

RESTRICTED USE PESTICIDE

Due to Toxicity to Fish and Aquatic Organisms

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

LAMBDA-CYHALOTHRIN | GROUP 3A | INSECTICIDE

Actylis Lambda-Cy Insecticide

For the Control of a Variety of Insect Pests on Selected Crops

Contains the same active ingredient as Karate® Insecticide.

For outdoor use only.

Active Ingredient:

Lambda-cyhalothrin..... 11.4%

Other Ingredients: 88.6%

Total 100.0%

Contains petroleum distillates.

Contains 1 lb. of active ingredient per gallon.

EPA Reg. No. 2749-661

EPA Est. No. 070989-MO-001

KEEP OUT OF REACH OF CHILDREN

WARNING/AVISO

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

FIRST AID

If swallowed: - Call a poison control center or doctor immediately for treatment advice. - **DO NOT** give any liquid to the person. - **DO NOT** induce vomiting unless told to do so by the poison control center or doctor. - **DO NOT** give anything by mouth to an unconscious person. **If in eyes:** - Hold eye open and rinse slowly and gently with water 15-20 minutes. - Remove contact lenses, if present, after the first 5 minutes, then continuing rinsing eye. - Call a poison control center or doctor for treatment advice. **If on skin or clothing:** - Take off contaminated clothing. - Rinse skin immediately with plenty of water for 15-20 minutes. - Call a poison control center or doctor for treatment advice. **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.

Have the product container or label with you when calling a poison control center or physician or going for treatment. FOR MEDICAL EMERGENCIES INVOLVING THIS PRODUCT, CALL CHEMTREC® TOLL FREE 1-800-424-9300 or 1-703-527-3887 (24 Hours per Day, 7 Days per Week).

Note to Physician - Contains petroleum distillate - vomiting may cause aspiration pneumonia.

See inside booklet for additional Precautionary Statement, First Aid, and Directions for Use

1 gallon (3.78 liters)

NET CONTENTS

Manufactured for **Actylis**, 4 Tri Harbor Court, Port Washington, NY 11050

Job 257459

PRECAUTIONARY STATEMENTS

Hazards to Humans and Domestic Animals

WARNING - AVISO: May be fatal if swallowed. Harmful if inhaled or absorbed through skin. Causes moderate eye irritation. Avoid contact with skin, eyes or clothing. Avoid breathing spray mist. Wash hands thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet. Remove contaminated clothing and wash clothing before reuse.

Personal Protective Equipment (PPE)

Mixers, loaders and applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Chemical-resistant gloves made of barrier laminate or viton \geq 14 mils
- Shoes plus socks
- Protective eyewear

In addition, if the applicator is making foliar broadcast treatments using a mechanically pressurized handgun to conifers and deciduous trees in nurseries, wear a minimum of a NIOSH-approved elastomeric half mask respirator with organic vapor (OV) cartridges and combination R, or P filters; OR a NIOSH-approved gas mask with OV canisters; OR a NIOSH-approved powered air purifying respirator with OV cartridges and combination HE filters.

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.

Engineering Controls Statement

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

User Safety Recommendations

Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
- Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing.

As soon as possible, wash thoroughly and change into clean clothing.

Environmental Hazards

This pesticide is extremely toxic to fish and aquatic organisms and toxic to wildlife. **DO NOT** apply when weather conditions favor drift from treated areas. Drift and runoff from treated areas may be hazardous to aquatic organisms in neighboring areas.

To protect the environment, **DO NOT** allow pesticide to enter or run off into storm drains, drainage ditches, gutters or surface waters. Applying Actylis Lambda-Cy Insecticide in calm weather when rain

is not predicted for the next 24 hours will help to ensure that wind and rain does not blow or wash pesticide off the treatment area. Rinsing application equipment over the treated area will help avoid runoff to water bodies or drainage systems.

Non-Target Organism Advisory: Actylis Lambda-Cy Insecticide is highly toxic to bees and other pollinating insects exposed to direct treatment or to residues in/on blooming crops or weeds. Protect pollinating insects by following label directions intended to minimize drift and reduce pesticide risk to these organisms. **DO NOT** apply Actylis Lambda-Cy Insecticide or allow it to drift to blooming crops or weeds if bees are visiting the treatment area.

Physical and Chemical Hazards

Combustible liquid. **DO NOT** use or store near heat or open flame. **DO NOT** use Actylis Lambda-Cy Insecticide in or on electrical equipment due to the possibility of shock hazard.

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.

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

USE RESTRICTIONS

- **DO NOT** apply as a foliar broadcast application using a mechanically pressurized handgun on orchards and vineyards.
- **DO NOT** apply as a soil, drench, or ground-directed application using a mechanically pressurized handgun on orchards and vineyards.
- **DO NOT** apply as a foliar broadcast application using a mechanically pressurized handgun on: (Brassica (head and stem), Cucurbit Vegetables, Fruiting Vegetables, Garlic, Legume Vegetables, Lettuce (head and leaf), Onion (dry bulb), Tobacco, Tuberous and Corm Vegetables).
- Removable chemical extraction probes (also known as "stingers") used in suction/extraction systems must be rinsed within the pesticide container prior to removal.
- See the "**SPECIFIC USE DIRECTIONS-AGRICULTURAL USES**" and "**NON-AGRICULTURAL USES**" sections of this label for additional crop/use site restrictions.

AGRICULTURAL USE REQUIREMENTS

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

DO NOT enter or allow worker entry into treated areas during the restricted-entry interval (REI) of 24 hours with the following exceptions:

- For hand or mechanically assisted detasseling of corn (field, pop, sweet) grown for seed and hand harvesting of sweet corn grown for grain, DO NOT enter or allow worker entry into treated areas during the restricted-entry interval (REI) of 48 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:

- Long-sleeved shirt and long pants
- Chemical-resistant gloves made of barrier laminate or viton \geq 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.

DO NOT enter or allow others to enter until sprays have dried.

FAILURE TO FOLLOW THE DIRECTIONS FOR USE AND PRECAUTIONS ON THIS LABEL MAY RESULT IN POOR INSECT CONTROL, CROP INJURY, OR ILLEGAL RESIDUES.

