem brassica vegetables : broccoli, Brussels sprouts, cabbage, cauliflower, cavalo broccolo, Chinese broccoli (gai lon, white flowering broccoli), Chinese cabbage (napa), Chinese mustard cabbage (gai choy), kohlrabi

PEST	RATE	APPLICATION INSTRUCTIONS AND PRECAUTIONS
Aphids armyworms corn earworm crickets cucumber beetles cutworms diamondback moth flea beetles ground beetles imported cabbageworm leafhoppers loopers saltmarsh caterpillar stink bugs thrips tobacco budworm whitefly wireworm (adults)	2.1 to 6.4 fl. oz. per acre (0.033 to 0.1 lb. ai per acre)	For spray applications, cover foliage with sufficient water to provide thorough, uniform coverage and distribution of spray mixture. For ground applications, use a minimum of 10 gallons of spray mixture per acre. For air applications, use a minimum of 2 gallons of spray mixture per acre. Use of emulsified oil (1 to 2 quarts) is allowed to replace some of the volume of water in the spray mixture.
Banks grass mite carmine mite *Lygus spp.* Pacific spider mite two-spotted spider mite	5.12 to 6.4 fl. oz. per acre (0.08 to 0.1 lb. ai per acre)	

RESTRICTIONS

- **DO NOT** apply more than 0.1 lb. ai/A (6.4 fl. oz./A) per application.
- **DO NOT** apply more than 0.5 lb. ai/A (32 fl. oz./A) per year.
- **DO NOT** make more than 5 applications after bloom.
- **DO NOT** make applications less than 7 days apart.
- **DO NOT** apply within 7 days of harvest.

CANEBERRIES (PHI – 3 Days)

bingleberries, blackberries, dewberries, loganberries, lowberries, marionberries, olallieberries, raspberries, youngberries

PEST	RATE	APPLICATION INSTRUCTIONS AND PRECAUTIONS
leafrollers orange tortrix root weevils	3.2 to 6.4 fl. oz. per acre (0.05 to 0.1 lb. ai per acre)	For spray applications, cover foliage with sufficient water to provide thorough, uniform coverage and distribution of spray mixture. For ground applications, use a minimum of 50 gallons of spray mixture per acre. For air applications, use a minimum of 10 gallons of spray mixture per acre. Use of emulsified oil (1 to 2 quarts) is allowed to replace some of the volume of water in the spray mixture. One application may be made pre-bloom and a second application may be made post bloom. For crown borer, use as a drench application at rate of 0.1 lb. ai /a, post-harvest (fall) or pre-bloom (spring). Apply the drench application directly at the crown of plants in a minimum of 200 gallons water per acre. For best results, use higher water gallonage (up to 400 gallons/a) or in an application prior to a significant rainfall event.
raspberry crown borer* spider mites	6.4 fl. oz. per acre (0.1 lb. ai per acre)	

RESTRICTIONS

- **DO NOT** apply more than 0.1 lb. ai/A (6.4 fl. oz./A) per application.
- **DO NOT** apply more than 0.2 lb. ai/A (12.8 fl. oz./A) per year.
- **DO NOT** make more than 2 applications per year.
- **DO NOT** make both pre-bloom foliar and pre-bloom drench applications.
- **DO NOT** apply within 3 days of harvest.

CANOLA, CRAMBE, RAPESEED (PHI – 35 Days)

PEST	RATE	APPLICATION INSTRUCTIONS AND PRECAUTIONS
aphids armyworms cutworms diamondback moth flea beetle flea hopper grasshopper loopers other lepidopterous larvae plant bug seedpod weevil stink bugs thrips whitefly	2.1 to 2.6 fl. oz. per acre (0.033 to 0.04 lb. ai per acre)	For spray applications, cover foliage with sufficient water to provide thorough, uniform coverage and distribution of spray mixture. For ground applications, use a minimum of 10 gallons of spray mixture per acre. For air applications, use a minimum of 2 gallons of spray mixture per acre. Use of emulsified oil (1 to 2 quarts) is allowed to replace some of the volume of water in the spray mixture.

RESTRICTIONS

- **DO NOT** apply more than 0.04 lb. ai/A (2.6 fl. oz./A) per application.
- **DO NOT** apply more than 0.08 lb. ai/A (5.12 fl. oz./A) per year.
- **DO NOT** make more than 2 applications per year.
- **DO NOT** make applications less than 14 days apart.
- **DO NOT** apply within 35 days of harvest.

Christmas Trees

PEST	RATE	APPLICATION INSTRUCTIONS AND PRECAUTIONS
Root weevil Spruce spider mite	3.9 to 6.4 fl. oz. per acre (0.06 to 0.1 lb. ai per acre)	For spray applications, cover foliage with sufficient water to provide thorough, uniform coverage and distribution of spray mixture. For ground applications, use a minimum of 20 gallons of spray mixture per acre. For air applications, use a minimum of 5 gallons of spray mixture per acre. The product is normally not phytoxic to Christmas trees. Since all varieties grown under local climatic conditions may be hardy to this product, test a small area of typical plants to ensure that no injury occurs.

RESTRICTIONS

- **DO NOT** apply more than 0.1 lb. ai/A (6.4 fl. oz./A) per application.
- **DO NOT** apply more than 0.2 lb. ai/A (12.8 fl. oz./A) per year.
- **DO NOT** make more than 2 foliar applications of bifenthrin (all products) per season.
- **DO NOT** make applications less than 21 days apart.
- **DO NOT** make applications through irrigation systems.
- For use only in OR & WA**.**

CILANTRO, CORIANDER (PHI – 3 Days)

PEST	Rate	APPLICATION INSTRUCTIONS AND PRECAUTIONS
aphids beet armyworm cabbage looper cutworm flea beetle grasshoppers leafminer saltmarsh caterpillar spotted cucumber beetle thrips whitefly	2. 1 to 6.4 fl. oz. per acre (0.033 to 0.1 lb. ai per acre)	For spray applications, cover foliage with sufficient water to provide thorough, uniform coverage and distribution of spray mixture. For ground applications, use a minimum of 10 gallons of spray mixture per acre. For air applications, use a minimum of 2 gallons of spray mixture per acre.
two-spotted spider mite	5.12 to 6.4 fl. oz. per acre (0.08 to 0.1 lb. ai per acre)	

RESTRICTIONS

- **DO NOT** apply more than 0.1 lb. ai/A (6.4 fl. oz./A) per application.
- **DO NOT** apply more than 0.5 lb. ai/A (32 fl. oz./A) per year.
- **DO NOT** make more than 5 applications per year.
- **DO NOT** make applications less than 7 days apart.
- **DO NOT** apply within 3 days of harvest.

CITRUS FRUIT Group 10-10 * (PHI – 1 Day)

Australian desert lime; Australian finger-lime; Australian round lime; Brown River finger lime; calamondin; citron; citrus hybrids; grapefruit; Japanese summer grapefruit; kumquat; lemon; lime; Mediterranean mandarin; mount white lime; New Guinea wild lime; orange, sour; orange, sweet; pummelo; Russell River lime; satsuma mandarin; sweet lime; tachibana orange; Tahiti lime; tangelo; tangerine (mandarin); tangor; trifoliate orange; uniq fruit

PEST	RATE	APPLICATION INSTRUCTIONS AND PRECAUTIONS
diaprepes root weevil (*Diaprepes abbreviatus)* southern blue green root weevil *(Pachnaeus litus)* blue green citrus root weevil (*Pachnaeus opalus)* brown leaf notcher *(Epicarus mexicanus*) little leaf notcher (*Artipus floridanus)*	16-32 fl. oz. per acre (0.25 to 0.5 lb. ai per acre)	Use ground equipment to uniformly apply this product to the bare soil beneath citrus trees from the tree trunk to the drip line. Use a minimum of 40 gallons of spray mixture per area. For best results, use more spray volume to improve uniformity of the coverage. Pre and post-application irrigation improves uniformity of coverage. Application timing is critical to obtain optimum control. Accurate forecast of application timing is made by observing adults. Adults are most active in the early morning hours and late afternoon hours. Use traps to estimate numbers throughout the typical spring and summer emergence periods. Egg laying occurs for 8 to 10 weeks following adult emergence from the soil. Neonates drop to the soil about 2 to 3 weeks after adult emergence. The ideal time to apply the insecticide barrier is just before the neonates burrow into the soil. Peak emergence of adult diaprepes root weevil varies by geographic region depending on the climatic weather conditions, especially soil moisture. The primary diaprepes root weevil peak emergence typically occurs in spring. A minor emergence of diaprepes root weevil also occurs in late summer or early fall depending on climatic weather conditions. Southern blue-green citrus root weevil and blue-green citrus root weevil typical exhibit a single peak emergence in the spring. *(continued)*
fire ant (Solenopsis spp.) Asian cockroach *(blattella asahinae*)	6.4-16 fl. oz. per acre (0.1 to 0.25 lb. ai per acre)	

(continued)

CITRUS FRUIT Group 10-10 * (PHI – 1 Day) *(cont.)*

Australian desert lime; Australian finger-lime; Australian round lime; Brown River finger lime; calamondin; citron; citrus hybrids; grapefruit; Japanese summer grapefruit; kumquat; lemon; lime; Mediterranean mandarin; mount white lime; New Guinea wild lime; orange, sour; orange, sweet; pummelo; Russell River lime; satsuma mandarin; sweet lime; tachibana orange; Tahiti lime; tangelo; tangerine (mandarin); tangor; trifoliate orange; uniq fruit

PEST	RATE	APPLICATION INSTRUCTIONS AND PRECAUTIONS
diaprepes root weevil (*Diaprepes abbreviatus)* southern blue green root weevil *(Pachnaeus litus)* blue green citrus root weevil (*Pachnaeus opalus)* brown leaf notcher *(Epicarus mexicanus*) little leaf notcher (*Artipus floridanus)*	16-32 fl. oz. per acre (0.25 to 0.5 lb. ai per acre)	Brown leaf notcher and little leaf notcher typical exhibit 3 emergences which varies seasonally and by location. This product is used to form an insecticide soil barrier around citrus tree roots to protect from diaprepes root weevil and other citrus weevil feeding. The newly hatched larvae (neonates) are controlled by contact with the treated soil. The life cycle of the citrus root weevils starts with egg hatch in new foliage. The neonates fall to the soil surface beneath the tree. As the neonates burrow into the root zone, they come in contact the insecticide soil barrier. For best results, minimize soil disturbance after treatment beneath the trees to maintain a continuous soil barrier
fire ant (Solenopsis spp.) Asian cockroach *(blattella asahinae*)	6.4-16 fl. oz. per acre (0.1 to 0.25 lb. ai per acre)	This product use to create an insecticide soil barrier. This is one tool as part of an integrated pest management (IPM) program for control of citrus root weevils. Use this application in conjunction with good cultural practices, biological control of larvae and foliar control of adults. For the latest IPM information to protect citrus trees from citrus root weevils and other pest, consult with local State Agricultural Extension service for suggested practices suited for local conditions. Apply to individual citrus resets, when not in solid planted rows, using hand-gun or shielded sprayer. Peak emergence of Diaprepes root weevil typically occurs in the spring.

