## 70506-58

## 09/27/2005

RESTRICTED USE PESTICIDE

Toxic to fish and aquatic organisms. For retail sale to and use only by certified applicators, or persons under their direct supervision and only for the uses covered by the certified applicator's certification.

## BIFENTURE™ EC-CA AGRICULTURAL INSECTICIDE

#### FOR SALE AND USE ONLY IN CALIFORNIA.

Active Ingredient:	By Wt.
Bifenthrin* (2 methyl[1,1'-biphenyl]-3-yl) methyl 3-(2-chloro-3,3,3	-trifluoro-
1-propenyl)-2,2-dimethylcyclopropanecarboxylate	
Inert Ingredients**:	<u>74.9</u> %
TOTAL	100.0%

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

**\*\***Contain xylene range aromatic solvents

This product contains 2 pounds active ingredient per gallon.

#### KEEP OUT OF REACH OF CHILDREN WARNING AVISO

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

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	<ul> <li>Call a poison control center or doctor immediately for treatment advice.</li> </ul>
	• 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	<ul> <li>Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li> </ul>
	<ul> <li>Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li> </ul>
	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	Take off contaminated clothing.
clothing	<ul> <li>Rinse skin immediately with plenty of water for 15-20 minutes.</li> </ul>
	Call a poison control center or doctor for treatment advice.
	NOTE TO PHYSICIAN
	a pyrethroid. If large amounts have been ingested, the stomach and intestine should be evacuated.
	nptomatic and supportive. Digestible fats, oils, or alcohol may increase absorption and so should be
	ins petroleum distillates. Vomiting may cause aspiration pneumonia.
	ct container or label with you when calling a poison control center or doctor, or going for treatment. NCY MEDICAL ASSISTANCE, CALL THE NATIONAL PESTICIDE INFORMATION CENTER 1-

## FOR CHEMICAL EMERGENCY: Spill, leak, fire, exposure, or accident, call CHEMTREC 1-800-424-9300.

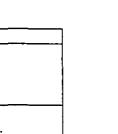


Manufactured for: United Phosphorus, Inc. 423 Riverview Plaza • Trenton, NJ 08611 1-800-247-1557 • <u>www.upi-usa.com</u>

EPA Reg. No. 70506-58 EPA Est. No. Net Contents

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Bifenture EC-CA Agricultural Insecticide MASTER LABEL



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ACO	) E	P.T:I	C D
SE	P 2	7 2005	
Under the Fungicide as amende Registered EPA Reg. 1	and R	odenticid	e Act

PRECAUTIONARY STATEMENTS Hazards to Humans and Domestic Animals Warning

May be fatal if swallowed. Causes substantial but temporary eye injury. Do not get in eyes or on clothing. Wear protective eyewear (goggles, face shield or safety glasses). Harmful if absorbed through the skin or inhaled Avoid breathing spray mist. Avoid contact with skin. Remove and wash contaminated clothing before reuse. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, or using tobacco.

#### 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 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 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 run-off 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 while bees are actively visiting the treatment area.

#### 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.

**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 should 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, nitrile rubber, neoprene rubber or Viton.
- Shoes plus socks.

#### STORAGE AND DISPOSAL

**Pesticide Storage:** Do not freeze. Do not store below  $40^{\circ}$ F. If crystals are observed, warm material to above  $60^{\circ}$ F by placing in warm location. 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.

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

**Pesticide Disposal:** Pesticide 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:** Metal or Plastic Container: Triple rinse (or equivalent), 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.

Returnable, Refillable Containers: Do not rinse container. Do not empty remaining formulated product. Do not break seals. Return intact to point of purchase.

#### **Special Equipment**

The registration of Bifenture EC-CA Agricultural Insecticide in California requires that the product be used in closed systems that meet the criteria for closed system as established by the California Department of Food and Agriculture. The criteria and a list of the closed systems meeting the criteria are available through the California Department of Food and Agriculture.

#### **Rotational Crops**

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

#### **Tank-Mixture**

Bifenture EC-CA Agricultural Insecticide may be applied in tank mixtures with other products approved for use on cotton. Observe all restrictions and precautions which appear on the labels of these products. Test for compatibility of products before using.

#### **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 generally require higher rates.

#### **Chemigation Use Directions**

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

For LEPA irrigation a minimum of 0.75 inch of water per acre is recommended. Where non-emulsified oils are used as the diluent, 1 to 2 pints per acre is recommended.

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 should the need arise. 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.

