## **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.

GROUP 3 INSECTICIDE



For use on, beans, brassicas, brassica vegetables, cilantro, citrus, corn, cucurbits, eggplant, field corn, head lettuce, leafy brassicas, okra, peas, peppers, popcorn, soybeans, spinach, succulent peas and beans, sweet corn, tobacco, tomatoes, and tuberous vegetables, turnip greens and corm vegetables to control listed insects/pests and mites. Xpedient Plus V is formulated to be compatible with liquid fertilizers.

## **ACTIVE INGREDIENT:**

#### **Bifenthrin**

(2-methyl[1,1'-biphenyl]-3-yl) methyl 3-(2-chloro-3,3,3-trifluoro-1-propenyl)-

2,2-dimethyl-cyclopropanecarboxylate*	 25.1%
INERT INGREDIENTS**	74.9%
ΤΟΤΔΙ	100.0%

## Contains petroleum distillate

This product contains 2 pounds active ingredient per gallon.

# **WARNING - AVISO**

(This label must be in the possession of the user at the time of application.) See other panels for additional precautionary information.

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

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

<sup>\*</sup>Cis isomers 97% minimum, trans isomers 3% maximum.

<sup>\*\*</sup>Contains xylene range aromatic solvents.

## **EMERGENCY INFORMATION**

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. **FOR THE FOLLOWING EMERGENCIES, PHONE 24 HOURS A DAY:** 

•	
For Medical Emergencies phone:	1-888-681-4261
For Transportation Emergencies, including spill, leak or fire, phone: CHEMTREC*	
For Product Use Information phone: AMVAC®	1-888-462-6822

#### **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 distillate – vomiting may cause aspiration pneumonia.

EPA Reg. No. 5481-609 EPA Est. No. Net Contents:

As Marked on Container





AMVAC Chemical Corporation 4695 MacArthur Court, Suite 1200 Newport Beach, CA 92660 U.S.A. 1-888-462-6822

## PRECAUTIONARY STATEMENTS

## HAZARDS TO HUMANS AND DOMESTIC ANIMALS

**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. Wash thoroughly with soap and water after handling and before eating, drinking, using tobacco, or using the toilet. Remove contaminated clothing and wash clothing before reuse.

## 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 product through application or other tasks must wear:

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

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

## **User Safety Recommendations**

Users should:

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

## **ENVIRONMENTAL HAZARDS**

This pesticide is extremely toxic to fish and aquatic invertebrates. Use with care when applying in areas adjacent to any body of water. Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. Do not make applications when weather conditions favor drift from treated areas. Drift and runoff from treated areas may be hazardous to aquatic organisms in neighboring areas. Do not contaminate water when disposing of equipment washwaters.

This product is highly toxic to bees exposed to direct treatment or residues on blooming crops or weeds. Do not apply this product or allow it to drift to blooming crops or weeds if bees are foraging 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 AND CHEMICAL HAZARDS

Do not use or store near heat or open flame.

## **DIRECTIONS FOR USE**

RESTRICTED USE PESTCIDE. 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.

**Pest Resistance:** Pests have demonstrated the ability to develop resistance to continual use of the same product or to products with a similar mode of action. In order to avoid conditions which favor development of pest resistance, follow established resistance management guidelines in your geography as recommended by state agricultural extension personnel and crop consultants. If product performance diminishes and pest resistance is suspected to have developed in your geography, and specifically on your crop, repeated use of this product may not adequately control the target pest. As soon as practical, contact your local crop consultant, agricultural advisor, or company representative to obtain information on alternative pest management strategies in your geography.

## **AGRICULTURAL USE REQUIREMENTS**

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

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 12 hours.

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.

#### **CHEMIGATION USE DIRECTIONS**

Do not apply using chemigation.

## **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-Mixture**

Product may be applied in tank mixtures with other products approved for use on registered crops. Observe all restrictions and precautions which appear on the labels of these products. Test for compatibility of products before mixing.

## **Directions for Application and Mixing**

The product is designed to be mixed with liquid fertilizers or with water. 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 generally require higher rates.

Mix 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 product, and 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 recommended tank mixtures, in conjunction with liquid starter or pop-up fertilizers may be used. A jar compatibility test should be performed with the appropriate ratio of Xpedient Plus V and fertilizer prior to use. Constant agitation should be maintained during mixing and application. If the mixture sits overnight, thoroughly agitate before use.

Apply as a T-band treatment over an open seed furrow, in-furrow with the seed or as a broadcast soil application. Position the spray nozzle behind the planter shoe, in front of the press wheel centered over the row. Use the crop tables below to determine the product needs per acre. Apply in a minimum of 3 gallons of finished spray per acre.