WEED RESISTANCE MANAGEMENT

For resistance management, Actylis Lambda-Cy Insecticide contains a Group 3A insecticide, lambda-cyhalothrin. Any insect population may contain individuals naturally resistant to Actylis Lambda-Cy Insecticide 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 Actylis Lambda-Cy Insecticide or other Group 3A insecticides within a growing season, or among growing seasons, with different groups that control the same pests.
- Use tank mixtures with insecticides from a different group that are equally effective on the target pest when such use is permitted. **DO NOT** rely on the same mixture repeatedly for the same pest population. Consider any known cross-resistance issues (for the targeted pests) between the individual components of a mixture. In addition, consider the following recommendations provided by the Insecticide Resistance Action Committee (IRAC):

- Individual insecticides selected for use in mixtures should be highly effective and be applied at the rates at which they are individually registered for use against the target species.
- Mixtures with components having the same IRAC mode of action classification are not recommended for insect resistance management.
- When using mixtures, consider any known cross-resistance issues between the individual components for the targeted pest(s).
- Mixtures become less effective if resistance is already developing to one or both active ingredients, but they may still provide pest management benefits.
- The insect resistance management benefits of an insecticide mixture are greatest if the two components have similar periods of residual insecticidal activity. Mixtures of insecticides with unequal periods of residual 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, certified crop advisors, and/or Actylis representative for any additional pesticide resistance management and/or integrated pest management recommendations for the specific site and pest problems in your area.
- For further information or to report suspected resistance, contact your Actylis representative.

BUFFER ZONES

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 lambda-cyhalothrin 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.

Flooded rice fields are not required to have a vegetative filter strip. However, non-flooded rice (i.e., row rice) are subject to the vegetative filter strip requirements described above.

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>

Vegetative Buffer Strip in the State of New York

In the state of New York, a 25 ft. vegetated, non-cropped buffer strip untraversed by drainage tiles must be maintained between a treated field and a coastal salt marsh or stream that drains into a coastal salt marsh, for both aerial and ground application. For aerial applications, the 25 ft. vegetated non-cropped buffer strip for runoff protection would be part of the larger 150 ft. buffer strip (or 450 ft. buffer strip for ULV application) required for spray drift.

Buffer Zones to Aquatic Habitats

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

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

Buffer Zone for 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, natural ponds, estuaries, and commercial fish ponds).

Buffer Zone for Non-ULV Aerial Application

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

SPRAY DRIFT MANAGEMENT

Mandatory Spray Drift Management

Aerial Applications:

- **DO NOT** release spray at a height greater than 10 feet above the vegetative canopy, unless a greater application height is necessary for pilot safety.
- Applicators are required to select nozzle and pressure that deliver medium or coarser droplets (ASABE S641).
- **DO NOT** apply when wind speeds exceed 15 mph at the application site. If the wind speed is greater than 10 mph, the boom length must be 65% or less of the wingspan for fixed wing aircraft and 75% or less of the rotor diameter for helicopters. Otherwise, the boom length must be 75% or less of the wingspan for fixed-wing aircraft and 90% or less of the rotor diameter for helicopters.
- If the windspeed is 10 miles per hour or less, applicators must use $\frac{1}{2}$ 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 mph at the application site.
- User must turn off outward pointing nozzles at row ends and when spraying outer row.
- **DO NOT** apply during temperature inversions.

Ground Boom Applications:

- User must only apply with the 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 a medium or coarser droplet size (ASABE S572).
- **DO NOT** apply when wind speeds exceed 15 mph at the application site.
- **DO NOT** apply during temperature inversions.

Boomless Ground Applications:

- Applicators are required to select nozzle and pressure that deliver a medium or coarser droplet size (ASABE S572).
- **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 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.

Handheld Technology Applications

Take precautions to minimize spray drift.

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.

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.

CHEMIGATION

Sprinkler Irrigation Application

Apply Actylis Lambda-Cy Insecticide at rates and timing described elsewhere in this label. As local recommendations differ, consult your local State Extension Service or other local experts for

recommendations on adjuvant or diluent types (see TANK MIX APPLICATION) rates and mixing instructions. These recommendations should be proven, through university and extension field trials, to be effective with Actylis Lambda-Cy Insecticide applied by chemigation.

Check the irrigation system to insure uniform application of water to all areas. Thorough coverage of foliage is required for good control. Good agitation in the pesticide supply tank should be maintained prior to and during the entire application period.

Apply by injecting the specified rate of Actylis Lambda-Cy Insecticide into the irrigation system using a metering device that will introduce a constant flow and by distributing the product to the target area in 0.1-0.2 acre-inch of water. In general, use the least amount of water required for proper distribution and coverage. It is recommended that the product be injected into the main irrigation line ahead of a right angle turn in the line to insure adequate dispersion or mixing in the irrigation water. Once the application is completed, flush the entire irrigation and injection system with clean water before stopping the system.

In addition to the above recommendations, if application is being made during a normal irrigation set of a stationary sprinkler, the specified rate of Actylis Lambda-Cy Insecticide for the area covered should be injected into the system only during the end of the irrigation set for sufficient time to provide adequate coverage and product distribution.

It is not recommended that Actylis Lambda-Cy Insecticide be applied through an irrigation system connected to a public water system. Public water system means a system for the provision to the public of piped water for human consumption if such system has at least 15 service connections or regularly serves an average of at least 25 individuals daily at least 60 days out of the year.

Use Precautions - Sprinkler Irrigation Application

- A. Apply Actylis Lambda-Cy Insecticide only through (sprinkler including center pivot, lateral move, end tow, side wheel roll, traveler, big gun, solid set, or hand move) irrigation system(s). **DO NOT** apply Actylis Lambda-Cy Insecticide through any other type of irrigation system.
- B. Crop injury, lack of effectiveness, or illegal pesticide residues in the crop can result from nonuniform distribution of treated water.
- C. If you have questions about calibration, you should contact State Extension Service specialists, equipment manufacturers or other experts.
- D. **DO NOT** connect an irrigation system (including greenhouse systems) used for pesticide application to a public water system unless the pesticide label-prescribed safety devices for public water systems are in place.
- E. 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.
- F. 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.

- G. The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.
- H. 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.
- I. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.
- J. 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.
- K. 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.
- L. Any alternatives to the above required safety devices must conform to the list of EPA-approved alternative devices.
- M. **DO NOT** apply when wind speed favors drift beyond the area intended for treatment or non-uniform distribution of treated water.
- N. **DO NOT** apply through chemigation systems connected to public water systems.

PRODUCT INFORMATION

Initial and residual control is contingent upon thorough crop coverage. Apply with ground or air equipment using sufficient water to obtain full coverage of foliage. Apply in a minimum of 2 gallons per acre by air or 10 gallons per acre by ground unless otherwise specified in this label. When foliage is dense or pest pressure is high (heavier insect or egg pressure, larger larval stages), use of higher application volumes and/or higher use rates may improve initial and residual control.

For cutworm control, Actylis Lambda-Cy Insecticide may be applied before, during or after planting. For soil incorporated applications, use higher rates for improved control.

Tank Mix Applications

Actylis Lambda-Cy Insecticide may be tank mixed with other currently registered pesticides unless expressly prohibited by the product label. Adjuvants such as spreader stickers, wetting agents, and penetrates may also be added. Use a small volume mixing test with the other products to confirm compatibility. If other chemicals are added to the applicator tank, Actylis Lambda-Cy Insecticide should be added last. Fill tank to desired volume and continue to agitate while making applications. If mixed with EC formulations, use within 24 hours. It is the 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.