Bifenture EC-CA Agricultural Insecticide should be applied continuously for the duration of the water application. Bifenture EC-CA Agricultural Insecticide should be diluted 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 recommended. Agitation generally is not required when a suitable dilutent is used. A dilutent test should be conducted 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.

#### Spray Drift Precautions

Bifenture EC-CA Agricultural Insecticide MASTER LABEL



#### OBSERVE THE FOLLOWING PRECAUTIONS WHEN SPRAYING IN THE VICINITY OF AQUATIC AREAS SUCH AS LAKES, RESERVOIRS, RIVERS, PERMANENT STREAMS, MARSHES, OR NATURAL PONDS, ESTUARIES, AND COMMERCIAL FISH FARMS:

Do not apply by ground equipment within 25 feet, or by air within 150 feet of lakes, reservoirs, rivers, permanent streams, marshes or natural ponds, estuaries, and commercial fish farm ponds. Increase the buffer zone to 450 feet when ultra low volurne (ULV) application is made.

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

Use the largest droplet size consistent with good pest control. Formation of very small droplets may be minimized by appropriate nozzle selection, by orienting nozzles away from the air stream as much as possible, and by avoiding excessive spray boom pressure.

Spray should be released at the lowest height consistent with pest control and flight safety. Applications more than 10 feet above the crop canopy should be avoided.

Make aerial or ground applications when the wind velocity favors on target product deposition (approximately 3 to 10 mph). Do not apply when wind velocity exceeds 15 mph. Avoid applications when wind gusts approach 15 mph.

Risk of exposure to sensitive aquatic areas can be reduced by avoiding applications when wind direction is toward the aquatic area.

Do not cultivate within 10 feet of the aquatic areas so as to allow growth of a vegetative filter strip.

Low humidity and high temperatures increase the evaporation rate of spray droplets and therefore the likelihood of increased spray drift to aquatic areas. Avoid spraying during conditions of low humidity and/or high temperature.

Do not make aerial or ground applications during 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.

#### INDEX TO CROPS LISTED ON THIS LABEL

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Artichokes Brassicas Caneberries Canola, Crambe, Rapeseed Citrus Cotton Field Corn (Grain and Silage), Popcorn, Field Corn Grown for Seed (At Plant Use) Field Corn (Grain and Silage), Popcorn, Field Corn Grown for Seed (Foliar Use) Sweet Corn (Grain and Silage), Sweet Corn Grown for Seed (At Plant Use) Sweet Corn (Grain and Silage), Sweet Corn Grown for Seed (Foliar Use) Cucurbits Eggplant · Hops Lettuce, Head Pears Peppers, Bell and Non-Bell Spinach Succulent Peas and Beans Tomatoes .

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## ARTICHOKES

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	DOSAGE		
PEST	LB A.I./A	FL.OZ/A	REMARKS AND RESTRICTIONS
Artichoke Plume Moth Cribrate Weevil	0.10	6.4	Apply when pest population reaches damaging threshold and repeat as necessary to maintain control, but not more often than 15 day intervals. Application by ground: Apply a full cover spray in a minimum of 75 gallons of finished spray per acre.
			Application by air: Apply specified dosage in a minimum of 10 gallons per acre.
			A 5-day preharvest interval must be observed.

## BRASSICAS

[		DOSAGE		
CROP	PEST	LB AI/A	FL OZ/A	REMARKS AND RESTRICTIONS
Head and Stem	Armyworms	0.033-0.10	2.1-6.4	Apply in a minimum of 2 gallons of finished spray per
Brassica	Corn Earworm			acre by air or in a minimum of 10 gallons per acre with
Vegetables	Crickets			ground equipment. When applying by air, 1-2 quarts of
including:	Cutworms			emulsified oil may be substituted for 1-2 quarts of water
Broccoli	Diamondback			in the finished spray. Thorough coverage is essential to
Brussels Sprouts	Moth			achieve control.
Cabbage	Flea Beetles			
Cauliflower	Imported			Do not apply more than 0.5 lb. a.i. (1 quart) per acre per
Cavalo Broccolo	Cabbageworm			season.
Chinese Broccoli	Loopers			
(gai lon, white	Saltmarsh			Do not make more than 5 applications after bloom.
flowering	Caterpillar			
broccoli)	Whitefly			Do not make applications less than 7 days apart.
Chinese Cabbage				
(napa)	Lygus spp.	0.08-0.10	5.12-6.4	Do not apply within 7 days of harvest.
Chinese Mustard	Lygus spp.	0.08-0.10	5.12-0.4	
Cabbage (gai			1	
choy)				
Kohlrabi				