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

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

## Maximum Allowable Use of Bifenthrin Per Acre Per Season

Refer to the individual crop sections for maximum allowable product usage per acre per season. The maximum allowable use must include all registered use patterns including at plant, soil applied, and/or foliar applications for a 12 month period. The 12 month period is to begin upon the initial application to the acre.

## **Buffer Zones**

## **Vegetative Buffer Strip**

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

Only apply products containing bifenthrin onto fields where a maintained vegetative buffer strip of at least 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. <a href="http://pesticidestewardship.org/drift/Documents/conservbuffers.pdf">http://pesticidestewardship.org/drift/Documents/conservbuffers.pdf</a>

## **Buffer Zone for Ground Application (groundboom or airblast)**

Do not apply within 25 feet of aquatic habitats (such as, but not limited to, lakes, reservoirs, rivers, 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 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 application according to ASAE<sup>TM</sup> (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.

#### **CROP USE DIRECTIONS**

## BEANS & PEAS (DRIED) (AT PLANT USE)

Dried cultivars of: Bean (*Lupinus*); Bean (*Phaseolus*), Field bean, Kidney bean, Lima bean (dry), Navy bean, Pinto bean, Tepary bean; Bean (*Vigna*), 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*), Field pea, Pigeon pea.

(Not for use in California)

			DOSAGE	
PEST	PLACEMENT	Fluid Ounces per Acre (Fl. oz./A)	Fluid Ounces per 1000 Row Feet (Fl. oz./1000 Row Ft.)	Pounds Active Ingredient per Acre (Lbs. a.i./A)
Armyworm species	At Plant	2.56 - 5.12	0.15 - 0.30	0.04 - 0.08
(including True*)				
Cutworm species				
(including Army*)				
Grape Colaspis				
Grubs				
Root Maggots				
Wireworms				
Corn Rootworm	At Plant	5.12 - 6.40	0.30 - 0.37	0.08 - 0.10
Larvae				

#### REMARKS

Apply as a 5-7 inch band over the row on the soil surface, 5-7 inch T-band over the open seed furrow, or infurrow with the seed.

## RESTRICTIONS

Do not apply more than 0.1 pound active ingredient per acre per season as an at plant application.

Do not apply more than 0.2 pound active ingredient to peas or 0.3 pound active ingredient to beans per acre per

<sup>\*</sup>Cutworm and Armyworm treatments may be applied as broadcast applications to the soil surface.

season including at plant plus foliar applications of all bifenthrin products.

## BRASSICA 'HEAD AND STEM' VEGETABLES (AT PLANT USE)

'Head and Stem' Brassica Vegetables including: Broccoli, Chinese, Broccoli (gai lan, white flowering broccoli), Brussels Sprouts, Cauliflower, 'Cavalo' broccoli, Kohlrabi, Cabbage, Chinese cabbage (napa), and Chinese mustard cabbage (gai choy).

(Not for use in California)

		DOSAGE		
PEST	PLACEMENT	Fluid Ounces per Acre (Fl. oz./A)	Fluid Ounces per 1000 Row Feet (Fl. oz./1000 Row Ft.)	Pounds Active Ingredient per Acre (Lbs. a.i./A)
Armyworms*	At Plant	2.56 - 5.12	0.15 - 0.30	0.04 - 0.08
Cabbage Maggots				
Cutworms*				
(including Army)*				
Grubs				
Root Aphids				
Root Maggots				
Seedcorn Maggots				
Wireworms				
Rootworm Larvae	At Plant	5.12 - 6.40	0.30 - 0.37	0.08 - 0.10

#### **REMARKS**

Apply as a 5-7 inch T-band over the open seed furrow, or in-furrow with the seed.

## **RESTRICTIONS**

Do not apply more than 0.1 pound active ingredient per acre per season as an at plant application.

Do not apply more than 0.5 pound active ingredient per acre per season including at plant plus foliar applications of all bifenthrin products.

## BRASSICA LEAFY VEGETABLES, TURNIP GREENS (AT PLANT USE)

Broccoli raab, Bok choy, Collard, Kale, Mizuna, Mustard greens, Mustard spinach, Rape greens, Turnip and Turnip greens.

(Not for use in California)

		DOSAGE			
PEST	PLACEMENT	Fluid Ounces per Acre (Fl. oz./A)	Fluid Ounces per 1000 Row Feet (Fl. oz./1000 Row Ft.)	Pounds Active Ingredient per Acre (Lbs. a.i./A)	
Armyworms* (including True*)	At Plant	2.56 - 5.12	0.15 - 0.30	0.04 - 0.08	
Cutworms* (including Army*)					
Grubs					
Lettuce Root Aphids					
Root Maggots					
Wireworms					
Rootworm Larvae	At Plant	5.12 - 6.40	0.30 - 0.37	0.08 - 0.10	

#### REMARKS

Apply as a 5-7 inch band over the row on the soil surface, a 5-7 inch T-band over the open furrow, or in-furrow with the seed. \*Apply broadcast to the soil surface for control of Army Cutworm, Armyworms, Cutworms, or True Armyworm.