POLLINATOR PROTECTION

Pollinator Best 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

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 – AGRICULTURAL USES

Crop	Target Pests	Rate		Remarks
		lb. a.i./A	fl. oz./A	
ALAFALA AND ALFALFA GROWN FOR SEED	Alfalfa Caterpillar Army cutworm Cutworm spp. Green Cloverworm Leafhopper species Looper spp. Threecornered Alfalfa Hopper Velvetbean Caterpillar Webworm spp.	0.015 - 0.025	1.92 - 3.20	Apply only to fields planted to pure stands of alfalfa. Apply as required by scouting. Base timing and frequency of applications upon insect populations reaching locally determined economic thresholds.
	Alfalfa Seed Chalcid (Adult) Alfalfa Weevil Armyworm Bean Leaf Beetle (Adult) Blister Beetle spp. Blue Alfalfa Aphid Clover Leaf Weevil spp. Clover Root Borer (Adult) Clover Root Curculio spp. (Adult) Clover Stem Borer (Adult) Corn Earworm Cowpea Aphid Cowpea Curculio (Adult) Cowpea Weevil (Adult) Cucumber Beetle spp. (Adult) Egyptian Alfalfa Weevil Fall Armyworm ¹ Grape Colaspis (Adult) Grasshopper spp. Green June Beetle (Adult) Green Peach Aphid Japanese Beetle (Adult) Meadow Spittlebug Mexican Bean Beetle Pea Aphid Pea Weevil (Adult) Plant Bug spp. Including Lygus spp. ³ Spotted Alfalfa Aphid Stink Bug spp. Sweet Clover Weevil (Adult) Thrips spp. ⁴ Western Yellow-striped Armyworm Whitefringed Beetle spp. (Adult) Yellow-striped Armyworm	0.02 - 0.03	2.56 - 3.84	Apply with ground or air equipment using sufficient water to obtain full coverage of foliage. Apply in a minimum of 2 gallons per acre by air or 10 gallons per acre by ground. When foliage is dense and/or pest populations are high 5-10 gallons per acre by air or 20 gallons per acre by ground and higher use rates are recommended. Use higher labeled rates for increased residual control. Avoid application when bees are actively foraging by applying during the early morning or during the evening hours. Be aware of bee hazard resulting from a cool evening and/or morning dew. It may be advisable to remove bee shelters during and for 2-3 days following application. Avoid direct application to bee shelters.
	Beet Armyworm ^{1,3} Blotch Leafminer ³ Spider Mites ¹	0.03	3.84	¹ Use higher labeled rates for large larvae. ² Suppression only. ³ See resistance statement under PRODUCT INFORMATION. ⁴ Does not include Western Flower Thrips.

Restrictions:

- **DO NOT** apply more than 0.03 lb. a.i. (0.24 pt. or 3.84 fl. oz. of product)/A per cutting.
- **DO NOT** apply more than 0.12 lb. a.i. (0.96 pt. or 15.36 fl. oz. of product)/A per season.
- **DO NOT** apply within 1 day of harvest for forage or within 7 days of harvest for hay.

Crop	Target Pests	Rate		Remarks
		lb. a.i./A	fl. oz./A	
CANOLA	Cutworm spp. Armyworm spp. Diamondback Moth Flea Beetle Cabbage Seedpod Weevil Lygus Bug Grasshoppers	0.015-0.03	1.92 - 3.84	Apply as required by scouting, usually at intervals of 5 or more days. Base timing and frequency of applications upon insect populations reaching locally determined economic threshold.
	Cabbage Aphid	0.03	3.84	Apply with ground or air equipment using sufficient water to obtain full coverage of foliage. When applying by air, apply a minimum of 2 gals. of water/A.

Restrictions:

- DO NOT apply within 7 days of harvest.
- DO NOT apply more than 0.09 lb. a.i. (0.72 pt. or 11.52 fl. oz. of product)/A per year.

Crop	Target Pests	Rate		Remarks
		lb. a.i.	fl. oz.	
CEREAL GRAINS: Corn (At-Plant): Field Corn Popcorn Seed Corn Sweet Corn	Corn Rootworm Larvae (Western, Northern, Southern, Mexican) Cutworm spp. Seed corn Maggot Seed corn Beetle Lesser Cornstalk Borer White Grub spp. Wireworm spp. Red Imported Fire Ant ¹	0.00179 lb. a.i. per 1,000 ft. of row ²	0.235 fl. oz. per 1,000 ft. of row ²	Banded Applications: Apply at planting as a 5-7 inch T-band sprayed across the open seed furrow between the furrow openers and the press wheels or as a band application behind the press wheel. In-Furrow Applications: Apply into the seed furrow through spray nozzles or microtubes behind the planter furrow openers and in front of the press wheel. Apply a minimum of 3 gals. of finished spray/A. ¹ Suppression only.

Restrictions:

- DO NOT harvest or graze livestock or cut treated crops for feed within 21 days of at-plant application.
- DO NOT apply more than 0.032 lb. a.i. (0.26 pt. or 4.10 fl. oz. of product)/A per crop at-plant.
- For field corn, popcorn, and seed corn, DO NOT apply more than 0.12 lb. a.i. (0.96 pt. or 15.36 fl. oz. of product/A per crop from at-plant and foliar applications.
- For sweet corn, DO NOT apply more than 0.48 lb. a.i. (3.84 pts. or 61.44 fl. oz. of product)/A per crop from at-plant and foliar applications.

²lbs. a.i. and fl. oz./A of Lambda-Cyhalothrin applied at 0.235 fl. oz./1000 ft. of row for various row spacings:

Row Spacing	40"	38"	36"	34"	32"	30"
Linear Ft./A	13,068	13,756	14,520	15,374	16,335	17,424
Lbs. a.i./A	0.024	0.025	0.027	0.028	0.030	0.032
Fl. oz./A	3.06	3.24	3.42	3.59	3.84	4.11