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## CANEBERRIES

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	DOSAGE		AGE	
CROP	PEST	LB AI/A	FL OZ/A	REMARKS AND RESTRICTIONS
Caneberries including: Bingleberries Blackberries	Leafrollers Orange Tortrix Root Weevils	0.05-0.10	3.2-6.4	Apply by air or ground equipment using sufficient water to obtain full coverage of foliage (minimum of 10 gallons per acre by air and 50 gallons per acre by ground).
Dewberries Loganberries Lowberries Marionberries Olallieberries Raspberries Youngberries	Spider Mites	0.10	6.4	One application may be made pre-bloom and a second application may be made post bloom. Do not apply within 3 days of harvest.

## CANOLA, CRAMBE, RAPESEED

	DOSAGE		
PEST	LB AI/A	FL OZ/A	REMARKS AND RESTRICTIONS
Aphids	0.033-0.04	2.1-2.6	Apply in a minimum of 2 gallons of finished spray per acre by air
Armyworms			or in a minimum of 10 gallons per acre with ground equipment.
Cutworms			When applying by air, 1-2 quarts of emulsified oil may be
Diamondback			substituted for 1-2 quarts of water in the finished spray. Thorough
Moth			coverage is essential to achieve control.
Flea Beetle			
Flea Hopper			Do not apply more than 0.08 lb. a.i. (5.12 ounces formulated
Grasshopper			product) per acre per season. Do not make applications less than
Loopers			14 days apart.
Other			
Lepidopterous			Do not apply within 35 days of harvest.
Larvae			
Plant Bug			
Seedpod Weevil			
Stink Bugs			
Thrips			
Whitefly			

### CITRUS

	DOSAGE	
PEST	FL OZ/A	REMARKS AND RESTRICTIONS
Asian Cockroaches Diaprepes Root Weevil (Diaprepes abbreviatus) Fire Ants	16 – 32 ounces (0.25 – 0.50 lb. a.i.) 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 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 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 formulated product can be applied early season and 16 fluid ounces formulated product can be applied later in the season. If emergence extends beyond the residual protection of

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Bifenture EC-CA, grower is advised to use additional management strategies (i.e. foliar adult control or soil larvae control such as nematodes). Contact your state agricultural Extension Specialist as to the recommendations suited for local conditions.

Do not apply through irrigation systems. Do not allow any application of Bifenture EC-CA to contact fruit or foliage Do not apply more than a total of 32 fluid ounces of formulated

product (0.5 lb a.l.) per acreiper year. Apply the specified dosage in a minimum of 30 gallons of finished spray per acre. Ground application only. Do not apply by air. Do not apply within one day of harvest.

Bifenture EC-CA Agricultural Insectionde MASTER LABEL

### COTTON

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	DOS	AGE			
PEST	LB AI/A	FL OZ/A	REMARKS AND RESTRICTIONS		
European Corn Borer Soybean (Banded) Thrips Tobacco Thrips	0.02-0.10	1.3-6.4	Bifenture EC-CA 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.		
Boll Weevil Bollworm Cabbage Looper Cotton Aphid Cotton Fleahopper Cotton Leafperforator Cutworms Fall Armyworm Lygus spp. Plant Bugs Saltmarsh Caterpillar Southern Garden Leafhopper Stink Bugs Tobacco Budworm Whitefly Yellow Striped Armyworm	0.04-0.10	2.6-6.4	<ul> <li>To Control Boll Weevil: Apply Bifenture EC-CA at an interval of 3 to 4 days until pest numbers are reduced to acceptable levels.</li> <li>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.</li> <li>Do not apply more than 0.3 pound a.i. per acre per season.</li> <li>Do not make more than 3 applications per growing season.</li> <li>Do not graze livestock in treated areas or cut treated crops for feed.</li> <li>Do not make more than 10 synthetic pyrethroid applications (of one product or combination of products) to a cotton crop in one growing season.</li> <li>Synthetic pyrethroid products include Ambush<sup>®</sup>, Ammo<sup>®</sup>, Asana<sup>®</sup> XL, Baythroid<sup>®</sup>, Capture<sup>®</sup>, Danitol<sup>®</sup>, Karate<sup>®</sup>, Mustang<sup>®</sup>, and Scout X-TRA<sup>®</sup>.</li> </ul>		
Beet Armyworm Carmine Spider Mite Pink Bollworm Twospotted Spider Mite	0.06-0.10	3.8-6.4	All aerial and ground application equipment must be properly maintained and calibrated using appropriate carriers.		

