

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.



Bifender[®] SM

Bifender SM is a versatile, broad-spectrum insecticide for use on the listed crops: beans and peas (dried and succulent); brassica vegetables (head and stem and leafy greens); corn; cucurbits; hops; peppers/eggplants; tomatoes; tuberous and corn vegetables.

Active Ingredient:**By Wt.**

Bifenthrin: (2-methyl [1,1'-biphenyl] 3-yl) methyl 3-(2-chloro-3,3,3-trifluoro-1-propenyl)-2,2-dimethyl cyclopropanecarboxylate* 12.3 %
Other Ingredients: 87.7 %
100.0 %

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

Contains 1.1 lb. of bifenthrin per gallon.

SHAKE WELL BEFORE USE**EPA Reg. No. 89118-3****FIRST AID****If swallowed:**

- Call a poison control center or doctor immediately for treatment advice.
- Have person sip a glass of water if able to swallow.
- **DO NOT** induce vomiting unless told to by a poison control center or doctor.
- **DO NOT** give anything by mouth to an unconscious person.

If in eyes:

- Hold eyes 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.
- 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.

EMERGENCY INFORMATION

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. In the event of a medical or chemical emergency contact Chemtel Inc. in North America at 1-800-255-3924 or worldwide international at +1-813-248-0585.

KEEP OUT OF REACH OF CHILDREN CAUTION

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 inside booklet for additional precautionary information and directions for use. / Refer to enclosed label for full instructions.

Net Contents: 2.5 Gallons

Vive Crop Protection, Inc.
500 Westover Dr., #10198
Sanford, NC 27330
1-888-760-0187



PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

Caution. Harmful if swallowed. Causes moderate eye irritation. Avoid contact with eyes or clothing. Wear protective eyewear, if appropriate. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet.

FIRST AID

If swallowed:

- Call a poison control center or doctor immediately for treatment advice.
- Have person sip a glass of water if able to swallow.
- **DO NOT** induce vomiting unless told to by a poison control center or doctor.
- **DO NOT** give anything by mouth to an unconscious person.

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PERSONAL PROTECTIVE EQUIPMENT (PPE)

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

- Long-sleeved shirt and long pants.
- Shoes plus socks.
- Chemical resistant gloves made of: barrier laminate, butyl rubber \geq 14 mils, nitrile rubber \geq 14 mils, neoprene rubber \geq 14 mils, polyvinyl chloride (PVC) \geq 14 mils or viton \geq 14 mils

Mixers and loaders must wear:

- Long-sleeved shirt and long pants.
- Shoes plus socks.
- Chemical resistant gloves made of: barrier laminate, butyl rubber \geq 14 mils, nitrile rubber \geq 14 mils, neoprene rubber \geq 14 mils, polyvinyl chloride (PVC) \geq 14 mils or viton \geq 14 mils
- Protective eyewear.

USER SAFETY REQUIREMENTS

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. **DO NOT** reuse them. Follow the 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. Wash thoroughly with soap and water after handling.
- Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. Wash outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

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 while bees are foraging in the treatment area. **Protect pollinating insects by following label directions intended to minimize drift and to reduce risk to these organisms.**

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

PHYSICAL OR CHEMICAL HAZARDS

DO NOT mix or allow coming in contact with any oxidizing agent. Hazardous chemical reaction may occur.

DIRECTIONS FOR USE

RESTRICTED USE PESTICIDE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

DO NOT apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application.

For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation

Failure to follow directions and precautions on this label may results in crop injury, poor insect control, and/or illegal residues.

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), notification to workers, and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard (WPS).

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 requirement specific to your State or Tribe, consult the State/Tribal agency responsible for pesticide regulation.

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 made of: barrier laminate, butyl rubber ≥ 14 mils, nitrile rubber ≥ 14 mils, neoprene rubber ≥ 14 mils, polyvinylchloride (PVC) ≥ 14 mils or viton ≥ 14 mils;
- shoes plus socks

NON-AGRICULTURAL USE REQUIREMENTS

The requirements in this box apply to uses of this product that are NOT within the scope of the Worker Protection Standard for agricultural pesticides (40 CFR Part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries, or greenhouses.

Keep children and pets off treated areas following application until the treated area has dried.

USE RESTRICTIONS

USE SITE AND APPLICATION METHOD RESTRICTIONS

- **DO NOT** apply within 100 feet (using ground equipment) or 300 feet (using aerial equipment) of coastal marshes or streams that drain into coastal marshes in New York State.
- The maximum pounds of active ingredient per acre per year is listed under the use directions for each crop and must not be exceeded. The maximum allowable use includes all registered use patterns including at-plant, pre-plant incorporated (PPI), pre-emergence (PRE), lay-by, and foliar applications of Bifender SM and other bifenthrin containing products for the 12 months period. The 12-month period begins on upon the initial application to the acre.

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.

RESISTANCE MANAGEMENT

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

To delay insecticide resistance, take the following steps:

- Rotate the use of Bifender SM or other Group 3A insecticides within a growing season, or among growing seasons, with different groups that control the same pests.
- Use tank mixtures with insecticides from a different group that are equally effective on the target pest when such use is permitted. **DO NOT** rely on the same tank mixture repeatedly for the same pest population. Consider any known cross-resistance issues (for the targeted pests) between the individual components of a mixture. In addition, consider the following recommendations provided by the Insecticide Resistance Action Committee (IRAC):
 1. Individual insecticides selected for use in mixtures should be highly effective and be applied at the rates at which they are individually registered for use against the target species.
 2. Mixtures with components having the same IRAC mode of action classification are not recommended for insect resistance management.
 3. When using mixtures, consider any known cross-resistance issues between the individual components for the targeted pest(s).
 4. Mixtures become less effective if resistance is already developing to one or both active ingredients, but they may still provide pest management benefits.
 5. The insect resistance management benefits of an insecticide mixture are greatest if the two components have similar periods of residual insecticidal activity. Mixtures of insecticides with unequal periods of residual insecticide activity may offer an insect resistance management benefit only for the period where both insecticides are active.
- Adopt an integrated pest management program for insecticide use that includes scouting, uses historical information related to pesticide use, crop rotation, record keeping, and which considers cultural, biological and other chemical control practices.

