RESTRICTED USE PESTICIDE

Toxic to Fish and Aquatic Organisms

For retail sale to and use only by Certified Applicators, or persons under their direct supervision, and only for those uses covered by the Certified Applicator's certification.

Aceto bifenthrin 2EC INSECTICIDE

For use on artichokes, brassica crops, 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, hops, leafy brassicas and turnip greens, lettuce (head), mayhaw, okra, peanut, pears, roots crops, soybean, spinach, succulent peas and beans, tobacco, tomato and tomatillo, tree nut crops and tuberous and corm vegetables.

ACTIVE INGREDIENT:	**By Wt.**
Bifenthrin*	25.1%
OTHER INGREDIENTS:**	74.9%
TOTAL	100.0%

*Cis isomers 97% minimum, trans isomers 3% maximum.
**Contains xylene range aromatic solvents.
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.

SEE BOOKLET FOR ADDITIONAL PRECAUTIONARY STATEMENTS AND USE DIRECTIONS

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

Manufactured for:

Aceto Agricultural Chemicals Corporation
4 Tri Harbor Court, Port Washington, NY 11050

NET CONTENTS
1 GALLON (3.78 liters)

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.	

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.

PRECAUTIONARY STATEMENTS
Hazards to Humans and Domestic Animals
WARNING – AVISO

WARNING. May be fatal if swallowed. Harmful if inhaled, or absorbed through skin. Causes moderate eye irritation. Avoid breathing vapor or spray mist. Avoid contact with skin, eyes, or clothing.

PERSONAL PROTECTIVE EQUIPMENT (PPE):

Some materials that are chemical-resistant to this product are listed below. If you want more options, follow the instructions for Category ***E*** on an EPA chemical resistance category selection chart.

Handlers who may be exposed to the dilute through application or other tasks must wear:

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

Handlers who may be exposed to the concentrate through mixing, loading, application or other tasks must wear:

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

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them. Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions are present for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

USER SAFETY RECOMMENDATIONS

Users should:

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

This product is highly toxic to bees exposed to direct treatment or residues on blooming crops or weeds. Do not apply this product or allow it to drift to blooming crops or weeds while bees are actively visiting the treatment area.

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

PHYSICAL/CHEMICAL HAZARDS

Do not use or store near heat or open flame.

DIRECTIONS FOR USE

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: Some insects are known to develop resistance to products used repeatedly for control. Because the development of resistance cannot be predicted, the use of this product must conform to resistance management strategies established for the use area. Consult your local or state agricultural authorities for details.

If resistance to this product develops in your area, this product, or other products with a similar mode of action, may not provide adequate control. If poor performance cannot be attributed to improper application or extreme weather conditions, a resistant strain of insect may be present. If you experience difficulty with control and resistance is

a reasonable cause, immediately consult your local company representative or agricultural advisor for the best alternative method of control 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, such as plants, soil, or water, is: coveralls; chemical-resistant gloves, such as barrier laminate or nitrile rubber or neoprene rubber or Viton; and shoes plus socks.

Application Instructions

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

Cultivation within 10 feet of a water body is prohibited to allow for the growth of a vegetated filter strip.

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

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, such as 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.

BUFFER ZONES

Vegetative Buffer Strip

Construct and maintain a minimum 10-foot-wide vegetative filter strip of grass or other permanent vegetation between the field edge and down gradient aquatic habitat (such as, but not limited to, lakes; reservoirs; rivers; permanent streams; marshes or natural ponds; estuaries; and commercial fish farm ponds).

Only apply products containing Bifenthrin onto fields where a maintained vegetative buffer strip of at least 10 feet exists between the field and down gradient aquatic habitat.

For guidance, refer to the following publication for information on constructing and maintaining effective buffers: *Conservation Buffers to Reduce Pesticide Losses. Natural Resources Conservation Services*. USDA NRCS. 2000 Fort Worth, Texas. 21 pp. www.in.nrcs.usda.gov/technical/agronomy/newconbuf.pdf .

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, permanent streams, marshes, natural ponds, estuaries, and commercial fish ponds).