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## FIELD CORN (GRAIN AND SILAGE), POPCORN, FIELD CORN GROWN FOR SEED (AT PLANT USE)

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PEST	DOS	AGE		REM	IARKŠ AND F	RESTRICTION	IS	
Corn Rootworm, Larvae Mexican Northern Southern Western	0.0046 lb. a.i. per 1,000 linear feet of row	0.30 fluid ounces 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 below to determine the Bifenture EC-CA needs pe acre. Apply in a minimum of 3 gallons of finished spray per acre. Mix Bifenture EC-CA 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 Bifenture EC-CA. Then add the rest of the water or					
Army Cutworm Cutworm Species Grubs Seed Corn Beetle Seed Corn Maggot True Armyworm or Armyworm Species Wireworm	0.0023 to 0.0046 lb. a.i. per 1,000 linear feet of row	0.15 to 0.30 fluid ounces per 1,000 linear feet of row	<ul> <li>proper amount of Bifenture EC-CA. Then add the rest of the water or fertilizer. Provide sufficient agitation during mixing and application to maintain a uniform spray mixture.</li> <li>Applications of Bifenture EC-CA alone or in recommended tank mixtures, in conjunction with in furrow pop-up fertilizers may be used. A jar compatibility test should be performed with appropriate ratio of Bifenture EC-CA and fertilizer to ensure mixture will stay in solution. Constant agitation should be maintained during mixing and application.</li> <li>Do not apply to soil where there is greater than 30% cover of crop residue remaining.</li> <li>Do not apply within 30 days of harvest.</li> <li>Do not graze livestock in treated area or cut treated crops for feed within 30 days of treatment.</li> <li>Do not apply more than 0.1 pound active per acre per season as an at plant</li> </ul>					
Row Spacings (inches)			application	40	38	36	30	
Bifenture EC-CA Agricultural Insecticide (pounds a.i. per acre)			0.060	0.064	0.069	0.080		
Bifenture EC-CA Agricultur ounces per acre)	ral Insecticide	e (formulat	ed product,	3.9	4.1	4.4	5.12	

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## FIELD CORN (GRAIN AND SILAGE), POPCORN, FIELD CORN GROWN FOR SEED (FOLLAR USE)

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	PEST DOSAGE LB A.L/A FL OZ/A		
PEST			REMARKS AND RESTRICTIONS
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         Southern Corn Borer         Stinkbugs         Tarnished Plant Bug         Thrips         True Armyworm or Armyworm Species         Webworms         Western Bean Cutworm         Yellowstriped Armyworm	0.033-0.10	2.1-6.4	<ul> <li>Apply in a minimum of 2-5 gallons of finished spray per acre by aircraft or in a minimum of 10 gallons per acre with ground equipment. To improve control by aircraft, use 5 gallons of finished spray per acre particularly when initial populations are heavier than normal. 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.</li> <li>To Control Ear-Attacking Pests: Apply Bifenture EC-CA just before silking and repeat as necessary to maintain control.</li> <li>Southwestern Corn Borer, European Corn Borer: Make application for corn borer control with initial application at or shortly before egg hatch.</li> <li>For Control of Other Insect Pests: Apply when pests first appear and repeat as necessary.</li> <li>For Control of Mites: 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.</li> <li>For Twospotted 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.</li> </ul>
Banks Grass Mite Carmine Mite Twospotted Spider Mite	0.08-0.10	5.12-6.4	<ul> <li>Higher rates will be necessary for heavier initial populations and corn under heat or drought stress.</li> <li>Field experience with dimethoate at 0.5 lb. active per acre in tank mixture has demonstrated good control under these conditions.</li> <li>Do not apply more than 0.2 pound active per acre per season.</li> <li>Do not apply within 30 days of harvest.</li> <li>Do not graze livestock in treated areas or cut treated crops for feed within 30 days of the last application.</li> <li>Use of ultra low volume (ULV) application on corn is prohibited.</li> <li>Do not make aerial or ground applications to corn if heavy rainfall is imminent.</li> <li>Use of BIFENURE EC-CA on corn is prohibited in all coastal counties.</li> </ul>

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### SWEET CORN (GRAIN AND SILAGE) SWEET CORN GROWN FOR SEED (AT PLANT USE)