## RESTRICTIONS

Do not apply more than 0.1 pound active ingredient per acre per season as an at plant application.

Do not apply more than 0.4 pound active ingredient per acre per season including at plant plus foliar applications of all bifenthrin products.

<sup>\*</sup>Cutworm and Armyworm treatments may be applied as broadcast applications to the soil surface.

## CILANTRO & CORIANDER (AT PLANT USE)

(Not for use in California)

		DOSAGE			
PEST	PLACEMENT	Fluid Ounces per Acre (Fl. oz./A)	Fluid Ounces per 1000 Row Feet (Fl. oz./1000 Row Ft.)	Pounds Active Ingredient per Acre (Lbs. a.i./A)	
Armyworm species Cutworm species Flea Beetle Larvae Wireworms	At Plant	2.56 - 5.12	0.15 - 0.30	0.04 - 0.08	

#### **REMARKS**

Apply as a 5-7 inch band over the row on the soil surface, 5-7 inch T-band over the open seed furrow, in-furrow with the seed or broadcast to the soil surface.

#### RESTRICTIONS

Do not apply more than 0.1 pound active ingredient per acre per season as an at plant application. Do not apply more than 0.5 pound active ingredient per acre per season including at plant plus foliar applications of all bifenthrin products.

CITRUS (Bare Soil Surface Under Drip Line)				
		DOSAGE		
PEST	PLACEMENT	Fluid Ounces per Acre (Fl. oz./A)	Pounds Active Ingredient per Acre (Lbs. a.i./A)	
Cockroaches, Asian	Bare Soil Surface Under	16.00 – 32.00	0.25 - 0.50	
Fire Ants	Drip Line	6.40 - 16.00	0.10 - 0.25 (Florida)	
Blue-Green Citrus Root Weevils	Bare Soil Surface Under	16.00 - 32.00	0.25 - 0.50	
Brown Leaf Notchers	Drip Line			
Diaprepes Root Weevils		<b>Y</b>		
Little Leaf Notchers		7		
Southern Blue-Green Citrus				
Root Weevils, other				

## REMARKS

Apply product by ground equipment to bare soil beneath citrus trees. Product must be uniformly applied from the trunk to the drip line of tree; apply in a minimum of 40 gallons of dilute spray per acre. Greater spray volume should ensure greater uniformity of coverage. Pre and post application irrigation may aid in the uniformity of coverage as well.

Product protects citrus tree roots from *Diaprepes* and other citrus root weevil feeding by forming a barrier which provides contact activity on newly hatched larvae (neonates). As citrus root weevil eggs hatch in new foliage, neonates fall to the soil surface beneath the tree and come in contact with this product as they attempt to burrow into the root zone. Disturbance of the soil beneath trees should be minimized.

Timing of product application is critical. Current information suggests that peak emergence of adult *Diaprepes* Weevil varies by citrus growing region and these emergence peaks can be dramatically affected by environmental factors, such as soil moisture. Typically, two peaks are observed for *Diaprepes*, first in spring then late summer or early fall. Southern Blue-Green and Blue-Green Citrus Weevils typically exhibit a single emergence peak in the spring. Brown and Little Leaf Notchers typically exhibit three emergence peaks, spring and summer and fall. Since emergence varies seasonally and by location, timing of product application can be accurately forecasted by observing adults. Adults are most active early morning and late afternoon; numbers can be estimated by trapping throughout spring and summer (emergence periods). Egg laying will occur for 8 to 10 weeks following adult emergence from the soil; larval invasion of the soil will begin 2 – 3 weeks following adult emergence. It is critical to have the product soil barrier in place prior to drop of the neonates.

This product is one of several effective tools in an integrated pest management program for citrus root weevils. Application of this product should be used in conjunction with good cultural practices, biological control of larvae and foliar control of adults. Consult local university extension personnel for current information to protect citrus

trees from Citrus Root Weevils and other pests.

## **ADDITIONAL INFORMATION**

Apply to individual citrus resets, when not in solid planted rows, using hand-gun or shielded sprayer.

Peak emergence of *Diaprepes* root weevil generally occurs in the spring. Depending on weather conditions, a minor emergence of *Diaprepes* root weevil may also occur in the fall.

If the citrus grove to be treated is in an area where weather conditions are conducive to primary emergence occurring in the spring, 32 fluid ounces per acre of formulated product should be used 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 fluid ounces per acre of formulated product can be applied early season and 16 fluid ounces per acre of formulated product can be applied later in the season.