- Monitor after application for unexpected target pest survival. If the level of survival suggests the presence of resistance, consult with your local university specialist or certified pest control advisor.
- Contact your local extension specialist or certified crop advisors for any additional pesticide resistance-management and/or IPM recommendations for the specific site and pest problems in your area.
- For further information or to report suspected resistance contact Vive Crop Protection at 1-888-760-0187. You can also contact your pesticide distributor or university extension specialist to report resistance.

MANDATORY SPRAY DRIFT MANAGEMENT

Aerial Applications:

- **DO NOT** release spray at a height greater than 10 ft above the ground or vegetative canopy, unless a greater application height is necessary for pilot safety.
- Applicators are required to select nozzle and pressure that deliver medium or coarser droplets (ASABE S641).
- **DO NOT** apply when wind speeds exceed 15 mph at the application site. If the wind speed is greater than 10 mph, the boom length must not exceed 65% of the wingspan for fixed wing aircraft or 75% of the rotor diameter for helicopters. Otherwise, the boom length must be 75% or less of the wingspan for fixed wing aircraft and 90% or less of the rotor diameter for helicopters.
- If the windspeed is 10 miles per hour or less, applicators must use $\frac{1}{2}$ swath displacement upwind at the downwind edge of the field. When the windspeed is between 11-15 miles per hour, applicators must use $\frac{3}{4}$ swath displacement upwind at the downwind edge of the field.
- **DO NOT** apply during temperature inversions.

Airblast Applications:

- Sprays must be directed into the canopy.
- **DO NOT** apply when wind speeds exceed 15 miles per hour at the application site.
- User must turn off outward pointing nozzles at the row end and when spraying the outer row.
- **DO NOT** spray during temperature inversion.

Ground Boom Applications:

- User must only apply with the release height recommended by the manufacturer, but no more than 4 feet above the ground or crop canopy.
- Applicators are required to select nozzle and pressure that deliver medium or coarser droplets (ASABE S572.1).
- **DO NOT** apply when wind speeds exceed 15 miles per hour at the application site.
- **DO NOT** apply during temperature inversions.

SPRAY DRIFT ADVISORIES

THE APPLICATOR IS RESPONSIBLE FOR AVOIDING OFF-SITE SPRAY DRIFT. BE AWARE OF NEARBY NON-TARGET SITES AND ENVIRONMENTAL CONDITIONS.

IMPORTANCE OF DROPLET SIZE

An effective way to reduce spray drift is to apply large droplets. Use the largest droplets that provide target pest control. While applying larger droplets will reduce spray drift, the potential for drift will be greater if applications are made improperly or under unfavorable environmental conditions.

Controlling Droplet Size - Ground Boom

- Volume - Increasing the spray volume so that larger droplets are produced will reduce spray drift. Use the highest practical spray volume for the application. If a greater spray volume is needed, consider using a nozzle with a higher flow rate.
- Pressure - Use the lowest spray pressure recommended for the nozzle to produce the target spray volume and droplet size.
- Spray Nozzle - Use a spray nozzle that is designed for the intended application. Consider using nozzles designed to reduce spray drift.

Controlling Droplet Size - Aircraft

- Adjust Nozzles - Follow nozzle manufacturers recommendations for setting up nozzles. Generally, to reduce fine droplets, nozzles should be oriented parallel with the airflow in flight.

BOOM HEIGHT - Ground Boom

- For ground equipment, the boom should remain level with the crop and have minimal bounce.

RELEASE HEIGHT - Aircraft

- Higher release heights increase the potential for spray drift.

SHIELDED SPRAYERS

- Shielding the boom or individual nozzles can reduce spray drift. Consider using shielded sprayers. Verify that the shields are not interfering with the uniform deposition of the spray on the target area.

TEMPERATURE AND HUMIDITY

- When making applications in hot and dry conditions, use larger droplets to reduce effects of evaporation.

TEMPERATURE INVERSIONS

- Drift potential is high during a temperature inversion. Temperature inversions are characterized by increasing temperature with altitude and are common on nights with limited cloud cover and light to no wind. The presence of an inversion can be indicated by ground fog or by the movement of smoke from a ground source or an aircraft smoke generator. Smoke that layers and moves laterally in a concentrated cloud (under low wind conditions) indicates an inversion, while smoke that moves upward and rapidly dissipates indicates good vertical air mixing. Avoid applications during temperature inversions.

WIND

- Drift potential generally increases with wind speed. AVOID APPLICATIONS DURING GUSTY WIND CONDITIONS.
- Applicators need to be familiar with local wind patterns and terrain that could affect spray drift.

Handheld Technology Applications:

- Take precautions to minimize spray drift.

VEGETATIVE FILTER STRIPS

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

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

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

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

BUFFER ZONES TO WATER BODIES

Ground Application (groundboom, chemigation, or airstblast)

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

Ultra Low Volume (ULV) Aerial Application

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

Non-ULV Aerial Application

- **DO NOT** apply within 150 feet of aquatic habitats (such as, but not limited to, lakes, reservoirs, rivers, streams, marshes, ponds, estuaries, and commercial fish ponds).

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.

APPLICATION AND MIXING INSTRUCTIONS

Shake well before use.