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PEST	DOS	AGE	I	REMARKS AI	ND RESTRIC	TIONS		
Corn Rootworm, Larvae	0.0046	0.30	Apply as a 5 to 7 in	nch T-band trea	atment over an	open seed furrow.		
Mexican	pound	fluid	Position the spray nozzle behind the planter shoe, in front of the press					
Northern	active	ounces	wheel centered over					
Southern	per 1,000	per 1,000	Bifenture EC-CA 1	needs per acre.	Apply in a mir	nimum of 3 gallons of		
Western	linear	linear	finished spray per	-		•		
	feet of	feet of						
	row	row	Mix Bifenture EC-	CA with water	or fertilizer in	the following manner.		
			Fill the spray tank			_		
						C-CA then add the rest of		
			•	-		on during mixing and		
			application to main		-			
Army Cutworm	0.0023 to	0.15 to			1			
Cutworm Species	0.0046	0.30	Applications of Bi	fenture EC-CA	alone or in rec	ommended tank		
Grubs	pound	fluid				ertilizers may be used. A		
Seed Corn Beetle	active	ounces			• • •	ppropriate ratio of		
Seed Corn Maggot	per 1,000	per 1,000		-		e will stay in solution.		
True Armyworm or	linear	linear				mixing and application.		
Armyworm Species	feet of	feet of	Brandon		g -	B aPP		
Wireworm	row	row		il where there i	s greater than 3	10% cover of crop residue		
			remaining.					
			Do not apply with	•				
			-		area or cut frea	ted crops for feed within		
			30 days of treatme					
				e than 0.1 pound	d active per acr	re per season as an at plant		
<u></u>			application.			······································		
Row Spacings (inches			40	38	36	30		
Bifenture EC-CA (pounds a	.i. per acre)		0.060	0.064	0.069	0.080		
Bifenture EC-CA (formulat	ed <u>ounces per a</u>	cre)	3.9	4.1	4.4	5.12		

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# 14/22

### SWEET CORN (GRAIN AND SILAGE) SWEET CORN GROWN FOR SEED (FOLIAR USE)

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	DOSAGE			
PEST	LB AI/A	FL OZ/A	REMARKS AND RESTRICTIONS	
AphidsArmy CutwormAster LeafhopperBeet ArmywormCereal Leaf BeetleChinch BugCommon Stalk BorerCorn EarwormCorn Rootworm AdultsCorn SilkflyCucumber Beetle AdultCutworm SpeciesEuropean Corn BorerFall ArmywormFlea BeetleGrasshoppersGreenbugJapanese Beetle AdultLeafhopperSap BeetleSouthern ArmywormSouthern Corn Leaf BeetleSouthwestern Corn BorerStinkbugsTarmished Plant BugThripsTrue Armyworm or Armyworm SpeciesWebwormsWestern Bean Cutworm	0.033-0.10	2.1-6.4	<ul> <li>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.</li> <li>To Control Ear-Attacking Pests: Apply Bifenture EC-CA when silking begins and repeat as necessary to maintain control.</li> <li>Southwestern Corn Borer, European Corn Borer: Make 2 applications for corn borer control with the initial application at or shortly before egg hatch.</li> <li>For Control of Other Insect Pests: Apply when pests first appear and repeat as necessary.</li> <li>For Control of Mites: 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.</li> <li>For Twospotted 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.</li> <li>Higher rates will be necessary for heavier initial</li> </ul>	
Yellowstriped Armyworm Banks Grass Mite	0.08-0.10	5,12-6.4	populations and corn under heat or drought stress. Do not apply more than 0.2 pounds a.i. (12.8 ounces	
Carmine Mite Pacific Spider Mite Twospotted Spider Mite			formulated product) per acre per season. Do not apply within one day of harvest. Do not graze livestock in treated areas or cut treated crops for feed within 1 day of the last application. Use of ultra low volume (ULV) application on corn is prohibited. Do not make aerial or ground applications to corn if heavy rainfall is imminent. Use of BIFENTURE EC-CA on corn is prohibited in all coastal counties.	