(continued)

CITRUS FRUIT Group 10-10 * (PHI – 1 Day) *(cont.)*

Australian desert lime; Australian finger-lime; Australian round lime; Brown River finger lime; calamondin; citron; citrus hybrids; grapefruit; Japanese summer grapefruit; kumquat; lemon; lime; Mediterranean mandarin; mount white lime; New Guinea wild lime; orange, sour; orange, sweet; pummelo; Russell River lime; satsuma mandarin; sweet lime; tachibana orange; Tahiti lime; tangelo; tangerine (mandarin); tangor; trifoliate orange; uniq fruit

PEST	RATE	APPLICATION INSTRUCTIONS AND PRECAUTIONS
diaprepes root weevil (*Diaprepes abbreviatus)* southern blue green root weevil *(Pachnaeus litus)* blue green citrus root weevil (*Pachnaeus opalus)* brown leaf notcher *(Epicarus mexicanus*) little leaf notcher (*Artipus floridanus)*	16-32 fl. oz. per acre (0.25 to 0.5 lb. ai per acre)	*(continued)* Depending on weather conditions, a minor emergence of Diaprepes root weevil may also occur in the fall. If the citrus grove to be treated is in an area where weather conditions are conducive to primary emergence occurring in the spring, use 32 fl. oz. of this product to obtain the longest residual management of Diaprepes root weevil. If the citrus grove to be treated is in an area where weather conditions will promote more than one peak of pest emergence, 16 fl. oz. formulated product can be applied early season and 16 fl. oz. formulated product can be applied later in the season. Apply the specified dosage in a minimum of 40 gallons of finished spray per acre.
fire ant (Solenopsis spp.) Asian cockroach *(blattella asahinae*)	6.4-16 fl. oz. per acre (0.1 to 0.25 lb. ai per acre)	

RESTRICTIONS

- **DO NOT** apply more than 0.5 lb. ai/A (32 fl. oz./A) per application and **DO NOT** apply more than 0.25 lb. ai/A (16 fl. oz./A) per application for control of Fire ants and Asian Cockroach.
- **DO NOT** apply more than 0.5 lb. ai/A (32 fl. oz./A) per year.
- **DO NOT** make more than 1 application per year.
- **DO NOT** apply within 1 day of harvest.
- **DO NOT** apply through irrigation systems.
- **DO NOT** allow any application of this product to contact fruit or foliage.
- Ground application only.
- **DO NOT** apply by air.

* Not for Use in California.

CITRUS (For Use in California) (PHI – 1 Day)

PEST	RATE	APPLICATION INSTRUCTIONS AND PRECAUTIONS
diaprepes root weevil (*Diaprepes abbreviatus)* *fire ant (Solenopsis spp.)* Asian cockroach (*blattella asahinae*)	16-32 fl. oz. per acre (0.25 to 0.5 lb. ai per acre)	Use hand-gun or shielded sprayers to apply spray mixture to individual citrus resets. The primary diaprepes root weevil peak emergence typically occurs in spring. A minor emergence of diaprepes root weevil also occurs in late summer or early fall depending on climatic weather conditions. Use this product at 32 fl. oz. per acre if growing area is in a geographic region conducive to primary diaprepes root weevil emergence. This will provide longest residual control of diaprepes root weevil. If growing area is in geographic region that will favor more than one peak emergence of diaprepes root weevil, use this product at 16 fl. oz. per acre in split applications early in the growing season and later in the season. If the emergence of diaprepes root weevil is beyond the length of the residual control of this product additional management strategies, i.e. foliar adult control or soil larvae control, e.g nematodes are to be employed by the grower. Consult with local State Agricultural Extension service for suggested practices suited for local conditions. Use a minimum of 30 gallons of spray mixture per acre. Ground application only.

RESTRICTIONS

- **DO NOT** apply more than 0.5 lb. ai/A (32 fl. oz./A) per application.
- **DO NOT** apply more than 0.25 lb. ai/A (16 fl. oz./A) per application for control of Fire ants and Asian Cockroach.
- **DO NOT** apply more than 0.5 lb. ai/A (32 fl. oz./A) per year.
- **DO NOT** make more than 1 application per year.
- **DO NOT** apply within 1 day of harvest.
- **DO NOT** apply through irrigation systems.
- **DO NOT** allow any application of this product to contact fruit or foliage.
- Ground application only.
- **DO NOT** apply by air.

Conifer Seed Orchards

PEST	RATE	APPLICATION INSTRUCTIONS AND PRECAUTIONS
cone worms seed bugs seed worms	6.4 to 12.8 fl. oz. per acre (0.1 to 0.2 lb. ai per acre)	For spray applications, cover foliage with sufficient water to provide thorough, uniform coverage and distribution of spray mixture. For ground applications, use a minimum of 100 to 500 gallons of spray mixture per acre. For air applications, use a minimum of 10 gallons of spray mixture or 0.5 gallons of refined vegetable oil per acre. Start the initial application 7 days after peak pollen flight and continue on 30-day intervals. Do not make applications through irrigation systems. For use only in AL, AR, FL, GA, LA, MS, OK, SC, TN, TX & VA.

RESTRICTIONS

- **DO NOT** apply more than 0.2 lb. ai/A (12.8 fl. oz./A) per application.
- **DO NOT** apply more than 0.6 lb. ai/A (38.4 fl. oz./A) per year.
- **DO NOT** make more than 3 applications per year.
- **DO NOT** make applications less than 30 days apart.

FIELD CORN (GRAIN AND SILAGE), POPCORN, FIELD CORN GROWN FOR SEED (AT PLANT USE) (PHI – 30 Days)

Row spacing (inches)	40	38	36	30
Aceto Bifenthrin 2 EC (pounds ai per acre)	.06	.064	.069	.08
Aceto Bifenthrin 2 EC (formulated ounces per acre)	3.9	4.1	4.4	5.12

PEST	RATE	APPLICATION INSTRUCTIONS AND PRECAUTIONS
corn rootworm larvae (Mexican, northern, southern, western)	0.30 fl. oz. (0.0046 lb. ai) per 1,000 linear feet of row	Apply as a 5 to 7 inch T-band treatment over an open seed furrow. Position the spray nozzle behind the planter shoe in front of the press wheel centered over the row. Use the table above to determine the product needs per acre. Apply in a minimum of 3 gallons of finished spray per acre. (3 gallons per acre is approximately 0.2 gallons per 1000 linear feet of row at 36 inch spacing). Mix this product with water or fertilizer in the following manner. Fill the spray tank approximately one-half full with water or liquid fertilizer, add the proper amount of this product, then add the rest of the water or fertilizer. Provide sufficient agitation during mixing and application to maintain a uniform spray mixture. Applications of this product alone or in tank mixtures, in conjunction with in furrow pop-up fertilizers may be used. Conduct a jar compatibility test with appropriate ratio of this product and fertilizer to ensure mixture will stay in solution. Maintain constant agitation during mixing and application.
army cutworm other cutworm species grubs seed corn beetle seed corn maggot true armyworm other armyworm species wireworm	0.15 to 0.30 fl. oz. (0.0023 to 0.0046 lb. a.i.) per 1,000 linear feet of row	

RESTRICTIONS

- **DO NOT** apply to soil where there is greater than 30% cover of crop residue remaining.
- **DO NOT** apply more than 0.1 lb. ai/A (6.4 fl. oz./A) per application as an at-plant application.
- **DO NOT** apply within 30 days of harvest.
- **DO NOT** graze livestock in treated areas or cut treated crops for feed within 30 days of the last application.

FIELD CORN (GRAIN AND SILAGE), POPCORN, FIELD CORN GROWN FOR SEED
Preplant
Incorporated (PPI) & Preemergence (PRE)

PEST	RATE	APPLICATION INSTRUCTIONS AND PRECAUTIONS
armyworm spp. black cutworm seedcorn maggot stalkborer white grubs wireworm	3 to 4 fl. oz. per acre **PPI** (0.047 to 0.062 lb. ai / acre)	The 3-4oz/A rate must be applied as PPI and can be tank mixed and applied with PPI herbicides. **DO NOT** incorporate this product any deeper than the intended planting depth and no deeper than 3 inches. The incorporation depth is to be close to the intended seed planting depth.
armyworm spp. black cutworm stalkborer	2.56 fl. oz. per acre (0.04 lb. ai / acre) **PRE**	The 2.56 oz. /A rate may be applied PRE and can be tank mixed and applied with PRE herbicides.

RESTRICTIONS

- **DO NOT** apply more than 0.062 lb. ai/A (4 fl. oz./A) per application as a PPI application.
- **DO NOT** apply more than 0.04 lb. ai/A (2.56 fl. oz./A) per application as a PRE application
- **DO NOT** apply more than 0.3 lb. ai/A per year including, at-plant, PRE, PPI, and foliar applications.
- **DO NOT** apply within 30 days of harvest.
- **DO NOT** graze livestock in treated areas or cut treated crops for feed within 30 days of the last application.
- Use of ultra-low volume (ULV) application on corn is prohibited.
- **DO NOT** make aerial or ground applications to corn if heavy rainfall is imminent.

FIELD CORN (GRAIN AND SILAGE), POPCORN, FIELD CORN GROWN FOR SEED
(Foliar use) (PHI – 30 Days)

PEST	RATE	APPLICATION INSTRUCTIONS AND PRECAUTIONS
aphid army cutworm beet armyworm cereal leaf beetle chinch bug common stalk borer corn earworm corn rootworm adults cucumber beetle adults cutworm species European corn borer fall armyworm flea beetle grasshoppers greenbug Japanese beetle adult leafhopper sap beetle southern armyworm southern corn leaf beetle southwestern corn borer stinkbugs tarnished plant bug thrips true armyworm or armyworm species webworms western bean cutworm yellowstriped armyworm	2.1 to 6.4 fl. oz. per acre (0.033 to 0.1 lb. ai / acre)	For spray applications, cover foliage with sufficient water to provide thorough, uniform coverage and distribution of spray mixture. For ground applications, use a minimum of 10 gallons of spray mixture per acre. For air applications, use a minimum of 2 to 5 gallons of spray mixture per acre. For best results under heavy pest pressure, use 5 gallons of spray mixture per acre. Use of emulsified oil (1 to 2 quarts) is allowed to replace some of the volume of water in the spray mixture. To control ear-attacking pests: Apply this product just before silking and repeat as necessary to maintain control. Southwestern corn borer, European corn borer: For best corn borer results, make initial application at or shortly before egg hatch. For control of other insect pests, make initial application when pests first appear and repeat as necessary.

(continued)

FIELD CORN (GRAIN AND SILAGE), POPCORN, FIELD CORN GROWN FOR SEED *(cont.)*
(Foliar use) (PHI – 30 Days)

PEST	RATE	APPLICATION INSTRUCTIONS AND PRECAUTIONS
Banks grass mite carmine mite two-spotted spider mite	5.12 to 6.4 fl. oz per acre (0.08 to 0.1 lb. ai / acre)	Apply for Banks grass mite control when colonies first form prior to leaf damage or discoloration and before dispersal above the bottom third of the plant. For two-spotted spider mite and carmine mite control: Apply when colonies first form prior to leaf damage or discoloration and before wide-spread mite dispersal throughout the canopy. Higher labeled rates will be necessary for heavier initial populations and corn under heat or drought stress. Field experience with dimethoate at 0.5 lb. a.i. per acre in tank mixture has demonstrated good control under these conditions. For mite control in Texas, New Mexico, Oklahoma, and Arizona: For ground applications, use a minimum of 10 gallons of spray mixture per acre for ground application and use a minimum of 5 gallons of spray mixture per acre for air application.

RESTRICTIONS

- **DO NOT** apply more than 0.1 lb. ai/A (6.4 fl. oz./A) per application.
- **DO NOT** apply more than 0.3 lb. ai/A (19.2 fl. oz./A) per year including at-plant, PRE, PPI, and foliar applications.
- **DO NOT** make more than 3 foliar applications per year.
- **DO NOT** apply within 30 days of harvest.
- **DO NOT** graze livestock in treated areas or cut treated crops for feed within 30 days of the last application.
- Use of ultra low volume (ULV) application on corn is prohibited.
- **DO NOT** make aerial or ground applications to corn if heavy rainfall is imminent.