Bifender SM insecticide and miticide is designed for pre-plant incorporated (PPI), at-plant, pre-emergence (PRE), banded, broadcast, transplant-water drench, and foliar spray applications, and must be diluted with water before application. Refer to Specific Use Directions for Crop Plants for pest control or suppression instructions.

DO NOT use strainer (nozzle screens) with a mesh designation greater than 50.

Make sure that application equipment is thoroughly cleaned and properly calibrated prior to application and thoroughly cleaned after application.

Bifender SM can be mixed directly with water. **DO NOT** exceed dilution specified by mixing instructions. For best results, use immediately after mixing.

DO NOT allow a tank mixture to set overnight. **DO NOT** store mixtures. Make sure that application equipment is thoroughly cleaned and properly calibrated prior to application and thoroughly cleaned after application.

- Use spray nozzles appropriate for the crop to provide full coverage and uniform distribution of the spray mixture
- Use screens where appropriate to protect sprayer equipment and prevent clogging
- Screens used to protect pump on the suction side to be no finer than 16-mesh
- **DO NOT** fit the recirculation line of the spray system with a screen
- Screens used on the spray nozzles are to be no finer than 50-mesh
- The spray system pump is to have sufficient capacity to deliver 35-40 psi of pressure to the nozzles, and recirculate at least 10% of the tank volume per minute to maintain a uniform mixture
- Agitate the spray mixture with a jet agitator or liquid sparge tube
- **DO NOT** use air sparge

Consult manufacturers of spray equipment for more information on sprayer use, calibration, and recommendations. Consult state agricultural extension recommendations for local directions and spray schedules.

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

Choose the rate of application within the label ranges for the crop being treated based on expected insect pest pressure. This can be determined by history and scouting of the field and whether weather conditions are expected to be favorable. Use lower labeled rates when insect pest pressure is expected to be light and use higher labeled rates when insect pest pressure is expected to be heavy. Higher labeled application rates are generally needed in arid climates.

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

Mixing Instructions

Solo Bifender SM Application

- Determine the required volume of water for application and fill the spray/mixing tank with $\frac{1}{2}$ - $\frac{2}{3}$ s of this volume
- Begin agitation of the tank and add the required volume of Bifender SM for the insecticide application
- Continue agitation while adding the remaining $\frac{1}{2}$ - $\frac{1}{3}$ s volume of water to complete the spray mixture
- Apply the mixture after the contents of the tank are completely dispersed
- Maintain agitation of the spray tank until all of the spray mixture has been applied.
- Thoroughly rinse spray tank with water and dispose of the rinse water by spraying onto a section of the already treated crop

DO NOT prepare more spray mixture than is required for the treatment. **DO NOT** allow a mixture to set overnight. If the mixture settles, agitate the mixture and assess to ensure thorough re-mixing prior to application. **DO NOT** store spray mixtures.

Bifender SM Tank Mixture Application

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

Bifender SM may be applied in tank mixtures with adjuvants, micronutrients, and other products approved for use on registered crops. Observe all restrictions and precautions which appear on the labels of these products. **DO NOT** combine Bifender SM in the spray tank with pesticides, adjuvants or fertilizers unless compatibility charts or your own prior use has shown that the combination is physically compatible, and the combination is effective and non-injurious to the target crop under your use conditions.

When an adjuvant is used, it is recommended to use an adjuvant that meets the standards of the Chemical Producers and Distributors Association (CPDA) adjuvant certification.

Tank Mixture Order of Addition Recommendation

This is the general recommendation for order of addition. Always follow any specific order of addition instructions on all the tank-mix partner labels. Jar tests (or other similar methods) to ensure order of addition compatibility between products should be conducted before use.

1. Fill tank $\frac{1}{3}$ to $\frac{1}{2}$ full with mixing water.
2. Begin tank agitation before adding any tank-mix partners.
3. Add any water conditioner/anti-foam/compatibility agents.
4. Add any products packaged in water-soluble packaging and allow to completely dissolve/disperse.
5. Add any wettable powders/flowables (DC, DS, GR, SG, SP).
6. Add any microencapsulated suspensions (ME).
7. Add any liquids and solubles (SC, SU), including Bifender SM.
8. Add any emulsifiable concentrates (EC).
9. Add any adjuvants.

Jar Test Procedure

Test potential mixing partners, including adjuvants, for mixing compatibility using a standard jar test or other similar method and for crop safety prior to use on a crop. Incompatibilities may exist with some methylated seed oils, crop oil concentrates, or silicone-based adjuvants; conduct jar tests before using.

The following jar test procedure is recommended to evaluate compatibility: Following any product specific instructions for order of addition, pour the recommended proportions of the products into a suitable container, mix thoroughly and allow to stand at least twenty (20) minutes. If the combination remains mixed or can be re-mixed readily, the mixture is considered physically compatible.

DO NOT prepare more spray mixture than is required for the treatment. For best results, use immediately after mixing. **DO NOT** allow a mixture to set overnight. If the mixture settles, agitate the mixture and assess to ensure thorough re-mixing prior to application. **DO NOT** store spray mixtures.

Instructions for PPI And PPE Applications

PPI Treatments: PPI herbicides can be tank mixed with Bifender SM. Test for compatibility with jar tests or similar methods before use. Follow all labeled use rate recommendations. Incorporate Bifender SM close to seed planting depth.

PRE Treatments: PRE herbicides can be tank mixed with Bifender SM. Test for compatibility with jar tests or similar methods before use and follow all labeled use rate recommendations.

Instructions for At-Plant and Banded Applications

Bifender SM can be applied as a soil-directed application at plant as an in-furrow or T-band application or as an early season banded application over the plant row for control of below ground and surface feeding insect pests. Refer to the use directions for specific crops to determine if such applications are labeled for a given crop and, if so, for which insect pests.