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## CUCURBITS

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DOSAGE						
CROP	PEST	LB AI/A	FL OZ/A	REMARKS AND RESTRICTIONS		
Chayote (fruit)	Aphids	0.04-	2.6-6.4	Apply in a minimum of 5 gallons of finished		
Chinese waxgourd	Cutworm	0.10		spray per acre by air or in a minimum of 20		
(Chinese preserving	Cabbage Looper			gallons per acre with ground equipment.		
melon)	Leafhoppers			When applying by air, 1-2 quarts of emulsified		
Citron melon	Cucumber Beetles			oil many be substituted for 1-2 quarts of water		
Cucumber	Squash Bugs			in the finished spray. Thorough coverage is		
Gherkin	Armyworms			essential to achieve control.		
Gourd, edible	Melonworm	1				
(includes hyloan,	Pickleworm			Do not apply more than 0.3 lb. a.i. (19.2		
cucuzza), (Luffa spp.)	Plant Bug	1		ounces formulated product) per acre per		
includes hechima,	Stink Bug			season.		
Chinese okra,	Rindworm					
(Momordica	Squash Vine Borer			Do not make more than two applications after		
spp.) (includes	Corn Earworm			bloom.		
balsam apple,	Tobacco Budworm					
balsam pear, bitter	Grasshopper			Do not make applications less than 7 days		
melon, Chinese				apart.		
cucumber)						
Muskmelon (hybrids				Do not apply within 3 days of harvest.		
and/or cultivars		0.08-	5.12-6.4			
of Cucumis	Whitefly	0.10				
melo) (includes	Banks Grass Mite					
true cantaloupe,	Twospotted Spider					
cantaloupe,	Mite					
casaba, crenshaw	Carmine Mite					
melon, golden,	Lygus spp					
pershaw melon, honeydew melon,		ł				
honey balls, mango						
melon, Persian		1				
melon, pineapple						
melon, Santa						
Claus melon, and						
snake melon)		ŀ				
Pumpkin (Cucurbita spp.)						
Squash, summer						
(includes crookneck						
squash, scallop						
squash, straightneck	1	1	1	1		
squash, vegetable						
marrow, zucchini)	· ·					
Squash, winter						
(includes butternut						
squash, calabaza,						
hubbard squash						
(C. mixte; C. pepo),						
includes acom				· · · ·		
squash, spaghetti						
squash)						
Watermelon,						
(includes hybrids and/						
or varieties of Citrullis						
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Bifenture EC-CA Agricultural Insecticide MASTER LABEL

## EGGPLANT

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	DOSAGE		
PEST	LB AI/A	FL OZ/A	REMARKS AND RESTRICTIONS
Armyworms	0.033-0.10	2.1-6.4	Apply in a minimum of 2 gallons of finished spray per acre by air or in
Cabbage Looper			a minimum of 10 gailons per acre with ground equipment. When
Colorado Potato Beetle			applying by air, 1-2 quarts of emulsified oil may be substituted for 1-2
Corn Earworm			quarts of water in the finished spray. Thorough coverage is essential to
Cucumber Beetle			achieve control.
European Corn Borer			
Flea Beetle			Do not make applications less than 7 days apart.
Plant Bug			
Stink Bug			Do not apply more than 0.2 lb. a.i. (12.8 ounces formulated product)
Thrips			per acre per season.
Tomato Hornworm			
Tomato Pinworm			Do not apply within 9 days of harvest.
Vegetable Leafminer			
Whitefly			
Banks Grass Mite	0.08-0.10	5.12-6.4	
Carmine Mite			
Lygus spp.			
Pacific Spider Mite			
Twospotted Spider			
Mite			

## HOPS

	DOSAGE			
PEST	LB AI/A	FL OZ/A	REMARKS AND RESTRICTIONS	
Aphids	0.06-0.1	3.8-6.4	Do not exceed 0.1 lb. a.i. per acre per application.	
Armyworms			Do not exceed 0.3 lb. a.i. per acre per season.	
Cutworms				
Leafrollers			A spray interval of 21 days between applications must be maintained.	
Loopers				
Root Weevils	0.05-0.1	3.2-6.4	A 14 day pre-harvest interval must be observed.	
Twospotted Spider Mite	0.1	6.4	Application by ground: For best results, full coverage is essential. Early season recommend 100-150 gallons of spray per acre. Late season recommend 200-250 gallons of spray 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 twospotted spider mites: Apply no less than 6.4 oz (0.1 lb. a.i.) per application in a minimum of 10 gallons per acre.	
			Use of ultra low volume (ULV) application on hops is prohibited.	