Crop	Target Pests	Rate		Remarks
		lb. a.i./A	fl. oz./A	
CEREAL GRAINS: Corn (Foliar): Field Corn Popcorn Seed Corn	Cutworm spp. Western Bean Cutworm ¹ Corn Earworm ¹ Green Cloverworm Meadow Spittlebug	0.015 - 0.025	1.92 - 3.20	Apply as required by scouting or locally prescribed corn growth stages, usually at intervals of 7 or more days. Base timing and frequency of applications based upon insect populations reaching locally determined economic thresholds or other locally recommended methods. Apply with ground or air equipment using sufficient water and application methods to obtain full coverage of target location. When applying by air, apply in a minimum of 2 gals. of water/A.
	Tobacco Budworm ^{1,4} European Corn Borer ¹ Southwestern Corn Borer Stalk Borer ¹ Hop Vine Borer ¹ Armyworm ² Fall Armyworm ² Yellow-striped Armyworm ² Webworm spp. Flea Beetle spp. Western Corn Rootworm Beetle (Adult) Northern Corn Rootworm Beetle (Adult) Southern Corn Rootworm Beetle (Adult) Mexican Corn Rootworm Beetle (Adult) Bean Leaf Beetle Cereal Leaf Beetle Japanese Beetle (Adult) Sap Beetle (Adult) Stink Bug spp. Grasshopper spp. Corn Leaf Aphid ³ Bird Cherry-Oat Aphid ³ English Grain Aphid ³	0.02 - 0.03	2.56 - 3.84	For chinch bug control, begin applications when bugs migrate from small grains or grass weeds to small corn. Direct spray to the base of corn plants. Repeat applications at 3-day intervals if needed. Actylis Lambda-Cy Insecticide may only suppress heavy infestations and/or subsequent migrations. For control of adult corn rootworm beetles (<i>Diabrotica</i> species) as part of an aerial-applied corn rootworm control program, use a minimum of 3.84 fl. oz./A (0.03 lb. a.i./A).
	Beet Armyworm ^{2,4} Chinch Bug Green Bug ⁴ Southern Corn Leaf Beetle Mexican Rice Borer ¹ Rice Stalk Borer ¹ Sugarcane Borer ¹	0.03	3.84	¹ For control before the larva bores into the plant stalk or ear. ² Use higher rates for large larvae. ³ Suppression only. ⁴ See resistance statement under PRODUCT INFORMATION.

Restrictions:

- **DO NOT** apply within 21 days of harvest.
- **DO NOT** allow livestock to graze in treated areas or harvest treat corn forage as feed for meat or dairy animals within 1 day after last treatment.
- **DO NOT** feed treated corn fodder or silage to meat or dairy animals within 21 days after last treatment.
- **DO NOT** apply more than 0.03 lb. a.i. (0.24 pt. or 3.84 fl. oz. of product)/A in a single application.
- **DO NOT** apply more than 0.12 lb. a.i. (0.96 pt. or 15.36 fl. oz. of product)/A per crop from at-plant and foliar applications.
- **DO NOT** apply more than 0.06 lb. a.i. (0.48 pt. or 7.68 fl. oz. of product) after silk initiation.
- **DO NOT** apply more than 0.03 lb. a.i. (0.24 pt. or 3.84 fl. oz. of product) after corn has reached the milk stage (yellow kernels with milky fluid).
- **DO NOT** enter or allow worker entry into treated areas during the restricted-entry interval (REI) of 24 hours with the following exceptions:
 - For hand or mechanically assisted detasseling of corn (field, pop) grown for seed, **DO NOT** enter or allow worker entry into treated areas during the restricted-entry interval (REI) of 48 hours.

Crop	Target Pests	Rate		Remarks
		lb. a.i./A	fl. oz./A	
CEREAL GRAINS: Corn (Foliar): Sweet Corn	Corn Earworm Fall Armyworm ¹ Southern Armyworm ¹ Beet Armyworm ¹³ Yellow-Striped Armyworm ¹ Cutworm spp. Western Bean Cutworm Webworm spp. European Corn Borer Southwestern Corn Borer Common Cornstalk Borer Western Corn Rootworm Beetle (Adult) Northern Corn Rootworm Beetle (Adult) Southern Corn Rootworm Beetle (Adult) Mexican Corn Rootworm Beetle (Adult) Japanese Beetle (Adult) Sap Beetle (Adult) Flea Beetle spp. Tarnished Plant Bug Stink Bug spp. Chinch Bug Aster Leafhopper Grasshopper spp. Aphid spp. ^{2,3} Spider Mite spp. ²	0.02 - 0.03	2.56 - 3.84	Apply as required by scouting, or locally prescribed corn growth stages, usually at intervals of 4 or more days. Base timing and frequency of applications upon insect populations reaching locally determined economic thresholds or other locally recommended methods and should be targeted for control before insects enter the stalk or ear. Apply with ground or air equipment using sufficient water and application methods to obtain full coverage of foliage and ears (if present). When applying by air, apply in a minimum of 2 gals. of water/A. For control of adult corn rootworm beetles (<i>Diabrotica</i> species) as part of an aerial applied corn rootworm control program, use a minimum of 3.2 fl. oz. of product/A (0.025 lb. a.i./A).
	Corn Silkfly (Adult) ²	0.03	3.84	¹ Use higher rates for large larvae. ² Suppression only. ³ See resistance statement under PRODUCT INFORMATION.

Restrictions:

- DO NOT apply within 1 day of harvest.
- DO NOT allow livestock to graze in treated areas or harvest treated corn forage as feed for meat or dairy animals within 1 day after last treatment.
- DO NOT feed treated corn fodder or silage to meat or dairy animals within 21 days after last treatment.
- DO NOT apply more than 0.03 lb. a.i. (0.24 pt. or 3.84 fl. oz. of product)/A in a single application.
- DO NOT apply more than 0.48 lb. a.i. (3.84 pts. or 61.44 fl. oz. of product)/A per season.
- DO NOT enter or allow worker entry into treated areas during the restricted-entry interval (REI) of 24 hours with the following exceptions:
 - For hand or mechanically assisted detasseling of sweet corn grown for seed and hand harvesting of sweet corn grown for grain, DO NOT enter or allow worker entry into treated areas during the restricted-entry interval (REI) of 48 hours.

Crop	Target Pests	Rate		Remarks
		lb. a.i./A	fl. oz./A	
CEREAL GRAINS: Rice Wild Rice	True Armyworm Fall Armyworm Yellow-striped Armyworm Rice Water Weevil (Adult) Rice Stink Bug Chinch Bug Grasshopper spp. Leafhopper spp. Bird Cherry-Oat Aphid Greenbug Sharpshooter spp. Yellow Sugarcane Aphid Riceworm	0.025 - 0.04	3.20 - 5.12	See additional instructions below. ¹ For control before the larvae bores into the plant stalk.
	European Corn Borer ¹ Mexican Rice Borer ¹ Rice Seed Midge ¹ Rice Stalk Borer ¹ Sugarcane Borer ¹	0.03 - 0.04	3.84 - 5.12	

REMARKS:

- Mixers/loaders supporting aerial applications to wild rice at a rate of 0.04 lb. a.i. per acre, and treating 1200 acres (or more) per day must wear a minimum of a NIOSH-approved elastomeric half mask respirator with organic vapor (OV) cartridges and combination R, P filters; OR a NIOSH-approved gas mask with OV canisters; OR a NIOSH-approved powered air purifying respirator with OV cartridges and combination HE filters.
- Apply as required by scouting. Base timing and frequency of application upon insect populations reaching locally determined economic thresholds. Determine the need for repeat applications, usually at intervals of 5- 7 days, by scouting.
- Actylis Lambda-Cy Insecticide can be safely used when propanil products are being used for weed control.
- Apply by air or by ground equipment using sufficient water to obtain full coverage of foliage. When applying by air, apply in a minimum of 2 gals. of water (or a total carrier volume)/A but ensure sufficient volume is used to provide adequate coverage. In addition, adding an emulsifiable crop oil (e.g., 1 pt./A) when lower aerial application volumes are used is recommended to help improve coverage, reduce evaporation, and improve efficacy. Apply a minimum of 10 gallons/A by ground.
- For control of rice water weevil in dry seeded rice, make a foliar application as indicated by scouting for the presence of adults and/or feeding scars, usually within a time frame of 0-5 days after permanent flood establishment. **DO NOT** exceed 10 days from starting permanent flood until insecticide application unless scouting indicates weevils have not been previously present. Adults may also be treated at later stages of rice development to reduce overwintering populations.
- For control of rice water weevil in water seeded rice, make the first foliar application after pinpoint flood as indicated by scouting for the presence of adults and/or feeding scars usually when rice has emerged 0.5 inch above the waterline. Under conditions of prolonged migration into the field, start field scouting for rice water weevil adults and/or feeding scars 3-5 days after the initial treatment and, if needed, apply a second application within 7-10 days of the first application. Adults may also be treated at later stages of rice development to reduce overwintering populations.

(continued)

REMARKS (cont.)

- California: In addition to above directions for control of rice water weevil in water seeded rice, Actylis Lambda-Cy Insecticide may be applied at the 1- to 3-leaf growth stage with the majority at the 2- leaf growth stage. Adults are vulnerable on levees and in the water. Larvae are vulnerable while feeding on the leaf prior to entering the soil. Monitor for adults, based upon field history and density of population. Monitor field edges and levee areas for adults. Treat in the following manner: (a) spray the inside perimeter of the field, or (b) spray the entire field.
- Greenbug is known to have many biotypes. Actylis Lambda-Cy Insecticide may only provide suppression. If satisfactory control is not achieved with the first application of Actylis Lambda-Cy Insecticide, a resistant biotype may be present. Use alternate chemistry for control.
- For control of stem borers, scout fields when rice growth is near panicle differentiation, for early symptoms of damaging populations exhibited as discoloration (orange-tan) around the junction of the leaf sheath and leaf blade which is caused by feeding of young larvae within the sheath. Applications must be made before larvae bore into rice stems. Make the first application at panicle differentiation to 2 inch panicle for partial control. Make the second application at boot to heading for maximum control. All rice varieties are susceptible to stem borer damage, but Cocodrie and Priscilla are particularly susceptible.

Restrictions:

- **DO NOT** release floodwater within 7 days of an application.
- **DO NOT** apply more than 0.12 lb. a.i. (0.96 pt. or 15.36 fl. oz. of product)/A per season.
- **DO NOT** apply more than 0.04 lb. a.i. (0.32 pt.)/A within 21 to 27 days of harvest.
- **DO NOT** apply within 21 days of harvest.
- **DO NOT** use treated rice fields for the aquaculture of edible fish and crustacea.
- **DO NOT** apply as an ultra-low volume (ULV) spray.

Crop	Target Pests	Rate		Remarks
		lb. a.i./A	fl. oz./A	
CEREAL GRAINS: Sorghum (Grain)	Cutworm spp. Sorghum Midge	0.015 - 0.02	1.92 - 2.56	Apply as required by scouting, usually at intervals of 5 or more days. Base timing and frequency of applications upon insect populations reaching locally determined economic thresholds.
	Armyworm Beet Armyworm ¹ Fall Armyworm ¹ Yellow-striped Armyworm ¹ Corn Earworm Webworm spp. European Corn Borer ² Southwestern Corn Borer ² Lesser Cornstalk Borer ² Flea Beetle spp. Stink Bug spp. Grasshopper spp.	0.02 - 0.03	256 - 3.84	Apply with ground or air equipment using sufficient water and application methods to obtain full coverage of target location. When applying by air, apply in a minimum of 2 gals. of water/A.
	Chinch Bug Mexican Rice Borer ² Rice Stalk Borer ² Sugarcane Borer ²	0.03	3.84	For sorghum midge control, begin applications when 25% of the sorghum heads have emerged and are in tip bloom. Repeat applications at 5-day intervals if needed. For chinch bug control, begin applications when bugs migrate from small grains or grass weeds to small sorghum. Direct spray to the base of sorghum plants. Repeat applications at 3- to 5-day intervals if needed. Actylis Lambda-Cy Insecticide may only suppress heavy infestations and/or subsequent migrations.
Restrictions:		¹ Use higher label rates for large larvae only. ² For control before the larva bores into the plant stalk. ³ See resistance statement under PRODUCT INFORMATION.		

Crop	Target Pests	Rate		Remarks
		lb. a.i./A	fl. oz./A	
CEREAL GRAINS: Barley Buckwheat Oats Rye Wheat Wheat Hay Triticale	Cutworm spp. Army Cutworm Armyworm Fall Armyworm Yellow-striped Armyworm Flea Beetle spp. Cereal Leaf Beetle Stink Bug spp. English Grain Aphid ¹ Russian Wheat Aphid ¹ Bird Cherry-Oat Aphid ¹ Grasshopper spp. Orange Blossom Wheat Midge Hessian Fly ⁴	0.015 - 0.025 0.02 - 0.03	1.92 - 3.20 256 - 3.84	Apply as required by scouting, usually at intervals of 5 or more days. Base timing and frequency of applications upon insect populations reaching locally determined economic thresholds. Apply with ground or air equipment using sufficient water and application methods to obtain full coverage of foliage. When applying by air, apply in a minimum of 2 gals. of water/A.
	Grass Sawfly	0.025 - 0.03	3.20 - 3.84	For chinch bug control, repeat applications at 3- to 5-day intervals if needed. Actylis Lambda-Cy Insecticide may only suppress heavy infestations and/or migrations.
	Chinch Bug Greenbug ² Corn Leaf Aphid ² Mite Spp. ³	0.03	3.84	Greenbug is known to have many biotypes. Actylis Lambda-Cy Insecticide may provide suppression only. In this situation, a second application using an alternative chemistry may be needed.
¹ Best control is obtained before insects begin to roll leaves. Once wheat has started to boot, Actylis Lambda-Cy Insecticide may provide suppression only. Higher label rates and increased coverage will be necessary. ² Suppression only. ³ See resistance statement under PRODUCT INFORMATION. ⁴ Make applications when adults emerge.				
Restrictions: • DO NOT apply within 30 days of harvest. • DO NOT allow livestock to graze in treated areas or harvest treated wheat forage as feed for meat or dairy animals within 7 days after last treatment. DO NOT feed treated straw to meat or dairy animals within 30 days after last treatment. • DO NOT apply more than 0.06 lb. a.i. (0.48 pt. or 7.68 fl. oz. of product) /A per season.				