Generally, at plant in-furrow applications are more effective against below ground feeding insects, whereas T-band and broadcast applications may be more effective against surface feeding insect pests. Check with your local extension specialist or certified crop advisor for specific advice on best local practices for insect control.

Use rates in the individual crop sections for at-plant soil applications are listed as Fluid oz/1000 Linear ft based on 30 inch row spacings. For conversion to application rates applicable to other row spacings see the table below.

At-Plant Application Instructions

Use 3 – 20 gallons of water per acre for in-furrow or T-band applications.

Direct the 5 -7 inch spray into the furrow just before the seed is covered, unless instructed otherwise under the specific crop instructions.

Use the higher labeled rate if conditions are expected to be favorable for insect pests or mites, or if minimum or no-till practices are being followed.

At Plant In-Furrow Application Rates (fl oz per acre)										
Row Spacing	Row ft per Acre	0.14 fl oz per 1000 row ft	0.27 fl oz per 1000 row ft	0.40 fl oz per 1000 row ft	0.54 fl oz per 1000 row ft	0.67 fl oz per 1000 row ft	1.00 fl oz per 1000 row ft	1.34 fl oz per 1000 row ft	2.02 fl oz per 1000 row ft	
20	26136	3.6	7.1	10.4	14.1	17.5	26.2	28.3	34.9	
22	23760	3.3	6.4	9.4	12.9	15.9	23.8	25.7	31.8	
24	21780	3.0	5.9	8.7	11.8	14.6	21.8	23.6	29.1	
26	20105	2.8	5.4	8.0	10.9	13.4	20.2	21.7	26.9	
28	18669	2.6	5.0	7.4	10.1	12.5	18.7	20.2	24.9	
30	17424	2.4	4.7	6.9	9.4	11.6	17.5	18.8	23.3	
32	16335	2.2	4.4	6.5	8.8	10.9	16.4	17.7	21.8	
34	15374	2.1	4.2	6.1	8.3	10.3	15.4	16.6	20.5	
36	14520	2.0	3.9	5.8	7.9	9.7	14.6	15.7	19.4	
38	13756	1.9	3.7	5.5	7.4	9.2	13.8	14.9	18.4	
40	13068	1.8	3.5	5.2	7.1	8.7	13.1	14.1	17.5	26.4
IMPORTANT: DO NOT apply more than the maximum a.i. per acre indicated in the specific crop use section.										
Linear Row Feet Calculation: 522720 ÷ row spacing (in inches) = Row feet per acre										

Instructions for Foliar Applications

Bifender SM can be applied as a spray to above ground plant parts: flowers, foliage and fruit. Application in a tank mixture with an adjuvant is recommended to get best wetting. Refer to the use directions for specific crops to determine if such applications are labeled for a given crop and, if so, for which plant parts and which insect pests.

Use higher labeled rates if insect pest pressure is high, controlling for mites, and/or conditions are expected to be favorable for pest population growth.

DO NOT apply when conditions favor drift from the area intended for treatment; follow instructions under the Spray Drift section.

Ground Applications

Apply with sufficient water in a manner that provides thorough and uniform coverage to obtain good pest control. Follow spray volume recommendations given under specific crops.

Aerial Applications

Apply with sufficient water in a manner that provides uniform coverage for good pest control. Follow spray volume recommendations given under specific crops. Dense canopies may limit coverage on lower leaves from aerial applications reducing insect pest control on those leaves.

Chemigation Use Directions

Apply this product only through sprinklers including center pivot, lateral move, end tow, side (wheel) roll, traveler, big gun, solid set, drip irrigation, 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 Low Energy Precision Application (LEPA) irrigation of 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 operation, 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. Bifender SM should be applied continuously for the duration of the water application. Bifender SM should be diluted in sufficient volume to ensure accurate application over the area to be treated. When using chemigation, a minimum of 0.25 inch per acre of irrigation water is recommended. Agitation generally is not required when a suitable diluent is used. A diluent 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.

POLLINATOR MANAGEMENT PRACTICES

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

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

How to Report Bee Kills

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

SPECIFIC USE DIRECTIONS FOR CROPS

BEANS AND PEAS, DRIED SUBGROUP 6C

Dried cultivars of bean (*Lupinus* species) (includes grain lupin, sweet lupin, white lupin, and white sweet lupin); (*Phaseolus* species) (includes field bean, kidney bean, lima bean (dry), navy bean, pinto bean; tepary bean; bean (*Vigna* species) (includes 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 (*Pisum* species) (includes field pea); pigeon pea, purple hulled peas.

BEANS AND PEAS, DRIED FOLIAR APPLICATIONS	
PESTS	USE RATES
	fl. oz. product/acre (lb. a.i./acre)
Beet Armyworm Cutworms Fall Armyworm Western Bean Cutworm Yellow Striped Armyworm	3.8 – 11.6 (0.033 – 0.10)
Foliar Instructions: <ul style="list-style-type: none">• Apply Bifender SM in 10 or more gallons of spray per acre by ground equipment, or 2 or more gallons of spray per acre by aircraft to achieve thorough coverage. When applying by air, 1-2 quarts of emulsified oil may be substituted for equivalent amounts of water in the finished spray. Thorough coverage is important for good control.	
Specific Use Restrictions: <ul style="list-style-type: none">• DO NOT make more than 2 foliar applications to peas and 3 foliar applications to beans per year.• DO NOT apply more than 0.1 pound active ingredient per acre per year 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 year including at-plant, PRE & PPI, and foliar application of Bifender SM and other bifenthrin containing products.• DO NOT make foliar applications less than 7 days apart.• DO NOT apply within 14 days of harvest.	