SWEET CORN (GRAIN AND SILAGE)
SWEET CORN GROWN FOR SEED
(At plant use) (PHI – 30 Days)

Apply as directed in the following table at rates indicated. To calculate the amount of this product to use per acre based on row spacing refer to the conversion chart below.

Row Spacing (inches)	40	38	36	30
Aceto Bifenthrin 2 EC (pounds ai per acre)	.06	.064	.069	.08
Aceto Bifenthrin 2 EC (formulated ounces per acre)	3.9	4.1	4.4	5.12

PEST	RATE	APPLICATION INSTRUCTIONS AND PRECAUTIONS
corn rootworm larvae (Mexican, northern, southern, western)	0.3 fl. oz. per 1000 linear feet of row (0.0046 lb. ai per 1000 linear feet of row)	Apply as a 5 to 7 inch T-band treatment over an open seed furrow. Position the spray nozzle behind the planter shoe, in front of the press wheel centered over the row. Use the table above to determine the product needs per acre. Apply in a minimum of 3 gallons of finished spray per acre. Mix this product with water or fertilizer in the following manner. Fill the spray tank approximately one-half full with water or liquid fertilizer, add the proper amount of this product, then add the rest of the water or fertilizer. Provide sufficient agitation during mixing and application to maintain a uniform spray mixture. Applications of this product alone or in tank mixtures, in conjunction with in furrow pop-up fertilizers may be used. Conduct a jar compatibility test with appropriate ratio of this product and fertilizer to ensure mixture will stay in solution. Maintain constant agitation during mixing and application.
army cutworm cutworm species grubs seed corn beetle seed corn maggot true armyworm or armyworm species wireworm	0.15 to 0.3 fl. oz. per 1000 linear feet of row (0.0023 to 0.0046 lb. ai per 1000 linear feet of row)	

RESTRICTIONS

- **DO NOT** apply more than 0.1 lb. ai/A per year as an at-plant application.
- **DO NOT** apply within 30 days of harvest.
- **DO NOT** graze livestock in treated area or cut treated crops for feed within 30 days of treatment.
- **DO NOT** apply to soil where there is greater than 30% cover of crop residue remaining.

SWEET CORN (GRAIN AND SILAGE)
SWEET CORN GROWN FOR SEED
(Foliar use) (PHI – 1 Day)

PEST	RATE	APPLICATION INSTRUCTIONS AND PRECAUTIONS
aphids army cutworm beet armyworm cereal leaf beetle chinch bug common stalk borer corn earworm corn rootworm adults cucumber beetle adult cutworm species European corn borer fall armyworm flea beetle grasshoppers greenbug Japanese beetle adult Leafhopper sap beetle southern armyworm southern corn leaf beetle southwestern corn borer stinkbugs tarnished plant bug true armyworm or armyworm species webworms western bean cutworm yellowstriped armyworm	2.1 to 6.4 fl. oz. per acre (0.033 to 0.1 lb. ai per acre)	Apply in a minimum of 2 gallons of finished spray 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. To control ear-attacking pests: Apply this product when silking begins and repeat as necessary to maintain control. Southwestern corn borer, European corn borer: Make 2 applications for corn borer control with the initial application at or shortly before egg hatch. For control of other insect pests: Apply when pests first appear and repeat as necessary.

(continued)

SWEET CORN (GRAIN AND SILAGE)
SWEET CORN GROWN FOR SEED
(Foliar use) (PHI – 1 Day) *(cont.)*

PEST	RATE	APPLICATION INSTRUCTIONS AND PRECAUTIONS
Banks grass mite carmine mite two-spotted spider mite	5.12 to 6.4 fl. oz per acre (0.08 to 0.1 lb. ai per acre)	Apply for Banks grass mites control when colonies first form from prior to leaf damage or discoloration and before dispersal above the bottom third of the plant. For two-spotted spider mite and carmine mite control: Apply when colonies first form prior to leaf damage or discoloration and before widespread mite dispersal throughout the canopy. Higher labeled rates will be necessary for heavier initial populations and corn under heat or drought stress. Costal restrictions removed.

RESTRICTIONS

- **DO NOT** apply more than 0.1 lb. ai/A (6.4 fl. oz./A) per application.
- **DO NOT** apply more than 0.2 lb. ai/A (12.8 fl. oz./A) per year.
- **DO NOT** make more than 2 foliar applications per year.
- **DO NOT** apply within 1 day of harvest.
- **DO NOT** graze livestock in treated areas or cut treated crops for feed within 1 day of the last application.
- Use of ultra low volume (ULV) application on corn is prohibited.
- **DO NOT** make aerial or ground applications to corn if heavy rainfall is imminent.

COTTON (PHI – 14 Days)

PEST	RATE	APPLICATION INSTRUCTIONS AND PRECAUTIONS
European corn borer soybean (banded) thrips tobacco thrips	1.3 to 6.4 fl. oz. (0.02 to 0.1 lb. ai) per acre	This product may be applied in water or refined vegetable oil (soybean/cottonseed). Application in Water: Apply in a minimum of 5 gallons per acre with ground equipment or 1 gallon per acre by aircraft. When applying by air, 1 quart of emulsified oil may be substituted for one quart of water in the finished spray. ULV Application: Apply the specified rate of this product in refined vegetable oil in a minimum of 1 quart of finished spray per acre with aircraft calibrated to give adequate coverage. To control boll weevil: Apply this product at an interval of 3 to 4 days until pest numbers are reduced to acceptable levels. To control mites and aphids**:** Apply when pests first appear. Repeat as necessary to maintain control. Higher rates will be required once a damaging threshold is established.
boll weevil bollworm cabbage looper cotton aphid cotton fleahopper cotton leaf perforator cutworms fall armyworm *Lygus spp.* plant bugs saltmarsh caterpillar southern garden leafhopper stink bugs tobacco budworm whitefly yellow striped armyworm	2.6 to 6.4 fl. oz. (0.04 to 0.1 lb. ai) per acre	
beet armyworm carmine spider mite *Lygus spp.* pink bollworm two-spotted spider mite	3.8 to 6.4 fl. oz. (0.06 to 0.1 lb. ai) per acre	

RESTRICTIONS

- **DO NOT** apply more than 0.1 lb. ai/A (6.4 fl. oz./A) per application.
- **DO NOT** apply more than 0.5 lb. ai/A (32fl. oz./A) per year in all states except in California. For California, **DO NOT** apply more than 0.3 lb. ai/A (19.2 fl. oz./A) per year.
- **DO NOT** make more than 5 applications per year in all states except in California. For California, **DO NOT** make more than 3 applications per year.
- Minimum re-treatment interval (RTI) is 3 days.
- **DO NOT** apply within 14 days of harvest.
- **DO NOT** graze livestock in treated areas or cut treated crops for feed.
- **DO NOT** make more than 10 synthetic pyrethroid applications (of one product or combination of products) to a cotton crop in one year.

CUCURBITS (PHI – 3 Days)

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, Crenshaw melon, golden pershaw melon, honeydew melon, honey balls, mango melon, Persian melon, pineapple melon Santa Claus melon, snake melon), pumpkin (*Cucurbita spp.),* summer squash (includes: crookneck squash, scallop squash, straightneck squash, vegetable marrow, zucchini), winter squash (includes: butternut squash, calabaza, Hubbard squash (*C. mixta; C. pepo)* includes acorn squash, spaghetti squash), watermelon (includes hybrids and or varieties of *Citrullis spp.*)

PEST	RATE	APPLICATION INSTRUCTIONS AND PRECAUTIONS
aphids armyworms cabbage looper corn earworm cucumber beetles cutworm grasshopper leafhoppers melonworm pickleworm plant bug rindworm squash bugs squash vine borer stink bugs tobacco budworm	2.6 to 6.4 fl. oz. per acre (0.04 to 0.1 lb. ai per acre)	For spray applications, cover foliage with sufficient water to provide thorough, uniform coverage and distribution of spray mixture. For ground applications, use a minimum of 20 gallons of spray mixture per acre. For air applications, use a minimum of 5 gallons of spray mixture per acre. Use of emulsified oil (1 to 2 quarts) is allowed to replace some of the volume of water in the spray mixture.
Banks grass mite Carmine mite *Lygus spp.* two-spotted spider mite whitefly	5.12 to 6.4 fl. oz. per acre (0.08 to 0.1 lb. ai per acre	

RESTRICTIONS

- **DO NOT** appl more than 0.1 lb. ai/A (6.4 fl. oz./A) per application.
- **DO NOT** apply more than 0.3 lb. ai/A (19.2 fl. oz./A) per year.
- **DO NOT** make more than 3 applications per year and **DO NOT** make more than 2 applications after bloom.
- **DO NOT** make applications less than 7 days apart.
- **DO NOT** apply within 3 days of harvest.

DRIED BEANS AND PEAS (PHI – 14 Days)

Dried cultivars of: bean (Lupins), bean (*Phaseolus spp.*), field bean, kidney bean, lima bean(dry), navy bean, pinto bean, tepary bean, bean (thrips *Vigna spp.*), adzuki bean, blackeyed pea, catjang, cowpea, crowder pea, moth bean, mung bean, rice bean, southern pea, urd bean, broad bean (dry), chickpea, guar, lablab bean, lentil, pea (*Piscum spp.*), field pea, pigeon pea

PEST	RATE	APPLICATION INSTRUCTIONS AND PRECAUTIONS
aster leafhopper flea beetle grasshopper leafhoppers	1.6 to 6.4 fl. oz. per acre (0.025 to 0.1 lb. ai per acre)	For spray applications, cover foliage with sufficient water to provide thorough, uniform coverage and distribution of spray mixture. For ground applications, use a minimum of 10 gallons of spray mixture per acre. For air applications, use a minimum of 2 gallons of spray mixture per acre. Use of emulsified oil (1 to 2 quarts) is allowed to replace some of the volume of water in the spray mixture. .
adult sap beetle adult thrips alfalfa caterpillar aphids bean leaf beetle beet armyworm cloverworm corn earworm loopers corn rootworm cucumber beetles cutworms European corn borer fall armyworm imported cabbage-worm Japanese beetle leafminer pea weevil pea leaf weevil plant bug saltmarsh caterpillar southern armyworm stink bugs tarnished plant bug tobacco budworm webworms western bean cutworm whitefly yellowstriped armyworm	2.1 to 6.4 fl. oz per acre (0.033 to 0.1 lb. ai per acre)	

(continued)

DRIED BEANS AND PEAS (PHI – 14 Days) *(cont.)*

Dried cultivars of: bean (Lupins), bean (*Phaseolus spp.*), field bean, kidney bean, lima bean(dry), navy bean, pinto bean, tepary bean, bean (thrips *Vigna spp.*), adzuki bean, blackeyed pea, catjang, cowpea, crowder pea, moth bean, mung bean, rice bean, southern pea, urd bean, broad bean (dry), chickpea, guar, lablab bean, lentil, pea (*Piscum spp.*), field pea, pigeon pea

PEST	RATE	APPLICATION INSTRUCTIONS AND PRECAUTIONS
Banks grass mite carmine mite *Lygus spp.* two-spotted spider mite	5.12 to 6.4 fl. oz per acre (0.08 to 0.1 lb. ai per acre)	For spray applications, cover foliage with sufficient water to provide thorough, uniform coverage and distribution of spray mixture. For ground applications, use a minimum of 10 gallons of spray mixture per acre. For air applications, use a minimum of 2 gallons of spray mixture per acre. Use of emulsified oil (1 to 2 quarts) is allowed to replace some of the volume of water in the spray mixture. .