## **RESTRICTIONS**

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 fluid ounces of formulated product (0.5 pound active ingredient) 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.

Do not apply within 1 day of harvest.

## CORN, FIELD (GRAIN AND SILAGE), FIELD CORN GROWN FOR SEED, POPCORN (AT PLANT USE) (Not for use in California)

			DOSAGE	
PEST	PLACEMENT	Fluid Ounces per Acre** (Fl. oz./A)	Fluid Ounces per 1000 Row Feet (Fl. oz./1000 Row Ft.)	Pounds Active Ingredient per Acre** (Lbs. a.i./A)
Armyworms* (including	At Plant	2.56 – 10.24	0.15 - 0.60	0.04 - 0.16
True*)				
Common Stalk Borer*				
Cutworms*( including Army*)				
Grubs				
Seed Corn Beetles				
Seed Corn Maggots				
Wireworms				
Corn Rootworm Larvae	At Plant	5.12 – 12.80	0.30 - 0.74	0.08 - 0.20
(Northern, Southern and				
Western)				

#### **REMARKS**

Apply as a 5 to 7 inch T-band over an open furrow, or in-furrow with the seed.

\*For Army Cutworm, Armyworms, Common Stalk Borer, Cutworms, or True Armyworm, apply as a 5 to 7 inch band over the row on the soil surface, a 5 to 7 inch T-band over the open furrow, in-furrow with the seed, or broadcast to the soil surface.

## RESTRICTIONS

Do not apply more than 0.2 pound active ingredient per acre per season as an at plant application.

For field corn, do not apply more than 0.3 pound active ingredient per acre per season including pre-plant incorporated (PPI), at plant, pre-emergence (PRE), and foliar applications of all bifenthrin products.

<sup>\*\*</sup>For 30 inch rows.

CORN, FIELD (GRAIN AND SILAGE), FIELD CORN GROWN FOR SEED, POPCORN (PRE & PPI)				
		DOSAGE		
PEST	PLACEMENT	Fluid Ounces per Acre (Fl. oz./A)	Pounds Active Ingredient per Acre (Lbs. a.i./A)	
Armyworms	Pre-Plant	3.0 - 4.0	0.05 - 0.06	
Black Cutworms	Incorporated			
Grape Colaspis	(PPI)			
Seedcorn Maggots				
White Grubs				
Wireworms				
Armyworms	Pre-Emergence	2.56	0.04	
Black Cutworms	(PRE)			
Common Stalk Borers				

## **REMARKS**

The 3-4 fl. oz./A rates must be pre-plant incorporated (PPI) and can be tank mixed and applied with PPI herbicides. Incorporation of this product should be close to the intended seed planting depth, and no deeper than 3 inches.

For PRE treatments, the 2.56 fl. oz./A rate may be applied and can be tank mixed and applied with PRE herbicides.

## RESTRICTIONS

For field corn, do not apply more than 0.3 pound active ingredient per acre total per season including PPI, at plant, PRE, and foliar applications of all bifenthrin products.

			DOSAGE	
PEST	PLACEMENT	Fluid Ounces per Acre* (Fl. oz./A)	Fluid Ounces per 1000 Row Feet (Fl. oz./1000 Row Ft.)	Pounds Active Ingredient per Acre* (Lbs. a.i./A)
Armyworms ( including True) Common Stalk Borers Cutworms ( including Army) Grubs Seed Corn Beetles Seed Corn Maggots Wireworms	At Plant	2.56 – 10.24	0.15 - 0.60	0.04 - 0.16
Corn Rootworm Larvae (Northern, Southern and Western)	At Plant	5.12 – 12.80	0.30 - 0.74	0.08 - 0.20

## **REMARKS**

Apply as a 5 to 7 inch T-band over an open furrow, or in-furrow with the seed. For Army Cutworm, Armyworms, Common Stalk Borer, Cutworms, or True Armyworm, apply as a 5 to 7 inch band over the row on the soil surface, a 5 to 7 inch T-band over the open furrow, in-furrow with the seed, or broadcast to the soil surface.

\*For 30 inch rows

## **RESTRICTIONS**

Do not apply more than 0.2 pound active ingredient per acre per season as an at plant application.

For sweet corn, do not apply more than 0.2 pound active ingredient per acre per season including pre-plant incorporated (PPI), at plant, pre-emergence (PRE), and foliar applications of other bifenthrin products.