Buffer Zone for ULV Aerial Application

Do not apply within 450 feet of aquatic habitats (such as, but not limited to, lakes, reservoirs, rivers, permanent streams, marshes, natural 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, permanent streams, marshes, natural ponds, estuaries, and commercial fish ponds).

SPRAY DRIFT REQUIREMENTS

Wind Direction and Speed

Only apply this product if the wind direction favors on-target deposition.

Do not apply when the wind velocity exceeds 15 mph.

Temperature Inversion

Do not make aerial or ground applications into temperature inversions.

Inversions are characterized by stable air and increasing temperatures with height above the ground. Mist or fog may indicate the presence of an inversion in humid areas. The applicator may detect the presence of an inversion by producing smoke and observing a smoke layer near the ground surface.

Droplet Size

Use only Medium or coarser spray nozzles (for ground and non-ULV aerial application) according to ASAE (S572) definition for standard nozzles. In conditions of low humidity and high temperatures, applicators should use a coarser droplet size.

Additional Requirements for Ground Applications

Wind speed must be measured adjacent to the application site on the upwind side, immediately prior to application.

For ground boom applications, apply using a nozzle height of no more than 4 feet above the ground or crop canopy.

For airblast applications, turn off outward pointing nozzles at row ends and when spraying the outer two rows. To minimize spray loss over the top in orchard applications, spray must be directed into the canopy.

Additional Requirements for Aerial Applications

The spray boom should be mounted on the aircraft as to minimize drift caused by wingtip or rotor vortices. The minimum practical boom length should be used and must not exceed 75% of the wing span or 80% rotor diameter.

Flight speed and nozzle orientation must be considered in determining droplet size.

Spray must be released at the lowest height consistent with pest control and flight safety. Do not release spray at a height greater than 10 feet above the crop canopy unless a greater height is required for aircraft safety.

When applications are made with a cross-wind, the swath will be displaced downwind. The applicator must compensate for this displacement at the downwind edge of the application area by adjusting the path of the aircraft upwind.

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.

Refer to the partner product label for important information in regards to the use instructions, spray additive requirements, pests controlled and application restrictions including pre-harvest intervals and crop rotation information. Follow the specifications listed on the most restrictive label when planning and applying the tank mixture combination.

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

If Aceto Bifenthrin 2EC 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 general 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 2EC 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 2EC 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

fl. oz. per acre	lb. ai per acre
5.12	0.08
6.4	0.1
12.8	0.2
16	0.25
19.2	0.3
32	0.5

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. Do not exceed 0.5 lb. ai per acre per season.

BRASSICA CROPS (PHI – 7 Days)

head and stem brassica vegetables including: 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 cabbage worm 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. Do not apply more than 0.5 lb. ai (32 fl. oz.) per acre per season. Do not make more than 5 applications after bloom. Do not make applications less than 7 days apart.
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)	

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. Do not exceed 0.2 lb. ai per acre per season. 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 waterper acre. For best results, use higher water gallonages (up to 400 gallons/a) or in an application prior to a significant rainfall event. Do not make both pre-bloom foliar and pre-bloom drench applications.
raspberry crown borer* spider mites	6.4 fl. oz. per acre (0.1 lb. ai per acre)	

* Not for Use in California.

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. Do not apply more than 0.08 lb. a.i. (5.12 ounces formulated product) per acre per season. Do not make applications less than 14 days apart.

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. This product is normally not phytotoxic 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. Do not apply more than 0.1 lb. a.i. (6.4 fl. oz. formulated product) per acre per year. Do not make more than 3 applications per year. 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. Do not make applications less than 7 days apart. Do not apply more than 0.50 pound active ingredient per acre per season.
two-spotted spider mite	5.12 to 6.4 fl. oz. per acre (0.08 to 0.1 lb. ai per acre)	

CITRUS* (PHI – 1 Day)

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. 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. This product is used 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.

CITRUS* (cont.)