RESTRICTIONS

- **DO NOT** apply more than 0.1 lb. ai/A (6.4 fl. oz./A) per application.
- **DO NOT** apply more than 0.2 lb. ai/A (12.8 fl. oz./A) to peas, or 0.3 lb. ai/A (19.2 fl. oz./A) to beans per year.
- **DO NOT** make more than 2 applications to peas and 3 applications to beans per year.
- **DO NOT** make applications less than 7 days apart.
- **DO NOT** apply within 14 days of harvest.

FRUITING VEGETABLES (PHI – 7 Days)

eggplant, pepper (bell & non-bell), groundcherry, pepino

PEST	RATE	APPLICATION INSTRUCTIONS AND PRECAUTIONS
armyworms: Including beet armyworm, Fall armyworm, Southern yellowstriped armyworm 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 hornworm tomato pinworm vegetable leafminer whitefly	2.1 to 6.4 fl. oz. per acre (0.033 to 0.1 lb. ai per acre)	For spray applications, cover foliage with sufficient water to provide thorough, uniform coverage and distribution of spray mixture. For ground applications, use a minimum of 10 gallons of spray mixture per acre. For air applications, use a minimum of 2 gallons of spray mixture per acre. Use of emulsified oil (1 to 2 quarts) is allowed to replace some of the volume of water in the spray mixture. .
banks grass mite broad mite carmine mite *Lygus spp.* Pacific spider mite two- spotted spider mite	5.12 to 6.4 fl. oz. per acre (0.08 to 0.1 lb. ai per acre)	

RESTRICTIONS

- **DO NOT** apply more than 0.1 lb. ai/A (6.4 fl. oz./A) per application.
- **DO NOT** apply more than 0.2 lb. ai/A (12.8 fl. oz./A) per year.
- **DO NOT** make more than 2 applications per year.
- **DO NOT** make applications less than 7 days apart.
- **DO NOT** apply within 7 days of harvest.

GARDEN BEET (PHI – 1 Day)

PEST	RATE	APPLICATION INSTRUCTIONS AND PRECAUTIONS
aphids fire ants flea beetles lepidopterous larvae spider mites whitefly	5.12 to 6.4 fl. oz. per acre (0.08 to 0.1 lb. ai per acre)	For spray applications, cover foliage with sufficient water to provide thorough, uniform coverage and distribution of spray mixture. For ground applications, use a minimum of 25 gallons of spray mixture per acre. For air applications, use a minimum of 2 gallons of spray mixture per acre.
RESTRICTIONS • **DO NOT** apply more than 0.1 lb. ai/A (6.4 fl. oz./A) per application. • **DO NOT** apply more than 0.4 lb. ai/A (25.6 fl. oz./A) per year. • **DO NOT** make more than 4 applications per year. • **DO NOT** make applications less than 7 days apart. • **DO NOT** apply within 1 day of harvest.		

GRAPES (For Use in California) (PHI – 30 Days)

PEST	RATE	APPLICATION INSTRUCTIONS AND PRECAUTIONS
cutworms eastern grape leafhopper grape berry moth Japanese beetles adults variegated leafhopper western grape leafhopper	3.2 to 6.4 fl. oz per acre (0.05 to 0.1 lb. ai / acre)	For spray applications, cover foliage with sufficient water to provide thorough, uniform coverage and distribution of spray mixture. For ground applications, use a minimum of 25 gallons of spray mixture per acre. For air applications, use a minimum of 10 gallons of spray mixture per acre. Use of emulsified oil (1 to 2 quarts) is allowed to replace some of the volume of water in the spray mixture. Use the higher rate for moderate to severe pest pressure.
black vine weevil glassywinged sharpshooter two-spotted spider mite	6.4 fl. oz/ acre (0.1 lb. ai per acre)	
RESTRICTIONS • **DO NOT** apply more than 0.1 lb. ai/A (6.4 fl. oz./A) per application. • **DO NOT** apply more than 0.1 lb. ai/A (6.4 fl. oz./A) per year. • **DO NOT** make more than 1 application per year. • **DO NOT** apply within 30 days of harvest.		

GRASS FORAGE, FODDER, and HAY GROUP and GRASS GROWN FOR SEED, (PHI – 30 Days)
PASTURE and RANGELAND
bahiagrass, barnyardgrass, bentgrass, Bermudagrass, Kentucky bluegrass, big bluestem, smooth bromegrass, buffalograss, reed canarygrass, centipedegrass, crabgrass, cupgrass, dallisgrass, sand dropseed, Kentucky fescue, meadow foxtail, eastern gramagrass, side-oats grama, guinea grass, Indian grass, Johnsongrass, lovegrass, napiergrass, oatgrass, orchardgrass, pangolagrass, paspalum, redtop, Italian ryegrass, St. Augustine grass, sprangletop, squirreltailgrass, stargrass, switchgrass, timothy, crested wheatgrass, wildrye grass and zoysia grass, sudangrass and sorghum forages and their hybrids.

NOTE: Use on grasses is limited to the States of Idaho, Oregon, and Washington.

PEST	RATE	APPLICATION INSTRUCTIONS AND PRECAUTIONS
Alfalfa Caterpillar Alfalfa Looper Alfalfa Weevil Armyworm, fall Armyworm, southern Armyworm, true Armyworm, Yellowstriped Ant spp. Black Grass Bug Blue Alfalfa Aphid[1] Cereal Leaf Beetle Chinch Bug Cricket Cutworms Egyptian Alfalfa Weevil (larvae & adult) Flea Beetles Grass Mealybug Grasshoppers Green Cloverworm Green Peach Aphid[1] Hornworms Hunting Bill Bug Meadow Spittlebug Pea Aphid[1] Plant Bug spp. Potato *(continued)*	6.4 fl. oz. per acre (0.1 lb. ai per acre)	Apply as insects appear in sufficient volume of water to ensure thorough coverage of foliage. Use higher labeled dosage for increased pest pressure or for increased residual pest control. **DO NOT** exceed maximum labeled rate. Apply in a minimum of 2 gallons of finished spray per acre by aerial equipment or 10 gallons of finished spray per acre by ground equipment. Higher volumes of finished spray may improve insect control under high temperatures, when foliage is dense and/or when insect pressure is high.

(continued)

GRASS FORAGE, FODDER, and HAY GROUP and GRASS GROWN FOR SEED, (PHI – 30 Days)
PASTURE and RANGELAND *(cont.)*
bahiagrass, barnyardgrass, bentgrass, Bermudagrass, Kentucky bluegrass, big bluestem, smooth bromegrass, buffalograss, reed canarygrass, centipedegrass, crabgrass, cupgrass, dallisgrass, sand dropseed, Kentucky fescue, meadow foxtail, eastern gramagrass, side-oats grama, guinea grass, Indian grass, Johnsongrass, lovegrass, napiergrass, oatgrass, orchardgrass, pangolagrass, paspalum, redtop, Italian ryegrass, St. Augustine grass, sprangletop, squirreltailgrass, stargrass, switchgrass, timothy, crested wheatgrass, wildrye grass and zoysia grass, sudangrass and sorghum forages and their hybrids.

NOTE: Use on grasses is limited to the States of Idaho, Oregon, and Washington.

PEST	RATE	APPLICATION INSTRUCTIONS AND PRECAUTIONS
(continued) Leafhopper Range caterpillar Spotted Alfalfa Aphid[1] Stink Bugs Threecornered Alfalfa Hopper Velvetbean Caterpillar Webworms	6.4 fl. oz. per acre (0.1 lb. ai per acre)	Apply as insects appear in sufficient volume of water to ensure thorough coverage of foliage. Use higher labeled dosage for increased pest pressure or for increased residual pest control. **DO NOT** exceed maximum labeled rate. Apply in a minimum of 2 gallons of finished spray per acre by aerial equipment or 10 gallons of finished spray per acre by ground equipment. Higher volumes of finished spray may improve insect control under high temperatures, when foliage is dense and/or when insect pressure is high.

RESTRICTIONS

- **DO NOT** apply more than 0.1 lb. ai/A (6.4 fl. oz./A) per application.
- **DO NOT** apply more than 0.2 lb. ai/A (12.8 fl. oz./A) per year.
- **DO NOT** make more than 2 applications per year.
- **DO NOT** make applications less than 14 days apart.
- Applications may be made up to 30 days prior to harvest for forage and hay.

[1]Aphid control may be variable depending on species present and host-plant relationships.

HOPS (PHI – 14 Days)

PEST	RATE	APPLICATION INSTRUCTIONS AND PRECAUTIONS
aphids armyworms cutworms leafrollers loopers	3.8 to 6.4 fl. oz per acre (0.06-0.1 lb. ai per acre)	For spray applications, cover foliage with sufficient water to provide thorough, uniform coverage and distribution of spray mixture. For ground applications in early season, use 100 to 150 gallons of spray mixture per acre. In late season, use 200 to 250 gallons of spray mixture per acre. 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. Application by air for late season control of two-spotted spider mites**:** Apply no less than 6.4 oz (0.1 lb. ai) per application in a minimum of 10 gallons per acre.
root weevils	3.2 to 6.4 fl. oz per acre (0.05 to 0.1 lb. ai per acre)	
two-spotted spider mite	6.4 fl. oz per acre (0.1 lb. ai per acre)	

RESTRICTIONS

- **DO NOT** apply more than 0.1 lb. ai/A (6.4 fl. oz./A) per application.
- **DO NOT** apply more than 0.3 lb. ai/A (19.2 fl. oz./A) per year.
- **DO NOT** make more than 3 applications per year.
- **DO NOT** make applications less than 21 days apart.
- **DO NOT** apply within 14 days of harvest.
- Use of ultra low volume (ULV) application on hops is prohibited.

LEAFY BRASSICAS and TURNIP GREENS* (PHI – 7 Days)

broccoli raab, bok choy, collards, kale, mizuna, mustard greens, mustard spinach, rape greens, turnip greens

PEST	RATE	APPLICATION INSTRUCTIONS AND PRECAUTIONS
aphids armyworms corn earworm crickets cucumber beetles cutworms diamondback moth flea beetles grasshoppers ground beetles imported cabbage-worm Japanese beetle (adult) leafhoppers loopers saltmarsh caterpillar stink bugs thrips tobacco budworm whitefly wireworm (adults)	2.1 to 6.4 fl. oz. per acre (0.033 to 0.1 lb. ai per acre)	For spray applications, cover foliage with sufficient water to provide thorough, uniform coverage and distribution of spray mixture. For ground applications, use a minimum of 10 gallons of spray mixture per acre. For air applications, use a minimum of 2 gallons of spray mixture per acre. Use of emulsified oil (1 to 2 quarts) is allowed to replace some of the volume of water in the spray mixture.
Banks grass mite carmine mite *Lygus spp.* Pacific spider mite two-spotted spider mite	5.12 to 6.4 fl. oz. per acre (0.08 to 0.1 ai per acre)	

RESTRICTIONS

- **DO NOT** apply more than 0.1 lb. ai/A (6.4 fl. oz./A) per application.
- **DO NOT** apply more than 0.4 lb. ai/A (25.6 fl. oz./A) per year.
- **DO NOT** make more than 4 applications per year.
- **DO NOT** make applications less than 7 days apart.
- **DO NOT** apply within 7 days of harvest..

* Not for Use in California.