BEANS AND PEAS, EDIBLE PODDED AND SUCCULENT SUBGROUPS 6A AND 6B

Bean (*Phaseolus* species.) (includes lima bean (green), runner bean, snap bean, wax bean); bean (*Vigna* species) (includes asparagus bean, blackeyed pea, Chinese longbean, cowpea, moth bean, southern pea, yardlong bean); broad bean (succulent); jackbean; pea (*Pisum* species.) (includes dwarf pea, edible-pod pea, English pea, garden pea, green pea, snow pea, sugar snap pea); pigeon pea; purple hulled pea; soybean (immature seed); sword bean.

BEANS AND PEAS, EDIBLE PODDED AND SUCCULENT FOLIAR APPLICATIONS	
PESTS	USE RATES
	fl. oz. product/acre (lb. a.i./acre)
Beet Armyworm Cutworms Fall Armyworm Western Bean Cutworm Yellow Striped Armyworm	3.8 – 11.6 (0.033 – 0.10)
Product Instructions: <ul style="list-style-type: none">• Apply Bifender SM in 10 or more gallons of spray per acre by ground equipment, or 2 or more gallons of spray per acre by aircraft to achieve thorough coverage. When applying by air, 1-2 quarts of emulsified oil may be substituted for equivalent amounts of water in the finished spray. Thorough coverage is important for good control.	
Specific Use Restrictions: <ul style="list-style-type: none">• DO NOT make more than 2 foliar applications per year.• DO NOT apply more than 0.1 pound active ingredient per acre per year as an at-plant application.• DO NOT apply more than 0.2 pound active ingredient per acre per year including at-plant, PRE & PPI, and foliar application of Bifender SM and other bifenthrin containing products.• DO NOT make foliar applications less than 3 days apart.• DO NOT apply within 3 days of harvest.	

BRASSICAS, HEAD AND STEM FOLIAR APPLICATIONS	
PESTS	USE RATES
	fl. oz. product/acre (lb. a.i./acre)
Armyworm species Cutworms	3.8 – 11.6 (0.033 – 0.10)
Foliar Instructions: <ul style="list-style-type: none">• Apply Bifender SM in 10 or more gallons of spray per acre by ground equipment, or 2 or more gallons of spray per acre by aircraft to achieve thorough coverage. When applying by air, 1-2 quarts of emulsified oil may be substituted for equivalent amounts of water in the finished spray. Thorough coverage is important for good control.	
Specific Use Restrictions: <ul style="list-style-type: none">• DO NOT make more than 5 foliar applications per year.• DO NOT apply more than 0.1 pound active ingredient per acre per year as an at-plant application.• DO NOT apply more than 0.5 pound active ingredient per acre per year including at-plant, PRI & PRE, and foliar application of Bifender SM and other bifenthrin containing products.• DO NOT make more than 5 applications after bloom.• DO NOT make foliar applications less than 7 days apart.• DO NOT apply within 7 days of harvest.	

BRASSICAS, LEAFY GREENS SUBGROUP 4-16B

Arugula*; broccoli, Chinese*; broccoli raab; cabbage, abyssinian*; cabbage, Chinese, bok choy; cabbage, seakale*; collards; cress, garden*; cress, upland*; hanover salad*; kale; maca, leaves*; mizuna; mustard greens; radish, leaves*; rape greens; rocket, wild*; shepherd's purse*; turnip greens; watercress*; cultivars, varieties, and hybrids of these commodities*.

BRASSICAS, LEAFY GREENS FOLIAR APPLICATIONS		
PESTS	USE RATES	
	fl. oz. product/acre (lb. a.i./acre)	
Armyworms Cutworms Flea Beetles	3.8 – 11.6 (0.033 – 0.10)	
Foliar Instructions: <ul style="list-style-type: none">• Bifender SM must be applied at the onset of infestation reaching locally determined threshold. Thorough coverage of these areas is important for good control.• Apply Bifender SM in 10 or more gallons of spray per acre by ground equipment, or 2 or more gallons of spray per acre by aircraft to achieve thorough coverage. When applying by air, 1-2 quarts of emulsified oil may be substituted for equivalent amounts of water in the finished spray. Thorough coverage is important for good control.		
Specific Use Restrictions: <ul style="list-style-type: none">• DO NOT make more than 4 foliar applications per year.• DO NOT apply more than 0.10 pound active ingredient per acre per year as an at-plant application.• DO NOT apply more than 0.40 pound active ingredient per acre per year including at-plant, PPI & PRE, and foliar application of Bifender SM and other bifenthrin containing products.• DO NOT make foliar applications less than 7 days apart.• DO NOT apply within 7 days of harvest.		

*Not Registered for Use by California

CORN

Field Corn (Grain and Silage), Popcorn, Field Corn Grown for Seed, Sweet Corn, Sweet Corn Grown for Seed

CORN AT-PLANT APPLICATIONS		
PESTS	USE RATES	
	fl. oz. product/acre (lb. a.i./acre)	fl. oz. product/1000 row ft. (lb. a.i./1000 row ft.)
Corn Rootworm larvae (Northern, Southern, and Western)	9.3 – 23.3 (0.08 – 0.20)	0.54 – 1.34 (0.0046 – 0.0115)
Army Cutworm ¹ Armyworm species ¹ Cutworm species ¹ Grubs Root Aphids Seed Corn beetle Seed Corn Maggot Stalkborer ¹ True Armyworm ¹ Wireworm	4.7 – 18.6 (0.04 – 0.16)	0.27 – 1.08 (0.0023 – 0.0093)
At-Plant Instructions: <ul style="list-style-type: none">• Following best local practice, apply as a spray T-banded over an open furrow or in-furrow with the seed. Thorough coverage is important for good control.• 'Army cutworm, Stalkborer, Cutworm species, True armyworm or Armyworm species: Apply as a 5 -7 inch band over the row on the soil surface, a 5 – 7 inch band over the open furrow (T-band), in-furrow with the seed, or broadcast to the soil surface.		