Crop	Target Pests	Rate		Remarks	
		lb. a.i./A	fl. oz./A		
BRASSICA HEAD AND STEM CROPS: Broccoli Brussels Sprouts Cabbage Cavolo Broccolo Cauliflower Chinese Broccoli (gai lon) Chinese Cabbage (napa) Chinese Mustard Cabbage (gai choy) Kohlrabi	Alfalfa Looper Cabbage Looper Imported Cabbageworm Southern Cabbageworm Cutworm spp. Cabbage Webworm Diamondback Moth ³ Armyworm Beet Armyworm ^{1,3} Fall Armyworm ¹ Yellow-striped Armyworm Corn Earworm Flea Beetle spp. Japanese Beetle (Adult) Vegetable Weevil (Adult) Grasshopper spp. Leafhopper spp. Plant Bug spp. including Lygus spp ³ Stink Bug spp. Meadow Spittlebug Aphid spp. ^{2,3} Whitefly spp. ^{2,3} Thrips spp. ² Spider Mite spp. ²	0.015 - 0.025	1.92 - 3.20 0.02 - 0.03	2.56 - 3.84	Apply as required by scouting, usually at intervals of 5 or more days. Base timing and frequency of applications upon insect populations reaching locally determined economic thresholds. Apply with ground or air equipment using sufficient water to obtain full coverage of foliage. When applying by air, apply in a minimum of 2 gals. of water/A. ¹ For control of first and second instar only. ² Suppression only. ³ See resistance statement under PRODUCT INFORMATION.
Restrictions:	<ul style="list-style-type: none"> • DO NOT apply within 1 day of harvest. • DO NOT apply more than 0.24 lb. a.i. (1.92 pts. or 30.72 fl. oz. of product)/A per season. 				

Crop	Target Pests	Rate		Remarks
		lb. a.i./A	fl. oz./A	
COTTON	Cutworm spp. Tobacco Thrips Soybean Thrips	0.015 - 0.02	192 - 256	Apply as required by scouting, usually at intervals of 5-7 days. Base timing and frequency of applications upon insect populations reaching locally determined economic thresholds.
	Lygus Bug spp. ³ Pink Bollworm Cabbage Looper Cotton Leafperforator Saltmarsh Caterpillar Cotton Leafworm Cotton Fleahopper	0.02 - 0.03	256 - 384	Apply with ground or air equipment using sufficient water to obtain full coverage of foliage. Applications may also be made with equipment adapted and calibrated for ULV sprays.
	Cotton Bollworm Tobacco Budworm ³ Boll Weevil Fall Armyworm Beet Armyworm ^{1,3} European Corn Borer Brown Stink Bug Green Stink Bug Southern Green Stink Bug Two-spotted Spider Mite ² Cotton Aphid ^{2,3} Bandedwing Whitefly ^{2,3} Sweetpotato Whitefly ^{2,3}	0.025 - 0.04	320 - 512	Actylis Lambda-Cy Insecticide may be mixed with once-refined vegetable oil and applied in a minimum of at least 1 qt. of finished spray/A. Under light bollworm/budworm infestation levels, 0.02 lb. a.i./A may be applied in conjunction with intense field monitoring. For boll weevil control spray on a 3- to 5-day schedule. When applied according to label directions for control of cotton bollworm and tobacco budworm, Actylis Lambda-Cy Insecticide also provides ovicidal control of unhatched <i>Heliothis</i> spp. eggs. ¹ For control of first and second instar only. ² Suppression only. ³ See resistance statement under PRODUCT INFORMATION.
Restrictions:				
<ul style="list-style-type: none"> • DO NOT apply within 21 days of harvest. • DO NOT graze livestock in treated areas. • DO NOT apply more than 0.2 lb. a.i. (1.6 pts. or 25.6 fl. oz. of product)/A per season. • DO NOT make more than a total of 10 synthetic pyrethroid applications (of one product or combination of products) to a cotton crop in one growing season. 				

Crop	Target Pests	Rate		Remarks
		lb. a.i./A	fl. oz./A	
CUCURBIT VEGETABLES CROP GROUP				
Including:				
Chayote (fruit)	Armyworm spp. ¹	0.02 - 0.03	2.56 - 3.84	
Chinese Waxgourd	Blister Beetle spp.			
(Chinese preserving melon)	Cabbage Looper			
Citron Melon	Corn Earworm			
Cucumber	Cricket spp.			
Gherkin	Cucumber Beetle spp. (adults)			
Gourd (edible)	Cutworm spp.			
<i>Lagenaria</i> spp. -	Flea Beetle spp.			
Includes:	Grasshopper spp.			
hyotan, cucuzza	June Beetle spp.			
<i>Luffa acutangula</i> ,	Leaffooted Bug			
Includes:	Leafhopper spp.			
hechima, Chinese okra	Lytus Bug spp.			
<i>Momordica</i> spp.	Melonworm			
Includes:	Pickleworm			
balsam apple, balsam pear, bitter melon,	Plant Bug spp.			
Chinese cucumber	Rindworm spp. complex			
Muskmelon	Saltmarsh Caterpillar			
(hybrids and/or cultivars of <i>Cucumis melo</i>) -	Squash Beetle			
Includes:	Squash Bug spp.			
true cantaloupe cantaloupe, casaba,	Squash Vine Borer spp.			
crenshaw melon, golden pershaw	Stink Bug spp.			
melon honeydew melon, honey balls,	Thrips spp. ²			
mango melon	Tobacco Budworm ¹			
Persian melon, pineapple melon, Santa	Webworm spp.			
Claus melon, snake melon				
Pumpkin	Aphid spp. ¹	0.03	3.84	
Squash, summer	Leafminer spp. ^{1,3}			
(<i>Cucurbita pepo</i> var. <i>melopepo</i>) -	Spider Mite spp. ³			
Includes:	Whitefly spp. ^{1,3}			
crookneck squash straightneck squash				
vegetable marrow, zucchini				
Squash, Winter				
(<i>Cucurbita maxima</i> , <i>C. moschata</i>) -				
Includes:				
Butternut squash, calabaza, hubbard				
squash				
(<i>C. mixta</i> , <i>C. pepo</i>) -				
Includes:				
acorn squash, spaghetti squash				
Watermelon - Includes:				
Hybrids and/or varieties of <i>Citrullus lanatus</i>				
Restrictions:	<ul style="list-style-type: none"> DO NOT apply more than 0.18 lb. a.i. (1.44 pts. or 23 fl. oz. of product)/A per season. DO NOT apply within 1 day of harvest. 			