## CORN, SWEET, SWEET CORN GROWN FOR SEED (PRE & PPI)

(Not for use in California)

		DOSAGE		
PEST	PLACEMENT	Fluid Ounces per Acre (Fl. oz./A)	Pounds Active Ingredient per Acre (Lbs. a.i./A)	
Armyworms	At Plant	3.00 - 4.00	0.05 - 0.06	
Black Cutworms	Pre-Plant			
Grape Colaspis	Incorporated			
Seedcorn Maggots	(PPI)			
White Grubs				
Wireworms				
Armyworms	At Plant	2.56	0.04	
Black Cutworms	Pre-Emergence			
Common Stalk Borers	(PRE)			

#### **REMARKS**

The 3-4 fl. oz./A rate must be pre-plant incorporated (PPI) and can be tank mixed and applied with PPI herbicides. Incorporation of this product should be close to the intended seed planting depth, and no deeper than 3 inches. For PRE treatments, the 2.56 fl. oz./A rate may be applied and can be tank mixed and applied with PRE herbicides.

## RESTRICTIONS

Do not apply more than 0.2 pound active ingredient per acre per season including PPI, at plant, PRE, and foliar applications of all bifenthrin products.

## **CUCURBITS (AT PLANT USE)**

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

(Not for use in California)

		DOSAGE			
PEST	PLACEMENT	Fluid Ounces per Acre (Fl. oz./A)	Fluid Ounces per 1000 Row Feet (Fl. oz./1000 Row Ft.)	Pounds Active Ingredient per Acre (Lbs. a.i./A)	
Armyworms* (including True*) Cutworms* (including Army*) Flea Beetle Larvae Grubs Wireworms	At Plant	2.56 - 5.12	0.15 - 0.3	0.04 - 0.08	
Cucumber Beetle Larvae	At Plant	5.12 - 6.40	0.30 - 0.37	0.08 - 0.10	

## **REMARKS**

For control of Cucumber Beetle Larvae, apply as a 5 to 7 inch T-band over an open furrow, or in-furrow with the seed. For control of Wireworm, Grub, and Flea Beetle Larvae, apply as a 5 to 7 inch T-band over an open furrow, or in-furrow with the seed or transplant. \*For control of Army Cutworm, Cutworms, True Armyworm and Armyworms, apply as a 5 to 7 inch band over the row on the soil surface, a 5 to 7 inch T-band over the open furrow, in-furrow with the seed, broadcast to the soil surface, or banded over the row.

## RESTRICTIONS

Do not apply more than 0.1 pound active ingredient per acre per season as an at plant application.

Do not apply more than 0.3 pound active ingredient per acre per season including at plant plus foliar applications

## **EGGPLANT** (AT PLANT USE)

(Not for use in California)

			DOSAGE	
PEST	PLACEMENT	Fluid Ounces per Acre (Fl. oz./A)	Fluid Ounces per 1000 Row Feet (Fl. oz./1000 Row Ft.)	Pounds Active Ingredient per Acre (Lbs. a.i./A)
Armyworms* (including	At Plant	2.56 - 5.12	0.15 - 0.3	0.04 - 0.08
True*)				
Cutworms* (including				
Army*)				
Grubs				
Root Maggots				
Wireworms				
Rootworm Larvae	At Plant	5.12 - 6.40	0.30 - 0.37	0.08 - 0.10

#### **REMARKS**

Apply as a 5 to 7 inch band over the row on the soil surface, a 5 to 7 inch T-band over the open furrow, or infurrow with the seed.

## **RESTRICTIONS**

Do not apply more than 0.1 pound active ingredient per acre per season as an at plant application.

Do not apply more than 0.2 pound active ingredient per acre per season including at plant plus foliar applications of all bifenthrin products.

## **LETTUCE, HEAD (AT PLANT USE)**

(Not for use in California)

			DOSAGE	
			Fluid Ounces per	Pounds Active
PEST	PLACEMENT	Fluid Ounces per Acre	1000 Row Feet	Ingredient per
		(Fl. oz./A)	(Fl. oz./1000 Row	Acre
			Ft.)	(Lbs. a.i./A)
Armyworms* (including	At Plant	2.56 - 5.12	0.15 - 0.30	0.04 - 0.08
True)				
Bulb Mites*				
Cutworms* (including				
Army*)				
Grubs				
Lettuce Root Aphids				
Root Maggots				
Wireworms				
Rootworm Larvae	At Plant	5.12 - 6.40	0.30 - 0.37	0.08 - 0.10

## **REMARKS**

Apply as a 5 to 7 inch band over the row on the soil surface, a 5 to 7 inch T-band over the open furrow, or infurrow with the seed.

\*Apply broadcast to the soil surface for control of Army Cutworm, Armyworms, Bulb Mites, Cutworms, or True Armyworm.

## **RESTRICTIONS**

Do not apply more than 0.1 pound active ingredient per acre per season as an at plant application.