(continued)

CORN (cont.)

CORN PPI & PRE APPLICATIONS	
PESTS	USE RATES
	fl. oz. product/acre (lb. a.i./acre)
Armyworm species Black Cutworm Grape Colaspis Seed Corn Beetle Seed Corn Maggot White Grub Wireworm	Pre-Plant Incorporated (PPI) 5.6 – 7.3 (0.048 – 0.063)
Armyworm species Black Cutworm Stalkborer	Pre-Emergence (PRE) 4.7 (0.04)
PPI & PRE Instructions: <ul style="list-style-type: none"> • PPI: PPI herbicides can be tank mixed with Bifender SM. Test for compatibility with jar tests or similar methods before use. Follow all labeled use rates. Incorporate Bifender SM close to seed planting depth up to a max depth of 3 inches. • PRE: PRE herbicides can be tank mixed with Bifender SM. Test for compatibility with jar tests or similar methods before use and follow all labeled use rates. 	
CORN FOLIAR APPLICATIONS	
PESTS	USE RATES
	fl. oz. product/acre (lb. a.i./acre)
Aphids Army Cutworm Armyworm species Beet Armyworm Cutworm species Fall Armyworm Flea Beetle Southern Armyworm True Armyworm Yellow Striped Armyworm	3.8– 11.6 (0.033 – 0.10)
Foliar Instructions: <ul style="list-style-type: none"> • Apply Bifender SM in 10 or more gallons of spray per acre by ground equipment, or 2 or more gallons of spray per acre by aircraft to achieve thorough coverage. To improve control by aircraft, use 5 gallons of finished spray per acre particularly when initial populations are heavier than normal. When applying by aircraft, 1-2 quarts of emulsified oil may be substituted for equivalent amounts water in the finished spray. Thorough coverage is important for good control. • Corn ear-attacking pests: Apply this product just before silking and repeat as necessary to maintain control. • Other listed insect pests: Apply when pests first appear and repeat as necessary. 	
Specific Use Restrictions: <ul style="list-style-type: none"> • DO NOT make more than 3 foliar applications to field corn and 2 foliar applications to sweet corn per year. • DO NOT apply more than 0.20 pound active ingredient per acre per year as an at-plant application. • For field corn: DO NOT apply more than 0.30 pound active ingredient per acre per year including at-plant, PPI & PRE, and foliar applications of Bifender SM and other bifenthrin containing products. • For sweet corn: DO NOT apply more than 0.20 pound active ingredient per acre total per year including at-plant, PPI & PRE, and foliar applications of other bifenthrin products. • DO NOT apply within 30 days of harvest for field corn (grain and silage), popcorn, or field corn grown for seed. • DO NOT apply within 1 day of harvest for sweet corn, or sweet corn grown for seed. • DO NOT graze livestock in treated areas or cut treated crops for feed within 30 days of last application for field corn (grain and silage), popcorn, or field corn grown for seed. • DO NOT graze livestock in treated areas or cut treated crops for feed within 1 day of harvest for sweet corn, or sweet corn grown for seed. • 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. 	

CUCURBITS CROP GROUP 9

Chayote (fruit), Chinese waxgourd (Chinese preserving melon), Citron melon, Cucumber, Gherkin, Gourd, edible *Lagenaria* species (includes hyotan, cucuzza), *Luffa* species (includes hechima, Chinese okra), *Momordica* species (includes balsam apple, balsam pear, bitter melon, Chinese cucumber), Muskmelon (hybrids and/or cultivars or *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, 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).

CUCURBITS FOLIAR APPLICATIONS	
PESTS	USE RATES
	fl. oz. product/acre (lb. a.i./acre)
Armyworm Cucumber Beetle Cutworm	4.7 – 11.6 (0.04 – 0.10)
Foliar Instructions: <ul style="list-style-type: none">• Apply Bifender SM in 20 or more gallons of spray per acre by ground equipment, or 5 or more gallons of spray per acre by aircraft to achieve thorough coverage. When applying by air, 1-2 quarts of emulsified oil may be substituted for equivalent amounts of water in the finished spray. Thorough coverage is important for good control.	
Specific Use Restrictions: <ul style="list-style-type: none">• DO NOT make more than 3 foliar applications per year.• DO NOT apply more than 0.10 pound active ingredient per acre per year as an at-plant application.• DO NOT apply more than 0.30 pound active ingredient per acre per year including at-plant, PPI & PRE, and foliar application of Bifender SM and other bifenthrin containing products.• DO NOT make more than 2 applications after bloom.• DO NOT make foliar applications less than 7 days apart.• DO NOT apply within 3 days of harvest.	

HOPS

HOPS FOLIAR APPLICATIONS	
PESTS	USE RATES
	fl. oz. product/acre (lb. a.i./acre)
Armyworm Cutworm	7.0 – 11.6 (0.06 – 0.10)
Foliar Instructions: <ul style="list-style-type: none">• Apply this product in a minimum of 100-150 gallons per acre with ground equipment in early season, or 200-250 gallons of spray per acre in late season. Thorough coverage is important for good control.	
Specific Use Restrictions: <ul style="list-style-type: none">• DO NOT make more than 3 foliar applications per year.• DO NOT exceed 0.10 pound active ingredient per acre per application.• DO NOT apply more than 0.30 pound active ingredient per acre per year including at-plant, PPI & PRE, lay-by, and foliar applications of Bifender SM and other bifenthrin containing products.• Use of ultra low volume (ULV) application on hops is prohibited.• DO NOT make foliar applications less than 21 days apart.• DO NOT apply within 14 days of harvest.	