Crop	Target Pests	Rate		Remarks
		lb. a.i./A	fl. oz./A	
FRUITING VEGETABLES: Tomato and Tomatillo Peppers (bell and non-bell) Eggplant Ground Cherry Pepino	Cabbage Looper Cutworm spp. Hornworm spp.	0.015 - 0.025	1.92 - 3.20	Apply as required by scouting, usually at intervals of 5 or more days. Base timing and frequency of applications upon insect populations reaching locally determined economic thresholds.
	Tomato Fruitworm Tobacco Budworm ³	0.02 - 0.03	2.56 - 3.84	
	Tomato Pinworm Beet Armyworm ¹³			
	Southern Armyworm ¹			
	Yellow-striped Armyworm ¹			
	Fall Armyworm ¹			
	European Corn Borer ⁴			
	Leafminer spp. ²			
	Colorado Potato Beetle ³			
	Flea Beetle spp.			
	Grasshopper spp.			
	Leafhopper spp.			
	Aphid spp. ^{2,3}			
	Whitefly spp. ^{2,3}			
	Meadow Spittlebug			
	Stink Bug spp.			
	Plant Bug spp.			
	Stalk Borer ⁴			
	Blister Beetle spp.			
	Japanese Beetle (Adult)			
	Pepper Weevil (Adult) ²			
	Vegetable Weevil (Adult)			
	Tomato Psyllid ^{2,3}			
	Spider Mite spp. ²			
	Thrips ⁵			
	Cucumber Beetle spp. (Adult)			

Restrictions:

- DO NOT apply within 5 days of harvest.
- DO NOT apply more than 0.36 lb. a.i. (2.88 pts. or 46.08 fl. oz. of product)/A per season.

Crop	Target Pests	Rate		Remarks
		lb. a.i./A	fl. oz./A	
GRASS FORAGE, FODDER, AND HAY Pasture and Rangeland Grass, Grass Grown for Hay or Silage, Grass Grown for Seed	Army Cutworm Cutworm spp. Essex Skipper Range Caterpillar Striped Grass Looper Beet Armyworm Billbug spp. ³ Bird Cherry-Oat Aphid ¹ Black Grass Bug Black Turfgrass Beetle (Adult) Blue Stem Midge Cereal Leaf Beetle Chinch Bug Crane Fly spp. Cricket spp. English Grain Aphid ¹ Fall Armyworm Flea Beetle spp. Grass Mealybug Grass Sawfly (Adult) Grasshopper spp. Green June Beetle (Adult) Greenbug ^{1,2} Japanese Beetle (Adult) Katydids spp. Leafhopper spp. Mite spp. Russian Wheat Aphid ¹ Southern Armyworm Spittlebug spp. Stink Bug spp. Sugarcane Aphid Thrips spp. Tick spp. True Armyworm Webworm spp. Yellowstriped Armyworm	0.015 - 0.025 0.02 - 0.03	1.92 - 3.20 2.56 - 3.84	Ground application: Apply in sufficient spray volume to obtain full coverage of the foliage or target area. Air application: Apply in a minimum of 2 gals. per acre or sufficient spray volume to obtain full coverage or target area. Monitor insect populations to determine timing and frequency of applications. Scout fields at a minimum of 5 day intervals. Apply in sufficient volume to ensure sufficient coverage of foliage. Chinch bugs: Actylis Lambda-Cy Insecticide may only suppress heavy infestations and/or migrations. In this situation, a second application using an alternative chemistry may be needed. Greenbug: Greenbug is known to have many biotypes. Actylis Lambda-Cy Insecticide may provide suppression only. In this situation, a second application using an alternative chemistry may be needed. Pasture and rangeland grass: May be used for grazing or cut for forage 0 days after application. DO NOT cut grass to be dried and harvested for hay until 7 days after the last application. Grass grown for seed: Straw and mature seed (seed screenings) may be used as feed 7 days after the last application. Regrowth of grass grown for seed may be used for grazing, cut for forage or cut to be dried and harvested for hay. ¹ Best control is obtained before insects begin to roll leaves. ² See resistance statement under PRODUCT INFORMATION ³ Suppression only.

Restrictions:

- **DO NOT** apply more than 0.03 lb. a.i. (0.24 pt. or 3.84 fl. oz. of product)/A per cutting for pasture, rangeland and grasses grown for seed. A minimum re-treatment interval (RTI) of 30 days is required for pastures and rangeland receiving 0.03 lb. a.i./A which have not been cut between applications.
- **DO NOT** apply more than 0.09 lb. a.i. (0.72 pt. or 11.52 fl. oz. of product)/A per season.

Crop	Target Pests	Rate		Remarks
		lb. a.i./A	fl. oz./A	
LEGUME VEGETABLES (BEANS AND PEAS): Edible Podded (only) <i>Canavalia gladiata</i> - sword bean <i>Canavalia ensiformis</i> - jackbean <i>Glycine max</i> - Soybean (immature seed)	Cutworm spp. Green Cloverworm Imported Cabbageworm Saltmarsh Caterpillar Velvetleaf Caterpillar Mexican Bean Beetle	0.015 - 0.025	1.92 - 3.20	Apply as required by scouting. Usually at intervals of 5 or more days. Base timing and frequency of applications upon insect populations reaching locally determined economic thresholds.
Edible Podded, Succulent Shelled or Dried Shelled <i>Phaseolus</i> spp. - includes: field, kidney, lima, navy, pinto, runner, snap, tepary, and wax bean <i>Vigna</i> spp. - includes: adzuki, asparagus, moth, mung, rice, urd and yard long beans, black-eyed pea, catjang, Chinese longbean, cowpea, Crowder pea, and Southern pea <i>Pisum</i> spp. - includes: dwarf, edible-pod, English, field, garden, green, snow and sugar snap peas <i>Cajanus cajan</i> - Pigeon pea	Corn Earworm Painted Lady Butterfly (lava) European Corn Borer Looper spp. Western Bean Cutworm Tobacco Budworm ⁴ Armyworm ² Fall Armyworm ² Yellow-striped Armyworm ² Western Yellow-striped Armyworm ² Bean Lea Skeletonizer Webworm spp. Leafier spp. Alfalfa Caterpillar Stalk Borer ¹ Cucumber Beetle spp. (Adult) Corn Rootworm Beetle spp. (Adult) Flea Beetle spp. (Adult) Curculio and Weevil spp. ¹ (foliage and pod feeding adults and larvae) Blister Beetle spp. Bean Leaf Beetle Japanese Beetle (Adult) Leafhopper spp. Flea Hopper spp. Three-cornered Alfalfa Hopper Meadow Spittlebug Stink Bug spp. Plant Bug spp. Including <i>Lugus</i> spp. ⁴ Grasshopper spp. Thrips spp. ⁵ Aphid spp. ⁴	0.02 - 0.03	256 - 3.84	Apply with ground or air equipment using sufficient water to obtain full coverage of foliage. When applying by air, apply in a minimum of 2 gals. of water/A. ¹ For control before the larva bores into the plant stalk or pods. ² Use higher label rates for large larvae. ³ For suppression only. ⁴ See resistance statement under PRODUCT INFORMATION. ⁵ Does not include Western Flower Thrips.
Succulent Shelled or Dried Shelled <i>Vicia faba</i> - broadbean (favabean) Dried Shelled (only) <i>Lupinus</i> spp. - includes: grain, sweet, white and sweet white lupines <i>Cicer arietinum</i> - Chickpea (garbanzo bean) <i>Cyamopsis tetragonoloba</i> - guar <i>Lablab purpureus</i> - Lablab bean (hyacinth bean) <i>Lens esculata</i> - Lentils	Beet Armyworm ^{1/4} Soybean Looper ^{3/4} Lesser Cornstalk Borer ³ Leafminer spp. ^{3/4} Whitefly spp. ^{3/4} Spider Mite Spp ⁴	0.03	3.84	