Do not apply more than 0.5 pound active ingredient per acre per season including at plant plus foliar applications of all bifenthrin products.

<sup>\*</sup>Apply broadcast to the soil surface for control of Army Cutworm, Armyworms, Cutworms, or True Armyworm.

## **OKRA** (AT PLANT USE)

(Not for use in California)

		DOSAGE		
PEST	PLACEMENT	Fluid Ounces per Acre (Fl. oz./A)	Fluid Ounces per 1000 Row Feet (Fl. oz./1000 Row Ft.)	Pounds Active Ingredient per Acre (Lbs. a.i./A)
Armyworms	At Plant	2.56 - 5.12	0.15 - 0.30	0.04 - 0.08
Cutworms				
Flea Beetle Larvae				
Wireworms				

## **REMARKS**

Apply as a 5-7 inch band over the row on the soil surface, a 5-7 inch T-band over the open seed furrow, in-furrow with the seed or broadcast to the soil surface.

#### RESTRICTIONS

Do not apply more than 0.1 pound active ingredient per acre per season as an at plant application.

Do not apply more than 0.2 pound active ingredient per acre per season including at plant plus foliar applications of all bifenthrin products.

## PEAS AND BEANS (SUCCULENT) (AT PLANT USE)

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

(Not for use in California)

			DOSAGE	
PEST	PLACEMENT	Fluid Ounces per Acre (Fl. oz./A)	Fluid Ounces per 1000 Row Feet (Fl. oz./1000 Row Ft.)	Pounds Active Ingredient per Acre (Lbs. a.i./A)
Armyworms*	At Plant	2.56 - 5.12	0.15 - 0.30	0.04 - 0.08
Cutworms*,(including Army*				
and True*)				
Grape Colaspis				
Grubs				
Root Maggots				
Seedcorn Maggots				
Wireworms				
Rootworm larvae	At Plant	5.12 - 6.40	0.30 - 0.37	0.08 - 0.10

## **REMARKS**

Apply as a 5 to 7 inch band over the row on the soil surface, a 5 to 7 inch T-band over the open furrow, or infurrow with the seed.

\*Apply a broadcast treatment to the soil surface for control of Army Cutworm, Armyworms, Cutworms, or True Armyworm.

## **RESTRICTIONS**

Do not apply more than 0.1 pound active ingredient per acre per season as an at plant application.

Do not apply more than 0.2 pound active ingredient per acre per season including at plant plus foliar applications of all bifenthrin products.

## PEAS, DRIED (SEE BEANS, DRIED)

## PEPPERS (BELL AND NON-BELL) (AT PLANT USE)

(Not for use in California)

		DOSAGE			
PEST	PLACEMENT	Fluid Ounces per Acre (Fl. oz./A)	Fluid Ounces per 1000 Row Feet (Fl. oz./1000 Row Ft.)	Pounds Active Ingredient per Acre (Lbs. a.i./A)	
Armyworms* (including True*) Common Stalk Borer* Cutworms*( including Army*) Flea Beetle Larvae Grubs Pepper Maggots Root Aphids Root Maggots Wireworms	At Plant	2.56 - 5.12	0.15 - 0.30	0.04 - 0.08	
Rootworm Larvae	At Plant	5.12 - 6.40	0.30 - 0.37	0.08 - 0.10	

## **REMARKS**

Apply as a 5 to 7 inch band over the row on the soil surface, a 5 to 7 inch T-band over the open furrow, or infurrow with the seed.

\*Apply broadcast over the soil surface for control of Army Cutworm, Cutworms, True Armyworm, Armyworms, or Common Stalk Borer.

## **RESTRICTIONS**

Do not apply more than 0.1 pound active ingredient per acre per season as an at plant application.

Do not apply more than 0.2 pound active ingredient per acre per season including at plant plus foliar applications of all bifenthrin products.

## **SOYBEANS** (AT PLANT USE)

(Not for use in California)

		DOSAGE				
PEST	PLACEMENT	Fluid Ounces per Acre (Fl. oz./A)	Fluid Ounces per 1000 Row Feet (Fl. oz./1000 Row Ft.)	Pounds Active Ingredient per Acre (Lbs. a.i./A)		
Armyworms*( including	At Plant	2.56 - 5.12	0.15 - 0.30	0.04 - 0.08		
True*)						
Cutworms*(including	, i					
Army*)						
Grape Colaspis						
Grubs						
Root Maggots						
Seedcorn Maggots						
Wireworms						
Rootworm Larvae	At Plant	5.12 - 6.40	0.30 - 0.37	0.08 - 0.10		

## **REMARKS**

Apply as a 5 to 7 inch band over the row on the soil surface, a 5 to 7 inch T-band over the open furrow, or infurrow with the seed.