PEPPERS/EGGPLANT SUBGROUP 8-10B

African eggplant; bell pepper; eggplant; Martynia; nonbell pepper; okra; pea eggplant; pepino; roselle; scarlet eggplant; cultivars, varieties, and/or hybrids of these.

PEPPERS & EGGPLANTS FOLIAR APPLICATIONS	
PESTS	USE RATES
	fl. oz. product/acre (lb. a.i./acre)
Armyworms (Beet, Fall, Southern, Yellowstriped) Cutworms	3.8 – 11.6 (0.033 – 0.10)
Foliar Instructions: <ul style="list-style-type: none">• Apply Bifender SM in 10 or more gallons of spray per acre by ground equipment, or 2 or more gallons of spray per acre by aircraft to achieve thorough coverage. Thorough coverage is important for good control.	
Specific Use Restrictions: <ul style="list-style-type: none">• DO NOT make more than 2 foliar applications per year.• DO NOT apply more than 0.10 pound active ingredient per acre per year as an at-plant application.• DO NOT apply more than 0.20 pound active ingredient per acre per year including at-plant, PPI & PRE, and foliar application of Bifender SM and other bifenthrin containing products.• DO NOT make foliar applications less than 7 days apart.• DO NOT apply within 7 days of harvest.	

TOMATOES SUBGROUP 8-10A

Bush tomato; cocona; currant tomato; garden huckleberry; goji berry; groundcherry; naranjilla; sunberry; tomatillo; tomato; tree tomato; cultivars, varieties, and/or hybrids of these.

TOMATOES FOLIAR APPLICATIONS	
PESTS	USE RATES
	fl. oz. product/acre (lb. a.i./acre)
Armyworms (Beet Armyworm, Fall Armyworm, Southern Yellow-striped Armyworm) Corn Rootworm Cutworms Flea Beetles	3.8 – 9.3 (0.033 – 0.08)
Foliar Instructions: <ul style="list-style-type: none">• Apply Bifender SM in 10 or more gallons of spray per acre by ground equipment or 5 or more gallons of spray per acre by air to achieve thorough coverage. Thorough coverage is essential to achieve control.	
Specific Use Restrictions: <ul style="list-style-type: none">• DO NOT make more than 4 foliar applications per year.• DO NOT apply more than 0.10 pound active ingredient per acre per year as an at-plant application.• DO NOT apply more than 0.40 pound active ingredient per acre per year including at-plant, PPI & PRE, and foliar application of Bifender SM and other bifenthrin containing products.• DO NOT make foliar applications less than 10 days apart.• DO NOT apply within 1 day of harvest.	

TUBEROUS AND CORM VEGETABLES SUBGROUP 1C

Potato, Sweet potato, Arracacha, Arrowroot, Chinese artichoke, Jerusalem artichoke, Edible canna, Cassava (bitter and sweet), Chayote (root), Chufa, Dasheen (taro), Ginger, Leren, Tanier, Turmeric, Yam bean, True yam

TUBEROUS AND CORM VEGETABLES AT-PLANT APPLICATIONS		
PESTS	USE RATES	
	fl. oz. product/acre (lb. a.i./acre)	fl. oz. product/1000 row ft. (lb. a.i./1000 row ft.)
Grape Colaspis Rootworms Sweet Potato Flea Beetle White Grub Wireworms	17.5 – 34.9 (0.15 – 0.30)	1.0 – 2.0 (0.0086 – 0.0174)
At-Plant Instructions: <ul style="list-style-type: none">Bifender SM may be applied as a soil incorporated broadcast, directed bed spray or a T-band spray into the furrows. Apply Bifender SM in 10 or more gallons of spray per acre to achieve thorough coverage.		
TUBEROUS AND CORM VEGETABLES PPI APPLICATIONS		
PESTS	fl. oz. product/acre (lb. a.i./acre)	
Grape Colaspis Rootworms Sweet Potato Flea Beetle White Grub Wireworm	17.5 – 34.9 (0.15 – 0.30)	
PPI Instructions: <ul style="list-style-type: none">PPI: Apply Bifender SM to the planting area as a broadcast application or a banded application prior to planting and incorporate to the planting depth. Apply Bifender SM in 10 or more gallons of spray per acre to achieve thorough coverage.		
TUBEROUS AND CORM VEGETABLES LAY-BY APPLICATIONS		
PESTS	fl. oz. product/acre (lb. a.i./acre)	
Grape Colaspis Rootworm Sweet Potato Flea Beetle White Grub	17.5 – 34.9 (0.15 – 0.30)	
Lay-By Instructions: <ul style="list-style-type: none">Bifender SM may be applied as one or more soil directed and incorporated treatments at cultivation or lay-by. Apply Bifender SM to the drill area and incorporate by cultivation with equipment set to throw soil towards the drill area. Apply Bifender SM in 10 or more gallons of spray per acre to achieve thorough coverage.		
TUBEROUS AND CORM VEGETABLES FOLIAR APPLICATIONS		
PESTS	fl. oz. product/acre (lb. a.i./acre)	
Southern Potato Wireworm Wireworm	3.8 – 11.6 (0.033 – 0.10)	
Foliar Instructions: <ul style="list-style-type: none">Apply Bifender SM in 10 or more gallons of spray per acre by ground equipment, or 3 or more gallons of spray per acre by aircraft to achieve thorough coverage.		
Specific Use Restrictions: <ul style="list-style-type: none">DO NOT make more than 2 foliar applications per year.DO NOT apply more than 0.3 pound active ingredient per acre per year as an at-plant application.DO NOT apply more than 0.5 pound active ingredient per acre per year including at-plant, PPI & PRE, lay-by, and foliar application of Bifender SM and other bifenthrin containing products.DO NOT make foliar applications less than 21 days apart.DO NOT apply within 21 days of harvest.		