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	DOSAGE				
PEST	LB AI/A	FL OZ/A	REMARKS AND RESTRICTIONS		
Aphids	0.033-0.10	2.1-6.4	Apply in water as necessary for insect control using a minimum of 15		
Armyworms			gallons of finished spray per acre with ground equipment and 5 gallons		
Cabbage Maggot			per acre by air. When applying by air, 1-2 quarts of emulsified oil may be		
Corn Earworm			substituted for 1-2 quarts of water in the finished spray. Thorough		
Cucumber Beetles			coverage is essential to achieve control.		
Cutworms					
Diamondback Moth			Do not make applications less than 7 days apart.		
Flea Beetles					
Grasshoppers			A maximum of 0.5 lb. a.i. may be applied per acre per season.		
Imported					
Cabbageworm			Do not apply within 7 days of harvest.		
Leafhoppers					
Loopers					
Salt Marsh Caterpillar					
Stink Bug spp.					
Thrips					
Tobacco Budworm					
Whitefly					
Carmine Mite	0.08-0.10	5.12-6.4			
Lygus spp.					
Twospotted Spider					
Mite					

## PEARS

	DOSAGE				
PEST	LB AI/A	FL OZ/A	REMARKS AND RESTRICTIONS		
Aphids	0.04 to 0.2	2.6 to 12.8	Application by ground:		
Codling Moth	1		Apply as a dilute (minimum of 200 gallons of finished spray per acre) or		
Cutworms			concentrate (minimum of 50 gallons of finished spray per acre) spray in		
Green Fruitworm			sufficient water to provide thorough coverage.		
Leafhoppers		1	Application by air:		
Leafminers			Apply the specified dosage in a minimum of 10 gallons per acre by air.		
Leafrollers			Do not apply more than 0.5 lb. a.i. per acre per season with no more than		
Lygus spp.			0.45 lb. a.i. per acre applied after petal fall.		
Plant Bugs			Apply as necessary to maintain control using a minimum of 30 day spray		
Plum Curculio			interval.		
San Jose Scale (crawlers)			Apply up to 14 days prior to harvest.		
Stink Bugs			Do not graze livestock in treated orchards or cut treated cover crops for		
Tarnished Plant Bugs	·		feed.		
Twospotted Spider Mite	0.06 to 0.2	3.8 to 12.8			
Yellow Mite	ļ				
European Red Mite	0.08 to 0.2	5.12 to 12.8	1		

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## PEPPERS, BELL AND NON-BELL

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	DOS	AGE	
PEST	LB AI/A	FL OZ/A	REMARKS AND RESTRICTIONS
Aphids	0.033-0.1	2.1-6.4	Apply using sufficient water to obtain uniform coverage. Apply as
Armyworms			needed. Apply with ground equipment using a minimum of 10 gallons of
Corn Earworm			finished spray per acre or a minimum of 2 gallons per acre by aircraft.
Cucumber Beetles			
Cutworms			Do not make applications less than 7 days apart.
European Corn			
Borer			Do not apply more than 0.20 pound a.i. per acre per season.
Flea Beetles			
Leafhoppers			Do not apply within 7 days of harvest.
Leafminers			
Loopers			
Pepper Weevil			
Stink Bug spp.			
Tobacco Budworm			
Thrips			
Whitefly			
Broad Mite	0.8-0.10	5.12-6.4	
Carmine Mite			
Lygus spp.			
Twospotted Spider	1		
Mite			

## SPINACH

	DOSAGE	
PEST	FL OZ/A	REMARKS AND RESTRICTIONS
Armyworms	2.1 to 6.4	For control of whiteflies apply foliar treatments of Bifenture EC-CA by
Colorado Potato Beetle	ounces	ground or air at rates of up to 0.4 pt. (0.1 lb. a.i.) per acre at minimum 7-
Corn Earworm	(0.033 to	day intervals up to a maximum of 4 applications.
Cucumber Beetles	0.10 lb.	Do not apply within 40 days of harvest.
Cutworms	a.i.) per	
European Corn Borer	acre	For control of fire ants apply Bifenture EC-CA to the soil (at planting) or
Flea Beetles		as a foliar treatment by ground or air at rates of up to 0.4 pt. (0.1 lb. a.i.)
Leafminers		per acre at minimum 7-day intervals up to a maximum of 4 applications.
Loopers		Do not apply within 40 days of harvest.
Pepper Weevil		
Thrips		Apply the specified dosage in 5-50 gallons of finished spray per acre by
Tomato Pinworm		air or 10-50 gallons finished spray per acre by ground.
Tomato Hornworm		:
Whitefly		Do not make applications less than 7 days apart.
Broad Mite	5.12 to 6.4	
Banks Grass Mite	ounces	Do not apply more than 0.4 lb. a.i. per acre per season.
Carmine Mite	(0.08 to	
Fire Ants	0.10 lb.	
Lygus spp.	a.i.) per	
Pacific Spider Mite	acre	
Twospotted Spider Mite		