PEST	RATE	APPLICATION INSTRUCTIONS AND PRECAUTIONS
fireant *(Solenopsis spp.)* Asian cockroach (blattella asahinae)	6.4-16 fl. oz. per acre (0.1 to 0.25 lb. ai per acre)	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. 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. 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. Do not apply through irrigation systems. Do not allow any application of this product to contact fruit or foliage. Do not apply more than a total of 32 fl. oz. of formulated product (0.5 a.i.) per acre per year. Apply the specified dosage in a minimum of 40 gallons of finished spray per acre. 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)* fireant *(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. Do not apply through irrigation systems. Do not allow any application of this product to contact fruit or foliage. Do not apply more than a total of 32 fl. oz. of formulated product (0.5 a.i.) per acre per year. Use a minimum of 30 gallons of spray mixture per acre. 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 apply more than a total of 38.4 fl. oz. of formulated product (0.6 lb. a.i.) per acre per year. Do not make more than 6 applications per year. Do not make applications less than 30 days apart. Do not make applications through irrigation systems. For use only in AL, AR, FL, GA, LA, MS, OK, SC, TN, TX & VA.

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 INSECTICIDE (pounds ai per acre)	.06	.064	.069	.08
Aceto Bifenthrin 2 EC INSECTICIDE (formulated ounces per acre)	3.9	4.1	4.4	5.12

FIELD CORN (GRAIN AND SILAGE), POPCORN, FIELD CORN GROWN FOR SEED *(cont.)*

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.
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	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. Do not apply to soil where there is greater than 30% cover of crop residue remaining. Do not graze livestock in treated area or cut treated crops for feed within 30 days of treatment. Do not apply more than 0.1 lb. ai (6.4 fl. oz) per acre per season as an at plant 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.

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

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 galllons 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 inital application at or shortly before egg hatch. For control of other insect pests, make initial application when pests first appear and repeat as necessary.
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 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.

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

PEST	RATE	APPLICATION INSTRUCTIONS AND PRECAUTIONS
Do not apply more than 0.3 lb. ai per acre per season including PRE & PPI, at plant plus foliar applications. 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. Use of this product on corn is prohibited in all coastal counties.		

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 INSECTICIDE (pounds ai per acre)	.06	.064	.069	.08
Aceto Bifenthrin 2 EC INSECTICIDE (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 1,000 linear feet of row (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.
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 1,000 linear feet of row (0.0023 to 0.0046 lb. ai per 1,000 linear feet of row)	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. Do not apply to soil where there is greater than 30% cover of crop residue remaining. Do not graze livestock in treated area or cut treated crops for feed within 30 days of treatment. Do not apply more than 0.1 lb. active per acre per season as an at plant application.

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 stink bugs 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.
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 rates will be necessary for heavier initial populations and corn under heat or drought stress.
Do not apply more than 0.2 lb. a.i. (12.8 ounces formulated) per acre per season. Do not graze livestock in treated areas of 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. Use of this product on corn is prohibited in all coastal counties.		

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. Do not apply more than 0.5 lb. ai per acre per season. Do not make more than 10 synthetic pyrethroid applications (of one product or combination of products) to a cotton crop in one growing season. Synthetic pyrethroid products include Ambush®, Ammo®, Asana® XL, Baythroid®, Capture®, Danitol®, Karate®, Mustang®, and Scout X-TRA®. Do not graze livestock in treated areas or cut treated crops for feed.
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	

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. Do not apply more than 0.3 lb. ai (19.2 ounces formulated) per acre per season. Do not make more than two applications after bloom. Do not make applications less than 7 days apart.
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	

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. Do not apply more than 0.2 lb. active ingredient (12.8 ounces formulated) to peas, or 0.3 active ingredient (19.2 ounces formulated) to beans per acre per season. Do not make applications less than 7 days apart.
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)	
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)	

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 0.10 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. Do not make applications less than 7 days apart. Do not apply more than 0.2 lb. active ingredient (12.8 ounces formulated) per acre per season.
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 0.10 lb. ai per acre)	

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. Apply no more than once every 7 days. Do not apply more than 0.4 lb. ai per acre per season.

GRAPES (PHI – 30 Day)

PEST	RATE	APPLICATION INSTRUCTIONS AND PRECAUTIONS
cutworms eastern grape leaf hopper 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. Do not apply more than 0.10 lb. ai per acre per season.
black vine weevil glassywinged sharp shooter two-spotted spider mite	6.4 fl. oz/ acre (0.1 lb. ai per acre)	

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)	Do not exceed 0.1 lb. ai per application. Do not exceed 0.3 lb. ai per acre per season. Do not make applications less than 21 days apart. 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. Do not use ultra low volume (ULV) application on hops.
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)	

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. Do not apply more than 0.4 lb. active ingredient per acre per season. Do not make applications less than 7 days apart.
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)	

*Not for Use in California.