STORAGE AND DISPOSAL

DO NOT contaminate water, food or feed by storage or disposal.

Pesticide Storage

Store in original containers only. Keep from freezing. Protect from excessive heat. Keep container closed when not in use. **DO NOT** store near food or feed. In case of spill on floor or paved surfaces, mop and remove to chemical waste storage area until proper disposal can be made if product cannot be used according to the label.

Pesticide Disposal

Pesticide wastes are acutely hazardous. 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:

Container Handling less than or equal to 5 gallons - Non-refillable container: **DO NOT** reuse or refill this container. Triple rinse 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 if available or reconditioning if appropriate or puncture and dispose of in a sanitary landfill or by other procedures approved by state and local authorities.

CONTAINER IS NOT SAFE FOR FOOD, FEED OR DRINKING WATER.

IMPORTANT INFORMATION READ BEFORE USING PRODUCT

Conditions of Sale and Limitation of Warranty and Liability:

NOTICE: Read the entire Directions for Use and Conditions of Sale and Limitation of Warranty and Liability before buying or using this product. If the terms are not acceptable, return the product at once, unopened, and the purchase price will be refunded.

The Directions for Use of this product must be followed carefully. It is impossible to eliminate all risks inherently associated with the use of this product. Crop injury, ineffectiveness, or other unintended consequences may result because of such factors as manner of use or application, weather or crop conditions beyond the control of Vive Crop Protection or Seller. All such risks shall be assumed by Buyer and User, and Buyer and User agree to hold Vive Crop Protection and Seller harmless for any claims relating to such factors.

Seller warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated on the Directions for Use when used in accordance with the directions under normal conditions of use.

TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, VIVE CROP PROTECTION MAKES NO WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE, NOR ANY OTHER EXPRESS OR IMPLIED WARRANTIES WITH RESPECT TO THE SELECTION, PURCHASE, OR USE OF THIS PRODUCT.

Any warranties, express or implied, having been made are inapplicable if this product has been used contrary to label instructions, or under abnormal conditions, or under conditions not reasonably foreseeable to (or beyond the control of) Seller or Vive Crop Protection, and Buyer assumes the risk of any such use.

To the extent consistent with applicable law, Vive Crop Protection or Seller shall not be liable for any incidental, consequential or special damages resulting from the use or handling of this product. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE EXCLUSIVE LIABILITY OF VIVE CROP PROTECTION AND SELLER FOR ANY AND ALL CLAIMS, LOSSES, INJURIES OR DAMAGES (INCLUDING CLAIMS BASED ON BREACH OF WARRANTY, CONTRACT, NEGLIGENCE, TORT, STRICT LIABILITY OR OTHERWISE) RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, SHALL BE THE RETURN OF THE PURCHASE PRICE OF THE PRODUCT OR, AT THE ELECTION OF VIVE CROP PROTECTION OR SELLER, THE REPLACEMENT OF THE PRODUCT.

This Conditions of Sale and Limitation of Warranty and Liability may not be amended by any oral or written agreement except as signed by an authorized representative of Vive Crop Protection.

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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.



Bifender SM is a versatile, broad-spectrum insecticide for use on the listed crops: beans and peas (dried and succulent); brassica vegetables (head and stem and leafy greens); corn; cucurbits; hops; peppers/eggplants; tomatoes; tuberous and corn vegetables.

Active Ingredient:

Bifenthrin: (2-methyl [1,1'-biphenyl]-3-yl) methyl 3-[2-chloro-3,3,3-trifluoro-1-propenyl]-2,2-dimethyl-cyclopropanecarboxylate*	By Wt. 12.3%
Other Ingredients:	87.7%
	100.0%

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

Contains 1.1 lb. of bifenthrin per gallon.

KEEP OUT OF REACH OF CHILDREN CAUTION

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 inside booklet for additional precautionary information and directions for use.

/ Refer to enclosed label for full instructions.

EPA Reg. No. 89118-8

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

Caution. Harmful if swallowed. Causes moderate eye irritation. Avoid contact with eyes or clothing. Wear protective eyewear, if appropriate. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet.

FIRST AID

If swallowed:

- Call a poison control center or doctor immediately for treatment advice.
- Have person sip a glass of water if able to swallow.
- **DO NOT** induce vomiting unless told to by a poison control center or doctor.
- **DO NOT** give anything by mouth to an unconscious person.

If in eyes:

- Hold eyes 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.
- 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.

EMERGENCY INFORMATION

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. In the event of a medical or chemical emergency contact Chemtel Inc. in North America at 1-800-255-3924 or worldwide international at +1-813-248-0585.

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 while bees are foraging in the treatment area. **Protect pollinating insects by following label directions intended to minimize drift and to reduce risk to these organisms.**

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

STORAGE AND DISPOSAL

DO NOT contaminate water, food or feed by storage or disposal.

Pesticide Storage

Store in original containers only. Keep from freezing. Protect from excessive heat. Keep container closed when not in use. **DO NOT** store near food or feed. In case of spill on floor or paved surfaces, mop and remove to chemical waste storage area until proper disposal can be made if product cannot be used according to the label.

Pesticide Disposal

Pesticide wastes are acutely hazardous. 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:

Container Handling less than or equal to 5 gallons - Non-refillable container: **DO NOT** reuse or refill this container. Triple rinse 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 if available or reconditioning if appropriate or puncture and dispose of in a sanitary landfill or by other procedures approved by state and local authorities.

CONTAINER IS NOT SAFE FOR FOOD, FEED OR DRINKING WATER.

SHAKE WELL BEFORE USE

Vive Crop Protection, Inc.
500 Westover Dr., #10198
Sanford, NC 27330
1-888-760-0187



Net Contents: 2.5 Gallons