LEAFY PETIOLE VEGETABLES (PHI – 7 Days)

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

PEST	RATE	APPLICATION INSTRUCTIONS AND PRECAUTIONS
Aphids Armyworms Cutworms Corn earworm Crickets Cucumber beetles Diamondback moth Flea Beatle Ground Beetles Imported Cabbageworm Leafhoppers Loopers Stink Bugs Thrips Wireworms	2.1 to 6.4 fl. oz. per acre (0.033 to 0.1 lb. ai per acre)	Apply in a minimum of 2 gallons of finished spray per acre by air or in a minimum of 10 gallons of finished spray per ace with ground equipment Through coverage is essential to achieve control.
Twospotted Spider Mite Carmine Mite Pacific Spider Mite Lygus Spp.	5.12 to 6.4 fl. oz. per acre (0.08 to 0.1 lb. ai per acre)	

RESTRICTIONS

- **DO NOT** apply more than 0.1 lb. ai/A (6.4 fl. oz./A) per application.
- **DO NOT** apply more than 0.5 lb. ai/A (32 fl. oz./A) per year.
- **DO NOT** make applications less than 7 days apart.
- **DO NOT** make more than 5 applications per year.
- **DO NOT** apply within 7 days of harvest.

LETTUCE, HEAD (PHI – 7 Days)

PEST	RATE	APPLICATION INSTRUCTIONS AND PRECAUTIONS
aphids armyworms corn earworm cucumber beetles cutworms diamondback moth flea beetles grasshopper imported cabbageworm leafhoppers loopers salt marsh caterpillar stink bug thrips tobacco budworm whitefly	2.1 to 6.4 fl. oz per acre (0.033 to 0.1 lb. ai per acre)	For spray applications, cover foliage with sufficient water to provide thorough, uniform coverage and distribution of spray mixture. For ground applications, use a minimum of 15 gallons of spray mixture per acre. For air applications, use a minimum of 5 gallons of spray mixture per acre. Use of emulsified oil (1 to 2 quarts) is allowed to replace some of the volume of water in the spray mixture.
carmine mite *Lygus spp.* two-spotted spider mite	5.12 to 6.4 fl. oz per acre (0.08 to 0.1 lb. ai per acre)	

RESTRICTIONS

- **DO NOT** apply more than 0.1 lb. ai/A (6.4 fl. oz./A) per application.
- **DO NOT** apply more than 0.5 lb. ai/A (32 fl. oz./A) per year.
- **DO NOT** make more than 5 applications per year.
- **DO NOT** make applications less than 7 days apart.
- **DO NOT** apply within 7 days of harvest.

MAYHAW (PHI – 30 Days)

PEST	RATE	APPLICATION INSTRUCTIONS AND PRECAUTIONS
plum curculio	5.12 to 6.4 fl. oz. per acre (0.08 to 0.1 lb. ai per acre)	For spray applications, cover foliage with sufficient water to provide thorough, uniform coverage and distribution of spray mixture. For ground applications, use a minimum of 28 gallons of spray mixture per acre. For air applications, use a minimum of 2 gallons of spray mixture per acre.
RESTRICTIONS • **DO NOT** apply more than 0.1 lb. ai/A (6.4 fl. oz./A) per application. • **DO NOT** apply more than 0.2 lb. ai/A (12.8 fl. oz./A) per year. • **DO NOT** make more than 2 applications per year. • **DO NOT** make applications less than 7 days apart. • **DO NOT** apply within 30 days of harvest.		

OKRA (PHI – 7 Days)

PEST	Rate	APPLICATION INSTRUCTIONS AND PRECAUTIONS
aphids armyworm corn earworm cucumber beetles cutworms European corn borer flea beetles Japanese beetle (adult) leafminers loopers stink bugs thrips whitefly	2.1 to 6.4 fl. oz. per acre (0.033 to 0.1 lb. ai per acre)	For spray applications, cover foliage with sufficient water to provide thorough, uniform coverage and distribution of spray mixture. For ground applications, use a minimum of 10 gallons of spray mixture per acre. For air applications, use a minimum of 2 gallons of spray mixture per acre.

(continued)

OKRA (PHI – 7 Days) *(cont.)*

PEST	Rate	APPLICATION INSTRUCTIONS AND PRECAUTIONS
Broad mite carmine mite *Lygus spp.* two-spotted spider mite	5.12 to 6.4 fl. oz. per acre (0.08 to 0.1 lb. ai per acre)	For spray applications, cover foliage with sufficient water to provide thorough, uniform coverage and distribution of spray mixture. For ground applications, use a minimum of 10 gallons of spray mixture per acre. For air applications, use a minimum of 2 gallons of spray mixture per acre.
RESTRICTIONS • **DO NOT** apply more than 0.1 lb. ai/A (6.4 fl. oz./A) per application. • **DO NOT** apply more than 0.2 lb. ai/A (12.8 fl. oz./A) per year. • **DO NOT** make more than 2 applications per year. • **DO NOT** make applications less than 7 days apart. • **DO NOT** apply within 7 days of harvest		

PEACH Subgroup 12-12B* (PHI – 14 Days)

PEST	RATE	APPLICATION INSTRUCTIONS AND PRECAUTIONS
Aphids Codling Moth Cutworms Green Fruitworm Leafhoppers Leafminers Leafrollers Lygus spp. Plant Bugs Plum Curculio San Jose Scale (Crawlers) Stink Bugs Tarnished Plant Bugs	2.6 to 12.8 fl. oz. per acre (0.04 to 0.2 lb. ai per acre)	Application by ground: Apply as a dilute (minimum of 200 gallons of finished spray per acre) or concentrate (minimum of 50 gallons of finished spray per acre) spray in sufficient water to provide thorough coverage. Application by air: Apply the specified dosage in a minimum of 10 gallons of finished spray per acre by air.
Two spotted Spider Mite Yellow Mite	3.8 to 12.8 fl. oz. per acre (0.06 to 0.2 lb. ai per acre)	

(continued)

PEACH Subgroup 12-12B* (PHI – 14 Days) *(cont.)*

PEST	RATE	APPLICATION INSTRUCTIONS AND PRECAUTIONS
European Red Mite	5.12 to 12.8 fl. oz. per acre (0.08 to 0.2 lb. ai per acre)	Application by ground: Apply as a dilute (minimum of 200 gallons of finished spray per acre) or concentrate (minimum of 50 gallons of finished spray per acre) spray in sufficient water to provide thorough coverage. Application by air: Apply the specified dosage in a minimum of 10 gallons of finished spray per acre by air.

RESTRICTIONS

- **DO NOT** apply more than 0.2 lb. ai/A (12.8 fl. oz./A) per application.
- **DO NOT** apply more than 0.5 lb. ai/A (32 fl. oz./A) per year with no more than 0.45 lb. ai/A (28.8 fl. oz./A) applied after petal fall.
- **DO NOT** make more than 3 applications per year.
- **DO NOT** make applications less than 30 days apart.
- **DO NOT** apply within 14 days of harvest or not graze livestock in treated orchards or cut treated cover crops for feed.

* Not for Use in California

POME FRUITS (except Mayhaw)* (PHI – 14 Days)

Apple; azarole; crabapple; loquat; medlar; pear; pear, Asian; quince; quince, Chinese; quince, Japanese; tejocote

PEST	RATE	APPLICATION INSTRUCTIONS AND PRECAUTIONS
Aphids Codling Moth Cutworms Green Fruitworm Leafhoppers Leafminers Leafrollers Lygus spp. Plant Bugs Plum Curculio San Jose Scale (Crawlers) Stink Bugs Tarnished Plant Bugs	2.6 to 12.8 fl. oz. per acre (0.04 to 0.2 lb. ai per acre)	**Application by ground**: Apply as a dilute (minimum of 200 gallons of finished spray per acre) or concentrate (minimum of 50 gallons of finished spray per acre) spray in sufficient water to provide thorough coverage. **Application by air**: Apply the specified dosage in a minimum of 10 gallons of finished spray per acre by air

(continued)

POME FRUITS (except Mayhaw)* (PHI – 14 Days) *(cont.)*

Apple; azarole; crabapple; loquat; medlar; pear; pear, Asian; quince; quince, Chinese; quince, Japanese; tejocote

PEST	RATE	APPLICATION INSTRUCTIONS AND PRECAUTIONS
Two spotted Spider Mite Yellow Mite	3.8 to 12.8 fl. oz. per acre (0.06 to 0.2 lb. ai per acre)	**Application by ground**: Apply as a dilute (minimum of 200 gallons of finished spray per acre) or concentrate (minimum of 50 gallons of finished spray per acre) spray in sufficient water to provide thorough coverage. **Application by air**: Apply the specified dosage in a minimum of 10 gallons of finished spray per acre by air
European Red Mite	5.12 to 12.8 fl. oz. per acre (0.08 to 0.2 lb. ai per acre)	

RESTRICTIONS

- **DO NOT** apply more than 0.2 lb. ai/A (12.8 fl. oz./A) per application.
- **DO NOT** apply more than 0.5 lb. ai/A (32 fl. oz./A) per year with no more than 0.45 lb. ai/A (28.8 fl. oz./A) applied after petal fall.
- **DO NOT** make more than 3 applications per year.
- **DO NOT** make applications less than 30 days apart.
- **DO NOT** apply within 14 days of harvest.
- **DO NOT** graze livestock in treated orchards or cut treated cover crops for feed.

* Not for Use in California

Pomegranate *(PHI – 14 Days)

PEST	RATE	APPLICATION INSTRUCTIONS AND PRECAUTIONS
Katydids Navel Orangeworms Omnivorous Leafrollers Leaf footed Plant Bugs Fuller Rose Beetles Aphids White scales Ground Beetles Brown Marmorated Stink Bugs	6.4 to 12.8 fl. oz. per acre (0.1 to 0.2 lb. ai per acre)	Apply foliar treatments in at least 50 gallons of finished spray per acre.

RESTRICTIONS

- **DO NOT** apply more than 0.2 lb. ai/A (12.8 fl. oz./A) per application.
- **DO NOT** apply more than 0.5 lb. ai/A (32 fl. oz./A) per year.
- **DO NOT** make more than 3 applications per year.
- **DO NOT** make applications less than 14 days apart.
- **DO NOT** apply within 14 days of harvest.

* Not for Use in California

PEANUT (PHI – 14 Days)

PEST	RATE	APPLICATION INSTRUCTIONS AND PRECAUTIONS
beet armyworm corn earworm cutworm species fall armyworm grasshoppers green cloverworm leafhoppers lesser cornstalk borer loopers rednecked peanut worm southern armyworm southern corn rootworm stink bugs threecornered alfalfa hopper velvetbean caterpillar yellowstriped armyworm	2.1 to 6.4 fl. oz. per acre (0.033 to 0.1 lb. ai per acre)	For spray applications, cover foliage with sufficient water to provide thorough, uniform coverage and distribution of spray mixture. For ground applications, use a minimum of 200 gallons of spray mixture per acre (dilute) or 50 gallon per acre (concentrate). For air applications, use a minimum of 2 gallons of spray mixture per acre.
aphids spider mites thrips whitefly	5.12 to 6.4 fl. oz. per acre (0.08 to 0.1 lb. ai per acre)	

RESTRICTIONS

- **DO NOT** apply more than 0.1 lb. ai/A (6.4 fl. oz./A) per application.
- **DO NOT** apply more than 0.5 lb. ai/A (32 fl. oz./A) per year.
- **DO NOT** make more than 5 applications per year.
- **DO NOT** make applications less than 14 days apart.
- **DO NOT** apply within 14 days of harvest.
- **DO NOT** feed green immature plants and peanut hay to livestock.