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### SUCCULENT PEAS AND BEANS

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		DOS	AGE	
CROP	PEST	LB AI/A	FL	REMARKS AND RESTRICTIONS
			OZ/A	
Bean (Phaseolus	Aster	0.025-	1.6-6.4	Apply in a minimum of 2 gallons of finished spray per
spp.):	Leafhopper	0.10		acre by air or in a minimum of 10 gallons per acre with
Broadbean	Flea Beetle			ground equipment. When applying by air, 1-2 quarts of
(succulent)	Grasshoppers			emulsified oil may be substituted for 1-2 quarts of water
Lima bean	Leafhoppers			in the finished spray. Thorough coverage is essential to
(green)	Alfalfa	0.033-	2.1-6.4	achieve control.
Runner bean	Caterpillar	0.033-	2.1-0.4	
Snap bean	Caterpina	0.10		Do not apply more than 0.2 lb. a.i. (12.8 ounces
Wax bean	Aphids	1		formulated product) per acre per season.
Bean (Vigna spp.):	Bean Leaf			
Asparagus	Beetle			Do not apply within 3 days of harvest
bean				
Blackeyed pea	Beet Armyworm			
Chinese	Cloverworm Corn Earworm			
longbean				
Cowpeas	Corn Rootworm,			
Moth bean	Adult			
Southern pea	Cucumber			
Yardlong	Beetles			
bean	Cutworms	•		
Jackbean	European Corn			_
Pea (Pisum spp.)	Borer			
Dwarf pea	Fall Armyworm			· · · · · · · · · · · · · · · · · · ·
Edible-pod pea	Japanese Beetle,			
English pea	Adult		]	
Garden pea	Loopers			
Green pea	Pea Leaf Weevil			
Snow pea	Pea Weevil			
Sugar snap pea	Plant Bug			
Pigeon pea	Sap Beetle			
Soybean	Southern			
(immature	Armyworm			
seed)	Stink Bugs			
Sword bean	Tarnished Plant			
	Bug			
	Thrips			
	Webworms			
	Western Bean			
	Cutworm	:		
	Whitefly			
	Yellowstriped			
	Armyworm			4
	Banks Grass	0.08-	5.12-6.4	
	Mite	0.10		
	Carmine Mite			
	Lygus spp.			l
•	Twospotted			
····	Spider Mite			



#### TOMATOES

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PEST	RATE	REMARKS AND RESTRICTIONS
Aphids	2.1 to 5.2	Apply in water as necessary for insect control using a minimum of 15
Armyworms, Including:	fluid	gallons of finished spray per acre with ground equipment.
Beet Armyworm, Fall	ounces	
Armyworm, Southern	(0.033 to	Thorough coverage is essential to achieve control.
Yellostriped Armyworm	0.08 lb.	
Bean Leaf Beetle	a.i.) per	Do not make applications less than 10 days apart.
Cabbageworm	acre	
Carmine Mite	-	A maximum of 4 applications may be applied per season.
Cloverworm		
Corn Earworm		Do not apply within one day of harvest.
Corn Rootworm		
Cucumber Beetles	}	
Cutworms		
Diamondback Moth		
European Corn Borer		
Flea Beetles		
Flea Hopper		
Grasshopper		
Japanese Beetle (Adlt)		
Leafhoppers		
Loopers		
Lygus spp.		
Melonworm		
Pea Weevil		
Pea Leaf Weevil		
Pickleworm		
Plant But		
Rindworm		
Salt March Caterpillar		
Sap Beetle		
Seedpod Weevil		
Squash Bugs		
Stink Bug spp.		
Tobacco Budworm	]	
Tarnished Plant But		
Thrips		
Two Spotted Spider Mite		
Whitefly		

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EPA Approved 8/25/04

## **Bifenture EC-CA Label Change Notes**

EPA approval of registration 8/25/04

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Sept. 7, 2004 – submission of Notification to change name to Bifenture EC-CA; incorporates changes required in EPA's pre-approval letter; includes correction of typos, standardization of "lb." and "a.i." throughout, alphabetization of crop and pest names, addition of "Inc." to United Phosphorus name in Warranty.

Sept. 8, 2004 – submission of amendment to add new crops citrus, pears, spinach, tomatoes. This submission replaced by 5/13/05 which includes both coastal restriction change and addition of new crops.

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