LETTUCE, HEAD (PHI – 7 Days)

PEST	RATE	APPLICATION INSTRUCTIONS AND PRECAUTIONS
aphids armyworms corn earworm cucumber beetles cutworms diamondback moth flea beetles grasshopper imported cabbage worm 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. Do not make applications less than 7 days apart. A maximum of 0.5 lb. ai may be applied per acre per season.
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)	

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. Do not make applications less than 7 days apart. Do not apply more than 0.2 lb. ai per acre per season.

* Not for Use in California.

OKRA (PHI –7 Days)

PEST	RATE	APPLICATION INSTRUCTIONS AND PRECAUTIONS
aphids armyworm corn earworm cucumber beetles cutworms European corn borer flea beeltes 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. Do not make applications less than 7 days apart. Do not apply more than 0.2 pound active ingredient per acre per season.
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)	

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. Do not make applications less than 14 days apart. Do not apply more than 0.5 lb. ai per acre per season.
aphids spider mites thrips whitefly	5.12 to 6.4 fl. oz. per acre (0.08 to 0.1 lb. ai per acre)	

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. Do not apply more than 0.5 lb. ai per acre per season with no more than 0.45 lb. active per acre applied after petal fall. Repeat applications if necessary to maintain control. Do not make applications less than 30 days apart. Do not graze livestock in treated orchards or cut treated cover crops for feed.
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)	

ROOT CROPS (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. Do not make applications less than 7 days apart. Do not apply more than 0.5 lb. ai per acre per season.

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 cabbage worm Japanese beetle adult leafhoppers leafminer loopers Mexican bean beetle adult pea leaf weevil pea weevil plant bug saltmarsh caterpillar sap beetle southern armyworm 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. Do not make applications less than 30 days apart. Do not apply more than 0.3 lb. ai per acre per season. * Pyrethroid resistance may occur for these pests. See the Resistance section of this label.
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)	

SPINACH (PHI – 40 Days)

PEST	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. Do not make applications less than 7 days apart. Do not apply more than 0.4 lb. ai per acre per season.
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 0.1 lb. ai per acre)	

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.)* including: broadbean (succulent), lima bean (green), runner bean, snap bean, wax bean, bean *(Vigna spp.)* including: 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. Do not apply more than 0.2 lb. a.i. (12.8 ounces formulated product) per acre per season.
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 army worm whitefly	2.1 to 6.4 fl. oz per acre (0.033 to 0.1 lb. ai per acre)	
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)	

TOBACCO

PEST	RATE	APPLICATION INSTRUCTIONS AND PRECAUTIONS
armyworm spp. *cutworms 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- 0.1 lb. ai/A per foliar application up to, and including, layby in a minimum of 10 gal/A. Do not make more than 2 foliar applications per season. Do not apply more than 0.2 lb. ai/A per season. Do not apply later than layby. May be tank mixed with Command, Spartan 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)	

TOMATO and TOMATILLO (PHI – 1 Day)

PEST	RATE	APPLICATION INSTRUCTIONS AND PRECAUTIONS
aphids armyworms including beet armyworm, fall armyworm, southern yellow- striped 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 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. Do not make applications less than 10 days apart. Do apply more than 4 applications per acre per season.
two-spotted spider mite	5.12 to 6.4 fl. oz. per acre (0.08 to 0.1 lb. ai per acre)	

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. Do not make applications less than 15 days apart. Do not exceed 0.2 lb. ai per acre per application. Do not apply more than 0.5 lb. active ingredient per acre per season. Do not graze livestock in treated orchards or cut treated cover crops for feed.
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)	

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. Do not make more than 2 foliar applications per season. Do not make applications less than 21 days apart. Do not apply more than 0.5 lb. active ingredient per acre per season, including soil application.
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)	

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.

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.

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.

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 Aceto Agricultural Chemicals Corporation. To the extent consistent with applicable law all such risks shall be assumed by the user or buyer.

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Active ingredient made in China, formulated and package in USA