PEARS * (PHI – 14 Days)

PEST	RATE	APPLICATION INSTRUCTIONS AND PRECAUTIONS
aphids coddling moth cutworms green fruitworm leafhoppers leafminers leafrollers *Lygus spp.* plant bugs plum curculio San Jose scale (crawlers) stink bugs tarnished plant bugs	2.6 to 12.8 fl. oz per acre (0.04 to 0.2 lb. ai per acre)	For spray applications, cover foliage with sufficient water to provide thorough, uniform coverage and distribution of spray mixture. For ground applications, use a minimum of 200 gallons of spray mixture per acre as a dilute spray. For a concentrate spray, a minimum of 50 gallons of spray mixture is applied if thorough coverage is obtained. For air applications, use a minimum of 10 gallons of spray mixture per acre. Repeat applications if necessary to maintain control.
two-spotted spider mite yellow mite	3.8 to 12.8 fl. oz. per acre (0.06 to 0.2 lb. ai per acre)	
European red mite	5.12 to 12.8 fl. oz per acre (0.08 to 0.2 lb. ai per acre)	

RESTRICTIONS

- **DO NOT** apply more than 0.2 lb. ai/A (12.8 fl. oz./A) per application.
- **DO NOT** apply more than 0.5 lb. ai/A (32 fl. oz./A) per year with no more than 0.45 lb. ai/A (28.8 fl. oz./A) applied after petal fall.
- **DO NOT** make more than 3 applications per year.
- **DO NOT** make applications less than 30 days apart.
- **DO NOT** apply within 14 days of harvest.
- **DO NOT** graze livestock in treated orchards or cut treated cover crops for feed.

ROOT CROPS (Except Sugar Beets) (PHI – 21 Days)

edible burdock, carrot, celeriac, turnip rooted chervil, chicory, ginseng, horseradish, turnip rooted parsley, parsnip, radish, Oriental radish, rutabaga, salsify, black salsify, Spanish salsify, skirret, turnip

PEST	RATE	APPLICATION INSTRUCTIONS AND PRECAUTIONS
aphids beet armyworm celery leaf tier corn earworm cross-striped cabbageworm cutworms diamondback moth European corn borer fall armyworm fire ants flea beetles green cloverworm hornworms imported cabbageworm loopers southern armyworm spider mites tobacco budworm velvetbean caterpillar whitefly yellowstriped armyworm	5.12 to 6.4 fl. oz. per acre (0.08 to 0.1 lb. ai per acre)	For spray applications, cover foliage with sufficient water to provide thorough, uniform coverage and distribution of spray mixture. For ground applications, use a minimum of 25 gallons of spray mixture per acre. For air applications, use a minimum of 2 gallons of spray mixture per acre.

RESTRICTIONS

- **DO NOT** apply more than 0.1 lb. ai/A (6.4 fl. oz./A) per application.
- **DO NOT** apply more than 0.5 lb. ai/A (32 fl. oz./A) per year.
- **DO NOT** make more than 5 applications per year.
- **DO NOT** make applications less than 7 days apart.
- **DO NOT** apply within 21 days of harvest

SMALL FRUIT VINE CLIMBING except Fuzzy Kiwi Fruit (SUBGROUP 13-07F)* (PHI – 30 Days) *

Amur river grape; gooseberry; grape; kiwifruit, hardy; maypop; schisandra berry; cultivars, varieties, and/or hybrids of these

PEST	RATE	APPLICATION INSTRUCTIONS AND PRECAUTIONS
Cutworms Eastern grape leafhopper Grape berry moth Japanese beetle adults Lady Beetle (Scymnus) Variegated leafhopper Western grape leafhopper	3.2 to 6.4 fl. oz. per acre (0.06 to 0.1 lb. ai per acre)	Apply in a minimum of 10 gallons of finished spray per acre by air or in a minimum of 25 gallons of finished spray per acre with ground equipment. When applying by air, 1 to 2 quarts of emulsified oil may be substituted for 1 to 2 quarts of water in the finished spray. Thorough coverage is essential to achieve control. When pest pressure is moderate to severe, use higher labeled rate.
Black vine weevil Glassy winged sharpshooter Two spotted spider mite	6.4 fl. oz. per acre (0.1 lb. ai per acre)	

RESTRICTIONS

- **DO NOT** apply more than 0.1 lb. ai/A (6.4 fl. oz./A) per application.
- **DO NOT** apply more than 0.1 lb. ai/A (6.4 fl. oz./A) per year.
- **DO NOT** make more than 1 application per year.
- **DO NOT** apply within 30 days of harvest

*** Not for use in California**

SOD FARMS

In New York State, this product may NOT be applied to any grass or turf area within 100 feet of a water body (lake, pond, river, stream, wetland, or drainage ditch).
In New York State, do make a single repeat application of this product if there are signs of renewed insect activity, but not sooner than two weeks after the first application.

Apply as a broadcast treatment. Use higher volumes up to 10 gallons of carrier per 1000 square feet to get uniform coverage when treating dense grass foliage.

For low water volume usage, less than 2 gallons/1000 square feet, addition of a non-ionic or silicone based surfactant (0.25% by volume) is recommended. Irrigation to treated area within a few hours following application can improve efficacy to sub-surface pests for example, but not limited to, mole crickets.

The application rates listed in the following table will provide excellent control of the respective pests under typical conditions. However, at the discretion of the applicator, this product may be applied at up to 0.32 fl. oz. per 1000 square feet to control each of the pests listed in this table. Use the higher labeled application rates when maximum residual control is desired or heavy pest populations occur.

PEST	fl. oz./A	fl. oz./ 1,000 sq. ft.	lb. ai/A
Armyworms[1] Cutworms[1] Sod Webworm[1]	2.2 - 3.5	0.05 - 0.08	0.03 - 0.05
Annual Bluegrass Weevil (Hyperodes) (Adult)[2] Banks Grass Mite[6] Billbugs (Adult)[3] Black Turfgrass Ataenius (Adult)[4] Crickets Earwigs Fleas (Adult) Grasshoppers Mealybugs Mites[6]	3.5 - 7	0.08 - 0.16	0.05 - 0.11
Ants Chinch Bugs[5] Fleas (Larvae)[7] Imported Fire Ants[8] Japanese Beetle (Adult) Mole Cricket (Adult)[9] Mole Cricket (Nymph)[10] Ticks[11]	7.0 - 14	0.16 - 0.32	0.11 - 0.21

(continued)

Comments

[1]**Armyworms**, Cutworms and Sod Webworms: To ensure optimum control, delay watering (irrigation) or mowing for 24 hours after application. If the grass area is being maintained at a mowing height of greater than 1 inch, then higher labeled application rates (up to 0.32 fl. oz./ 1000 square feet) may be required during periods of high pest pressure.

[2]**Annual Bluegrass Weevil (Hyperodes) adults**: Time applications to control adult weevils as they leave their overwintering sites and move into grass areas. This movement normally begins when Forsythia is in full bloom and concludes when flowering dogwood (Cornus florida) is in full bloom. Consult your State Cooperative Extension Service for more specific information regarding application timing.

[3]**Billbug adults**: Make applications when adult billbugs are first observed during April and May. Degree day models have been developed to optimize application timing. Consult your State Cooperative Extension Service for information specific to your region. In temperate regions, spring applications targeting billbug adults will also provide control of over-wintered chinch bugs.

[4]**Black Turfgrass Ataenius adults**: Make applications during May and July to control the first and second generation of black turfgrass ataenius adults, respectively. Time the May application to coincide with the full bloom stage of Vanhoutte spiraea (Spiraea vanhouttei) and horse chestnut (Aesculus hippocastanum). Time the July application to coincide with the blooming of Rose of Sharon (Hibiscus syriacus).

[5]**Chinch Bugs**: Chinch Bugs infest the base of grass plants and are often found in the thatch layer. Irrigation of the grass area before treatment will optimize the penetration of the insecticide to the area where the chinch bugs are located. Use higher volume applications if the thatch layer is excessive or if a relatively long mowing height is being maintained. Chinch Bugs can be one of the most difficult pests to control in grasses and the higher labeled application rates (up to 0.32 fl. oz./per 1000 square feet) may be required to control populations that contain both nymphs and adults during the middle of the summer.

[6]**Mites**: To ensure optimal control of eriophyid mites, apply in combination with the labeled application rate of a surfactant. A second application, five to seven days after the first, may be necessary to achieve acceptable control.

[7]**Flea larvae:** Flea larvae develop in the soil of shaded areas that are accessible to pets or other animals. Use a higher volume application when treating these areas to ensure penetration of the insecticide into the soil. Note: if the lawn area is being treated with this product at 0.10 fl. oz./1000 square feet for adult flea control, then the larval application rate may be achieved by increasing the application volume two- to four-fold.

[8]**Imported Fire Ants:** Control will be optimized by combining broadcast applications that will control foraging workers and newly mated fly- in queens with mound drenches that will control existing colonies. If the soil is not moist, then it is important to irrigate before application or use a high volume application. For broadcast treatments apply 0.32 fl. oz./1,000 square feet. Treat mounds by diluting 0.05 fluid oz of this product per gallon of water and applying 1 to 2 gallons of finished spray per mound. Treat the mounds with sufficient force to break their apex and allow the insecticide solution to flow into the ant tunnels. Also treat a four-foot diameter circle around the mound. For best results, apply in cool weather (65 - 80°F) or in early morning or late evening hours.

(continued)

(continued)

Comments *(cont.)*

[9]**Mole Cricket adults:** Achieving acceptable control of adult mole crickets is difficult because preferred grass areas are subject to continuous invasion during the early spring by this extremely active stage. Make applications as late in the day as possible and in with up to 0.5 inches of water immediately after treatment. If the soil is not moist, then it is important to irrigate before application to bring the mole crickets closer to the soil surface where contact with the insecticide will be maximized. Grass areas that receive pressure from adult mole crickets should be treated at peak egg hatch to ensure optimum control of subsequent nymph populations (see below).

[10]**Mole Cricket nymphs**: Grass areas that received intense adult mole cricket pressure in the spring should be treated immediately prior to peak egg hatch. Optimal control is achieved at this time because young nymphs are more susceptible to insecticides and they are located near the soil surface where the insecticide is most concentrated. Control of larger, more damaging, nymphs later in the year may require both higher labeled application rates and more frequent applications to maintain acceptable control. Make applications as late in the day as possible and in with up to 0.5 inches of water immediately after treatment. If the soil is not moist, then it is important to irrigate before application to bring the mole crickets closer to the soil surface where contact with the insecticide will be maximized.

[11]**Ticks** (Including ticks that may transmit Lyme Disease and Rocky Mountain Spotted fever): **DO NOT** make spot applications. Treat the entire area where exposure to ticks may occur. Use higher spray volumes when treating areas with dense ground cover or heavy leaf litter. Ticks may be reintroduced from surrounding areas on host animals. Retreatment may be necessary to achieve and/or maintain control during periods of high pest pressure. Repeat application is necessary only if there are signs of renewed activity. Repeat application should be limited to no more than once per seven days.

Deer ticks (Ixodes sp.) have a complicated life cycle that ranges over a two year period and involves four life stages. Applications should be made in the late fall and/or early spring to control adult ticks that are usually located on brush or grass above the soil surface and in mid to late spring to control larvae and nymphs that reside in the soil and leaf litter.