\*For control of Army Cutworm, Armyworms, Cutworms, or True Armyworm, apply as a broadcast treatment to the soil surface.

## RESTRICTIONS

Do not apply more than 0.1 pound active ingredient per acre per season as an at plant application.

Do not apply more than 0.2 pound active ingredient per acre per season including at plant plus foliar applications of all bifenthrin products.

## **SOYBEANS (PPI & PRE)**

(Not for use in California)

		DOSAGE		
PEST	PLACEMENT	Fluid Ounces per Acre (Fl. oz./A)	Pounds Active Ingredient per Acre (Lbs. a.i./A)	
Armyworms	At Plant	3.00 - 4.00	0.05 - 0.06	
Black Cutworms	Pre-Plant Incorporated			
Seedcorn Maggots	(PPI)			
White Grubs				
Wireworms				
Armyworms	At Plant	2.56	0.04	
Black Cutworms	Pre-Emergence			
Common Stalk Borers	(PRE)			

#### **REMARKS**

The 3-4 fluid ounces per acre rate must be pre-plant incorporated (PPI) and can be tank mixed and applied with PPI herbicides. Incorporation of this product should be close to the intended seed planting depth, and no deeper than 3 inches.

For PRE treatments, the 2.56 fluid ounces per acre rate may be applied and can be tank mixed and applied with PRE herbicides.

## **RESTRICTIONS**

Do not apply more than 0.1 pound active ingredient per acre per season as PPI or PRE application.

Do not apply more than 0.2 pound active ingredient per acre per season including at plant plus foliar applications of all bifenthrin products.

## **SPINACH (AT PLANT)**

(Not for use in California)

			DOSAGE	
PEST	PLACEMENT	Fluid Ounces per Acre (Fl. oz./A)	Fluid Ounces per 1000 Row Feet (Fl. oz./1000 Row Ft.)	Pounds Active Ingredient per Acre (Lbs. a.i./A)
Armyworms	At Plant	2.56 - 5.12	0.15 - 0.30	0.04 - 0.08
(including True)				
Cutworms (including				
Army)		•		
Grubs				
Root Maggots				
Seedcorn Maggots				
Wireworms				
Rootworm Larvae	At Plant	5.12 - 6.40	0.30 - 0.37	0.08 - 0.10

## REMARKS

Apply as a 5 to 7 inch band over the row on the soil surface, a 5 to 7 inch T-band over the open furrow, or infurrow with the seed.

\*Apply a broadcast treatment to the soil surface for control of Army Cutworm, Armyworms, Cutworms, or True Armyworm.

## **RESTRICTIONS**

Do not apply more than 0.1 pound active ingredient per acre per season as an at plant application.

Do not apply more than 0.4 pound active ingredient per acre per season including at plant plus foliar applications of all bifenthrin products.

## **TOBACCO** (PRE-TRANSPLANT & AT-TRANSPLANT)

(Not for use in California)

,		DOSAGE		
PEST	PLACEMENT	Fluid Ounces per Acre (Fl. oz./A)	Fluid Ounces per 1000 Row Feet (Fl. oz./1000 Row Ft.)	Pounds Active Ingredient per Acre (Lbs. a.i./A)
Armyworm species	Pre-Transplant and	2.56 - 6.40	0.15 - 0.37	0.04 - 0.10
Cutworm species	At-Transplant			
Flea Beetle Larvae				
Mole Crickets				
Stalkborers				
White Grubs				
Wireworms				

#### **REMARKS**

Pre-transplant soil applications: Use of suitable equipment to incorporate into the top 4 inches of the soil is required to control below ground pests.

At-transplant water treatment application: Apply 0.06 to 0.1 pound active ingredient per acre in a water treatment application volume of 10 to 200 gallons per acre.

## **RESTRICTIONS**

Do not apply more than 0.2 pound active ingredient per acre per season.

Do not apply later than lay-by.

May be tank mixed with herbicides approved for tobacco use.

(Not for use in California)

,			DOSAGE	
PEST	PLACEMENT	Fluid Ounces per Acre (Fl. oz./A)	Fluid Ounces per 1000 Row Feet (Fl. oz./1000 Row Ft.)	Pounds Active Ingredient per Acre (Lbs. a.i./A)
Armyworms* (including	At Plant	2.56 - 5.12	0.15 - 0.30	0.04 - 0.08
True*)				
Common Stalk Borers*				
Cutworms* (including				
Army*)				
Flea Beetle Larvae				
Grubs				
Root Maggots				
Wireworms				
Rootworm larvae	At Plant	5.12 - 6.40	0.30 - 0.37	0.08 - 0.10

#### REMARKS

Apply as a 5 to 7 inch band over the row on the soil surface, a 5 to 7 inch T-band over the open furrow, or infurrow with the seed.