American dog ticks may be a considerable nuisance in suburban settings, particularly where homes are built on land that was previously field or forest. These ticks commonly congregate along paths or roadways where humans are likely to be encountered. Applications should be made as necessary from mid-spring to early fall to control American dog tick larvae, nymphs and adults

SOYBEAN (PHI – 18 Days)

PEST	RATE	APPLICATION INSTRUCTIONS AND PRECAUTIONS
Alfalfa caterpillar aphids aster leafhopper bean leaf Beetle beet armyworm* cloverworm corn earworm corn rootworm adult cucumber beetles cutworms European corn borer fall armyworm flea beetle grasshoppers imported cabbageworm Japanese beetle adult leafhoppers leafminer loopers Mexican bean beetle adult pea leaf weevil pea weevil plant bug saltmarsh caterpillar sap beetle southern armyworm soybean aphid stink bugs tarnished plant bug thrips tobacco budworm* webworms western bean cutworm whitefly yellowstriped armyworm	2.1 to 6.4 fl. oz. per acre (0.033 to 0.1 lb. ai per acre)	For spray applications, cover foliage with sufficient water to provide thorough, uniform coverage and distribution of spray mixture. For ground applications, use a minimum of 10 gallons of spray mixture per acre. For air applications, use a minimum of 2 gallons of spray mixture per acre. * Pyrethroid resistance may occur for these pests. See the Resistance section of this label.

(continued)

SOYBEAN (PHI – 18 Days)

PEST	RATE	APPLICATION INSTRUCTIONS AND PRECAUTIONS
Lygus Spp. two- spotted spider mite whitefly	5.12 to 6.4 fl. oz. per acre (0.08 to 0.1 lb. ai per acre)	For spray applications, cover foliage with sufficient water to provide thorough, uniform coverage and distribution of spray mixture. For ground applications, use a minimum of 10 gallons of spray mixture per acre. For air applications, use a minimum of 2 gallons of spray mixture per acre. * Pyrethroid resistance may occur for these pests. See the Resistance section of this label.
RESTRICTIONS • **DO NOT** apply more than 0.1 lb. ai/A (6.4 fl. oz./A) per application. • **DO NOT** apply more than 0.3 lb. ai/A (19.2 fl. oz./A) per year. • **DO NOT** make more than 3 applications per year. • **DO NOT** make applications less than 30 days apart. • **DO NOT** apply within 18 days of harvest.		

SPINACH (PHI – 40 Days)

PESTS	RATE	APPLICATION INSTRUCTIONS AND PRECAUTIONS
armyworms Colorado potato beetle corn earworm cucumber beetles cutworms European corn borer flea beetles leafminers loopers pepper weevil tomato pinworm tomato hornworm thrips whitefly	2.1 to 6.4 fl. oz (0.033 to 0.1 lb. ai per acre	For control of whiteflies apply foliar treatments of this product by ground or air at rates of up to 0.4 pt. (0.1 lb. ai) per acre at minimum 7-day intervals up to a maximum of 4 applications. For control of fire ants apply this product to the soil (at planting) or as a foliar treatment by ground or air at rates of up to 0.4 pt. (0.1 lb. active) per acre at minimum 7-day intervals up to a maximum of 4 applications. Apply the specified dosage in 5-50 gallons of finished spray per acre by air or 10-50 gallons of finished spray per acre by ground.

(continued)

SPINACH (PHI – 40 Days) *(cont.)*

PESTS	RATE	APPLICATION INSTRUCTIONS AND PRECAUTIONS
broad mite Banks grass mite carmine mite fire ants *Lygus spp.* two-spotted spider mite Pacific spider mite	5.12 to 6.4 fl. oz (0.08 to 0.1lb. ai per acre	For control of whiteflies apply foliar treatments of this product by ground or air at rates of up to 0.4 pt. (0.1 lb. ai) per acre at minimum 7-day intervals up to a maximum of 4 applications. For control of fire ants apply this product to the soil (at planting) or as a foliar treatment by ground or air at rates of up to 0.4 pt. (0.1 lb. active) per acre at minimum 7-day intervals up to a maximum of 4 applications. Apply the specified dosage in 5-50 gallons of finished spray per acre by air or 10-50 gallons of finished spray per acre by ground.
RESTRICTIONS • **DO NOT** apply more than 0.1 lb. ai/A (6.4 fl. oz./A) per application. • **DO NOT** apply more than 0.4 lb. ai/A (25.6 fl. oz./A) per year. • **DO NOT** make more than 4 applications per year. • **DO NOT** make applications less than 7 days apart. • **DO NOT** apply within 40 days of harvest.		

STRAWBERRIES (PHI – 0 Days)

PEST	RATE	APPLICATION INSTRUCTIONS AND PRECAUTIONS
Aphids Armyworms Flea beetles Hehothis spp. Leafrollers Lygus spp. Plant bugs Spittlebugs Stink bugs Strawberry clipper Strawberry sap beetle	2.56 to 12.8 fl. oz. per acre (0.04 to 0.2 lb. ai per acre)	Apply in a minimum of 5 gallons of finished spray per acre by air or in a minimum of 50 gallons of finished spray per acre with ground equipment. Thorough coverage is essential to achieve control. Apply when pest populations reach damaging thresholds and repeat as necessary at 7 – 14 day intervals.

(continued)

STRAWBERRIES (PHI – 0 Days) *(cont.)*

PEST	RATE	APPLICATION INSTRUCTIONS AND PRECAUTIONS
Black vine weevil Strawberry root weevil	3.2 to 12.8 fl. oz. per acre (0.05 to 0.1 lb. ai per acre)	Apply in a minimum of 5 gallons of finished spray per acre by air or in a minimum of 50 gallons of finished spray per acre with ground equipment. Thorough coverage is essential to achieve control. Apply when pest populations reach damaging thresholds and repeat as necessary at 7 – 14 day intervals.
Spider mites	6.4 to 12.8 fl. oz. per acre (0.1 to 0.2 lb. ai per acre)	

RESTRICTIONS

- **DO NOT** apply more than 0.2 lb. ai/A (12.8 fl. oz./A) per application.
- **DO NOT** apply more than 0.5 lb. ai/A (32 fl. oz./A) per year.
- **DO NOT** make more than 5 applications per year.
- **DO NOT** make applications less than 7 days apart.
- Aerial application is prohibited in Florida.
- **DO NOT** apply within 0 days of harvest.
- California Specific Requirements for Strawberry Harvesters: Harvesters and other personnel performing tasks with all day foliage contact in treated fields within 5 days of application must wear a long sleeved shirt, long pants, and shoes plus socks. Following treatment of strawberry fields at rates of this product greater that 6.4 fl. oz. (0.1 lb. ai)/acre, harvesters must wear gloves for five (5) days after application.

SUCCULENT PEAS AND BEANS (PHI – 3 Days)

peas (*Pisum spp.*): dwarf pea, edible-pod, English pea, garden pea, green pea, snow pea, sugar snap, pigeon pea, beans (*Phaseolus spp.*) : broadbean (succulent), lima bean (green), runner bean, snap bean, wax bean, bean (*Vigna spp.)* : asparagus bean, blackeyed pea, Chinese longbean, cowpeas, moth bean, southern pea, yardlong bean, jackbean, soybean (immature seed), sword bean

PEST	RATE	APPLICATION INSTRUCTIONS AND PRECAUTIONS
aster leafhopper flea beetle grasshoppers leafhoppers	1.6 to 6.4 fl. oz per acre (0.025 to 0.1 lb. ai per acre)	For spray applications, cover foliage with sufficient water to provide thorough, uniform coverage and distribution of spray mixture. For ground applications, use a minimum of 10 gallons of spray mixture per acre. For air applications, use a minimum of 2 gallons of spray mixture per acre. Use of emulsified oil (1 to 2 quarts) is allowed to replace some of the volume of water in the spray mixture.
alfalfa caterpillar aphids bean leaf beetle beet armyworm cloverworm corn earworm corn rootworm (adult) cucumber beetles cutworms European corn borer fall armyworm Japanese beetle (adult) loopers pea leaf weevil pea weevil plant bug sap beetle southern armyworm stink bugs tarnished plant bug thrips webworms western bean cutworm yellowstriped armyworm whitefly	2.1 to 6.4 fl. oz per acre (0.033 to 0.1 lb. ai per acre	

(continued)

SUCCULENT PEAS AND BEANS (PHI – 3 Days)

peas (*Pisum spp.*): dwarf pea, edible-pod, English pea, garden pea, green pea, snow pea, sugar snap, pigeon pea, beans (*Phaseolus spp.*) : broadbean (succulent), lima bean (green), runner bean, snap bean, wax bean, bean (*Vigna spp.)* : asparagus bean, blackeyed pea, Chinese longbean, cowpeas, moth bean, southern pea, yardlong bean, jackbean, soybean (immature seed), sword bean

PEST	RATE	APPLICATION INSTRUCTIONS AND PRECAUTIONS
Banks grass mite carmine mite *Lygus spp.* two-spotted spider mite	5.12 to 6.4 fl. oz per acre (0.08 to 0.1 lb. ai per acre	For spray applications, cover foliage with sufficient water to provide thorough, uniform coverage and distribution of spray mixture. For ground applications, use a minimum of 10 gallons of spray mixture per acre. For air applications, use a minimum of 2 gallons of spray mixture per acre. Use of emulsified oil (1 to 2 quarts) is allowed to replace some of the volume of water in the spray mixture.

RESTRICTIONS

- **DO NOT** apply more than 0.1 lb. ai/A (6.4 fl. oz./A) per application.
- **DO NOT** apply more than 0.2 lb. ai/A (12.8 fl. oz./A) per year.
- **DO NOT** make more than 2 applications per year.
- **DO NOT** make applications less than 3 days apart.
- **DO NOT** apply within 3 days of harvest.

TOBACCO

PEST	RATE	APPLICATION INSTRUCTIONS AND PRECAUTIONS
armyworm spp. *cutworm ssp.* mole crickets stalkborers tobacco flea beetle (larvae) white grubs wireworms	4 to 6.4 fl. oz. per acre (0.0625 to 0.1 lb. ai per acre)	Pre-transplant soil applications: Apply 0.0625- 0.1 lb. ai/A in a minimum of 10 gal/A to control soil pests. Use of suitable equipment to incorporate into top 4 inches of soil is required to control below ground pests. At-transplant water treatment application: Apply 0.0625- 0.1lb. ai/A in a water treatment application volume of 10-200 gal/A. Foliar applications: Apply 0.04- 0.10 lb. ai/A per foliar application up to, and including, layby in a minimum of 10 gal/A. May be tank mixed with clomazone, sulfentrazone and other herbicides approved for tobacco use.
aphid spp. *armyworm spp.* chinch bugs *cutworm spp.* flea beetle (adults) grasshoppers green bugs Japanese beetles stink bugs tarnished plant bugs thrips whiteflies	2.6 to 6.4 fl. oz. per acre (0 .04 to 0.1 lb. ai per acre)	
Lygus spp. spider mites	6.4 fl. oz. per acre (0.1 lb. ai per acre)	

RESTRICTIONS

- **DO NOT** apply more than 0.1 lb. ai/A (6.4 fl. oz./A) per application.
- **DO NOT** apply more than 0.2 lb. ai/A (12.8 fl. oz./A) per year.
- **DO NOT** apply later than lay-by.
- **DO NOT** make more than 2 foliar applications per year.

TOMATO (Subgroup 8-10A) **(PHI – 1 Day)**

Bush tomato; cocona; currant tomato; garden huckleberry; goji berry; groundcherry; naranjilla; sunberry; tomatillo; tomato; tree tomato

PEST	RATE	APPLICATION INSTRUCTIONS AND PRECAUTIONS
aphids armyworms including beet armyworm, fall armyworm, southern yellowstriped armyworm bean leaf beetle cabbageworm carmine mite cloverworm corn earworm corn rootworm(adult) 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 salt marsh caterpillar *(continued)*	2.1 to 5.2 fl. oz. per acre (0.033 to 0.08 lb. ai per acre)	Apply in water as necessary for insect control using a minimum of 15 gallons of finished spray per acre with ground equipment. For air applications, use a minimum of 3 gallons of spray mixture per acre. Thorough coverage is essential to achieve control.