\*Apply a broadcast treatment to the soil surface for control of Army Cutworm, Armyworms, Common Stalk Borer, Cutworms, or True Armyworm.

## **RESTRICTIONS**

Do not apply more than 0.1 pound active ingredient per acre per season as an at plant application.

Do not apply more than 0.32 pound active ingredient per acre per season including at plant plus foliar applications of all bifenthrin products.

## TUBEROUS AND CORM VEGETABLES (AT PLANT USE)

Potato, Sweet potato, Arracacha, Arrowroot, Chinese artichoke, Jerusalem artichoke, Edible canna, Cassava (bitter and sweet), Chayote (root), Chufa, Dasheen (taro), Ginger, Leren, Tanier, Turmer, Yam bean, True yam. (Not for use in California)

		DOSAGE	
PEST	PLACEMENT	Fluid Ounces per Acre (Fl. oz./A)	Pounds Active Ingredient per Acre (Lbs. a.i./A)
Grape Colaspis	At Plant	9.60 - 19.20	0.15 - 0.30
Rootworms			
Sweet Potato Flea Beetles			
White Grubs			
Wireworms			

## **REMARKS**

Apply as a soil incorporated broadcast, directed bed spray or a T-band spray into the planting furrow. Apply at the rate of 0.15 to 0.3 pound active ingredient (9.6 to 19.2 fl. oz./A) in a minimum of 10 gallons per acre of spray.

## **RESTRICTIONS**

Do not apply more than 0.3 pound active ingredient per acre per season as an at plant application.

Do not apply more than 0.5 pound active ingredient per acre per season including at plant plus foliar applications of all bifenthrin products.

## TUBEROUS AND CORM VEGETABLES (LAY-BY)

Potato, Sweet potato, Arracacha, Arrowroot, Chinese artichoke, Jerusalem artichoke, Edible canna, Cassava (bitter and sweet), Chayote (root), Chufa, Dasheen (taro), Ginger, Leren, Tanier, Turmer, Yam bean, True yam. (Not for use in California)

		DOSAGE		
PEST	PLACEMENT	Fluid Ounces per Acre (Fl. oz./A)	Pounds Active Ingredient per Acre (Lbs. a.i./A)	
Grape Colaspis	Lay-By	9.60 - 19.20	0.15 - 0.30	
Rootworms				
White Grubs				
Wireworms				

#### **REMARKS**

Apply as one or more soil-directed and incorporated treatments at cultivation or lay-by. Make applications to the drill area and incorporate by cultivation equipment set to throw soil towards the drill area. Apply at a rate of 0.15 to 0.3 pound active ingredient (9.6 to 19.2 fluid ounces) per acre in a minimum spray volume of 10 gallons per acre.

## **RESTRICTIONS**

Do not apply more than 0.5 pound active ingredient per acre per season including soil plus foliar applications of all bifenthrin products.

## STORAGE AND DISPOSAL

**Pesticide Storage**: Do not freeze or store product below 40°F. If crystals are observed, gradually warm product to above 60°F by placing container in a warmer location. Gently shake or roll container periodically to redissolve solids.

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.

In case of spill, avoid contact, isolate area and keep out animals and unprotected persons. Confine spills. Call Chemtrec: 1-800-424-9300

To confine spill: Dike surrounding area or absorb with sand, cat litter or commercial clay. Place damaged package 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 Handling**

For Plastic Containers 5 Gallons or Less: Nonrefillable container. Do not reuse or refill this container. 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. Offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by other procedures approved by State and local authorities.

For 15 gallon returnable product Container: Returnable container. Nonrefillable container. Do not reuse or refill this container. This container is a dedicated, single-product returnable container. Return empty container to seller at location designated by seller as a collection point. Do not break seals, add anything to container or open container after use. Do not rinse or contaminate empty container. Do not dispose of un-tampered empty container or use it for any other purposes. Any evidence of broken seals or other tampering or adding anything to the container renders it unfit for return. In such case, it is the obligation of the holder of the container to dispose of it properly or offer for recycling, if available.

**Dealers Must Sell in Original Packages Only.** 

## LIMITED WARRANTY AND DISCLAIMER

The manufacturer warrants (a) that this product conforms to the chemical description on the label; (b) that this product is reasonably fit for the purposes set forth in the directions for use, subject to the inherent risks referred to herein, when it is used in accordance with such directions; and (c) that the directions, warnings, and other statements on this label are based upon responsible experts' evaluations of reasonable tests of effectiveness, of toxicity to laboratory animals and to plants and residues on food crops, and upon reports of field experience. Tests have not been made on all varieties of food crops and plants, or in all states or under all conditions.

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