(continued)

TOMATO (Subgroup 8-10A) **(PHI – 1 Day)**

Bush tomato; cocona; currant tomato; garden huckleberry; goji berry; groundcherry; naranjilla; sunberry; tomatillo; tomato; tree tomato

PEST	RATE	APPLICATION INSTRUCTIONS AND PRECAUTIONS
(continued) sap beetle seedpod weevil squash bugs stink bug species tobacco budworm tarnished plant bug thrips two- spotted spider mite whitefly	2.1 to 5.2 fl. oz. per acre (0.033 to 0.08 lb. ai per acre)	Apply in water as necessary for insect control using a minimum of 15 gallons of finished spray per acre with ground equipment. For air applications, use a minimum of 3 gallons of spray mixture per acre. Thorough coverage is essential to achieve control.
two- spotted spider mite	5.12 to 6.4 fl. oz. per acre (0.08 to 0.1 lb. ai per acre)	

RESTRICTIONS

- **DO NOT** apply more than 0.1 lb. ai/A (6.4 fl. oz./A) per application.
- **DO NOT** apply more than 0.4 lb. ai/A (25.6 fl. oz./A) per year.
- **DO NOT** make more than 4 applications per year.
- **DO NOT** make applications less than 10 days apart.
- **DO NOT** apply within 1 day of harvest.

TREE NUT CROPS (PHI – 21 Days Pecans) (PHI – 7 Days All Other Nut Crops)

Almonds, beech nut, Brazil nut, butternut, cashew, chestnut, chinquapin, filbert (hazelnut) hickory nut, macadamia nut (bush nut), pecan, pistachio and walnut (black and English)

PEST	RATE	APPLICATION INSTRUCTIONS AND PRECAUTIONS
black pecan aphid codling moth filbert worm hickory shuckworm leaffooted bugs navel orangeworm oblique banded leafroller peach twig borer pecan,leaf casebearer pecan nut casebearer pecan phylloxera plant bugs stink bugs walnut aphid yellow pecan aphid	3.2 to 12.8 fl. oz. per acre (0.05 to 0.20 lb. ai. per acre)	For spray applications, cover foliage with sufficient water to provide thorough, uniform coverage and distribution of spray mixture. Apply this product as a dilute (minimum of 200 gallons of finished spray per acre) or concentrate (minimum of 50 gallons of spray per acre) spray by ground or in a minimum of 10 gallons of finished spray per acre by air.
European red mite spider mites	5.1 to 12.8 fl. oz. per acre (0.08 to 0.20 lb. ai. per acre)	
fire ants walnut husk fly	6.4 to 12.8 fl. oz. per acre (0.1 to 0.2 lb. ai. per acre)	

RESTRICTIONS

- **DO NOT** apply more than 0.2 lb. ai/A (12.8 fl. oz./A) per application.
- **DO NOT** apply more than 0.5 lb. ai/A (32 fl. oz./A) per year.
- **DO NOT** make more than 3 applications per year.
- **DO NOT** make applications less than 15 days apart.
- **DO NOT** apply within 21 days of harvest for pecans and 7 days for all other registered tree nut crops.
- **DO NOT** graze livestock in treated orchards or cut treated cover crops for feed.

TUBEROUS AND CORM VEGETABLES (PHI – 21 Days)

potato, sweet potato, arracacha, arrowroot, Chinese artichoke, Jerusalem artichoke, edible canna, cassava (bitter and sweet), chayote (root), chula, dasheen (taro), ginger, leren, tanier, turmer, yam bean, true yam

PEST	RATE	APPLICATION INSTRUCTIONS AND PRECAUTIONS
corn wireworm tobacco wireworm	19.2 fl. oz. per acre (0.3 lb. ai per acre) (at plant)	This product may be applied as an in-furrow planting time treatment for the control of wireworms, rootworms and white grubs. Apply this product at the rate of 0.3 pounds active per acre as an in-furrow spray or T-band spray at planning time. This product may be applied as a lay-by treatment for the control of wireworms, rootworms and white grubs. Apply this product to the drill area and cover with soil utilizing cultivation equipment set to throw soil to the drill area. Apply this product as a banded spray over the row at a rate of 0.05-0.15 lb. active per acre (3.2 to 9.6 ounces formulated) in 10 gallons per acre of spray. This product may be applied as a foliar spray for the control of the adult life stages of flea beetles, click beetles (wireworms), cucumber beetles(rootworms), white fringed beetles and May/June beetles (white grubs). Apply this product at the rate of 0 .1 lbs. active per acre (6.4 ounces formulated) in 10 gallons of spray by ground and 3 gallons of spray by air.
banded cucumber beetle black flea beetle cucumber beetle Japanese beetle grubs June beetles rootworms	3.2 fl. oz. per acre (0.05 lb. ai per acre) (lay-by)	
sweet potato flea beetle southern potato wireworm sugarcane beetle sweet potato weevil white-fringed beetle	2.1 to 6.4 fl. oz. per acre (0.033 to 0.1 ai per acre) (foliar)	

RESTRICTIONS

- **DO NOT** apply more than 0.5 lb. ai/A (32 fl. oz./A) per year, including soil application.
- **DO NOT** make more than 2 foliar applications per year.
- **DO NOT** make applications less than 21 days apart.
- **DO NOT** apply within 21 days of harvest.

STORAGE AND DISPOSAL

DO NOT contaminate water, foodstuffs, feed or seed 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. Carefully open containers. After partial use, replace lids and close tightly. **DO NOT** put concentrate or dilute material into food or drink containers. **DO NOT** contaminate other pesticides, fertilizers, water, food, or feed by storage or disposal. **DO NOT** freeze or store below 40ºF. If crystals are observed, warm material to above 60ºF by placing container in warm location. Shake or roll container periodically to redissolve solids.

Spills

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 and used absorbent material in a holding container. Identify contents.

Pesticide Disposal

Pesticide wastes are toxic. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal Law. If these wastes cannot be disposed of by use according to label instructions, contact your State pesticide or environmental control agency, or the Hazardous Waste representative of the nearest EPA Regional Office for guidance.

Container Disposal:

Nonrefillable containers. DO NOT reuse or refill this container. Clean container promptly after emptying.

Nonrefillable container equal to or less than 5 gallons. 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. Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by other procedures approved by State and local authorities. **DO NOT** cut or weld metal containers.

Nonrefillable container greater than 5 gallons. 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 of disposal. Repeat this procedure two more times. Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by other procedures approved by State and local authorities. **DO NOT** cut or weld metal containers.

FOR CHEMICAL SPILL, LEAK, FIRE, EXPOSURE OR MEDICAL EMERGENCY INVOLVING THIS PRODUCT CALL CHEMTREC® TOLL FREE 1-800-424-9300 or 1-703-527-3887 (24 Hours per Day, 7 Days per Week). .

WARRANTY DISCLAIMER AND NOTICE

IMPORTANT: READ BEFORE USE

Read the entire Directions for Use, Conditions, Disclaimer of Warranties and Limitations of Liability before using this product. If terms are not acceptable, return the unopened product container at once.

By using this product, user or buyer accepts the following Conditions, 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. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as weather conditions, presence of other materials, or the manner of use or application, all of which are beyond the control of Actylis. To the extent consistent with applicable law all such risks shall be assumed by the user or buyer.

DISCLAIMER OF WARRANTIES: To the extent consistent with applicable law, ACTYLIS MAKES NO OTHER WARRANTIES, EXPRESS OR IMPLIED, OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE OR OTHERWISE, THAT EXTEND BEYOND THE STATEMENTS MADE ON THIS LABEL. No agent of Actylis is authorized to make any warranties beyond those contained herein or to modify the warranties contained herein. To the extent consistent with applicable law, ACTYLIS DISCLAIMS ANY LIABILITY WHATSOEVER FOR SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT.

LIMITATIONS OF LIABILITY: 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 OR HANDLING OF THIS PRODUCT, WHETHER IN CONTRACT, WARRANTY, TORT, NEGLIGENCE, STRICT LIABILITY OR OTHERWISE, SHALL NOT EXCEED THE PURCHASE PRICE PAID, OR AT ACTYLIS'S ELECTION, THE REPLACEMENT OF PRODUCT.

Active ingredient made in China, formulated and packaged in USA.

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 the uses covered by the certified applicator's certification.

BIFENTHRIN	GROUP	3A	INSECTICIDE

Aceto

bifenthrin 2EC

INSECTICIDE

For use on artichokes, brassica crops, bushberries, caneberries, canola, crambe, rapeseed, Christmas trees, cilantro, conifer seed orchards, coriander, citrus, corn (field, popcorn and sweet), cotton, cucurbits, dried beans and peas, fruiting vegetables, garden beets, grapes, grass forage, fodder and hay groups and grass grown for seed, pasture and rangeland, hops, leafy brassicas and turnip greens, leafy petiole vegetables, lettuce (head), mayhaw, okra, peach subgroup 12-12B, peanut, pomegranate, pome fruit (except mayhaw), roots crops, small fruit vine climbing (except fuzzy kiwi fruit) subgroup 13-07F, sod farms, soybean, spinach, succulent peas and beans, tobacco, tomato subgroup 8-10A, tree nut crops and tuberous and corm vegetables.

For Outdoor Use Only

Active Ingredient:	**By Wt.**
Bifenthrin*	25.1%
Other Ingredients:**	74.9%
TOTAL	100.0%

*Cis isomers 97% minimum, trans isomers 3% maximum.
**Contains petroleum distillates
This product contains 2 pounds active ingredient per gallon.

KEEP OUT OF REACH OF CHILDREN

WARNING AVISO

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.)

This label must be in the possession of the user at the time of application.

EPA Registration No. 2749-556 **EPA Est. No.070989-MO-001**

Manufactured by:

Actylis
4 Tri Harbor Court, Port Washington, NY 11050

NET CONTENTS
1 GALLON (3.78 liters)

PF 240636

PROOF

THIS PROOF IS TO BE CHECKED FOR ACCURACY

Please review and approve **Text, Spelling, Copy Placement, Size, Shape, Colors** and **Dieline.**

Authorized signature accepts responsibility for accuracy of all copy, color break and artwork. Cimarron Label is not liable for any discrepancies subsequently identified.

PLEASE NOTE: Due to color variance between printers/monitors, the colors represented by this proof cannot be deemed accurate. Please refer to a color matching system such as the Pantone Matching System for a truer representation of spot colors.

THIS PROOF IS NOT ACCURATE FOR COLOR-MATCH.

Dieline does not print.

DATE	JOB NUMBER	CUSTOMER
11/27/24	240636	Aceto
LABEL SIZE	**BOOKLET SIZE**	
4.75" x 5"	4.5" x 4"	
LABEL COLORS	**BOOKLET OUTSIDE COLORS**	**BOOKLET INSIDE COLORS**
BLK	BLK, 349	BLK
PATTERN VARNISH: ☒ YES ☐ NO		

Form: CS 006B - 3/29/2017

☐ *ARTWORK IS APPROVED* ☐ *REVISED PROOF NEEDED*

WE CANNOT PROCESS THIS ORDER WITHOUT AN AUTHORIZED SIGNATURE

Signed _____ **Date** _____

Cimarron Label
Inovar
4201 North Westport Ave. • Sioux Falls, SD 57107
Phone: (605) 978-0451 • Fax: (605) 978-0463