Restrictions:

- For edible podded and succulent shelled legume vegetables, **DO NOT** apply within 7 days of harvest.
- For dried shelled legume vegetables, **DO NOT** apply within 21 days of harvest.
- DO NOT** apply more than 0.12 lb. a.i. (0.96 pt. or 15.36 fl. oz. of product)/A per season.
- For succulent and dried shelled peas and beans, **DO NOT** graze livestock in treated areas or harvest vines for forage or hay.

Crop	Target Pests	Rate		Remarks
		lb. a.i./A	fl. oz./A	
LEGUME VEGETABLES: Soybean	Corn Earworm Velveteen Caterpillar Green Cloverworm Cabbage Looper Painted Lady (Thistle) Caterpillar Saltmarsh Caterpillar Woollybear Caterpillar Cutworm spp. Bean Leaf Beetle Mexican Bean Beetle Western Corn Rootworm Beetle (Adult) Northern Corn Rootworm Beetle (Adult) Southern Corn Rootworm Beetle (Adult) Mexican Corn Rootworm Beetle (Adult) Three-Cornered Alfalfa Hopper Potato Leafhopper Thrips spp. ⁵ Soybean Aphid ⁴	0.015 - 0.025	1.92 - 3.20	Apply as required by scouting, usually at intervals of 5 or more days. Base timing and frequency of applications upon insect populations reaching locally determined economic thresholds. Apply with ground or air equipment using sufficient water to obtain full coverage of foliage. When applying by air, apply in a minimum of 2 gals. of water/A. For control of adult corn rootworm beetles (<i>Diabrotica</i> species) as part of an aerial applied corn rootworm control program, use a minimum of 2.56 fl. oz./A (0.02 lb. a.i./A). Use higher rates for large larvae. Suppression only. ³ See resistance statement under PRODUCT INFORMATION. ⁴ Use lower label rates for early season applications and/or lighter populations. ⁵ Does not include Western Flower Thrips.
	Armyworm ¹ Fall Armyworm ¹ Yellow-striped Armyworm ¹ Tobacco Budworm ³ Webworm spp. European Corn Borer Silver-spotted Skipper Japanese Beetle (Adult) Blister Beetle spp. Stink Bug spp. Plant Bug spp. Grasshopper spp.	0.025 - 0.03	3.20 - 3.84	
	Beet Armyworm ^{2,3} Soybean Looper ^{2,3} Lesser Cornstalk Borer ² Spider Mite spp. ²	0.03	3.84	

Restrictions:

- DO NOT apply within 30 days of harvest.
- DO NOT apply more than 0.06 lb. a.i. (0.48 pt.)/A per season.
- DO NOT graze or harvest treated soybean forage, straw, or hay for livestock feed.

Crop	Target Pests	Rate		Remarks
		lb. a.i./A	fl. oz./A	
LETUCE (HEAD AND LEAF)	Alfalfa Looper Cabbage Looper Imported Cabbageworm Cutworm spp. Saltmarsh Caterpillar Green Cloverworm	0.015 - 0.025	1.92 - 3.20	Apply as required by scouting, usually at intervals of 5 or more days. Base timing and frequency of applications upon insect populations reaching locally determined economic thresholds.
	Diamondback Moth ³ Armyworm Beet Armyworm ^{1,3} Fall Armyworm ¹ Southern Armyworm Corn Earworm Tobacco Budworm ³ European Corn Borer Flea Beetle spp. Japanese Beetle (Adult) Vegetable Weevil (Adult) Grasshopper spp. Leafhopper spp. Plant Bug spp. including Lygus spp. ³ Stink Bug spp. Meadow Spittlebug Aphid spp. ^{2,3} Whitefly spp. ^{2,3} Spider Mite spp. ²	0.02 - 0.03	2.56 - 3.84	Apply with ground or air equipment using sufficient water to obtain full coverage of foliage. When applying by air, apply in a minimum of 2 gals. of water/A. ¹ For control of first and second instar only. ² Suppression only. ³ See resistance statement under PRODUCT INFORMATION.

Restrictions:

- DO NOT apply within 1 day of harvest.
- DO NOT apply more than 0.3 lb. a.i. (2.4 pts. or 38.4 fl. oz. of product)/A per season.

Crop	Target Pests	Rate		Remarks
		lb. a.i./A	fl. oz./A	
ONION (BULB) AND GARLIC	Cutworm spp. Seedcorn Maggot (Adult) Onion Maggot (Adult) Leafminer spp. (Adult)	0.015 - 0.025	1.92 - 3.20	Apply as required by scouting, usually at intervals of 5 or more days. Base timing and frequency of applications upon insect populations reaching locally determined economic thresholds.
	Armyworm spp. ¹ Onion Thrips ³ Tobacco Thrips ³ Western Flower Thrips ^{2,3} Flower Thrips ^{2,3} Aphid spp. ² Plant Bug spp. Stink Bug spp.	0.02 - 0.03	2.56 - 3.44	Use the higher label rates as thrips population increases and avoid rescue situations. Apply with ground or air equipment using sufficient water and application methods to obtain full coverage of foliage. When applying by air, apply in a minimum of 2 gals. of water/A. For thrips control by aerial application, the addition of 1% COC v/v, 1/4% NIS v/v, or a silicone adjuvant (follow manufacturer's use directions) may enhance the deposition of the spray and increase plant coverage. ¹ For control of the first and second instars only. ² Suppression only. ³ See resistance statement under PRODUCT INFORMATION

Restrictions:

- DO NOT apply within 14 days of harvest.
- DO NOT apply more than 0.24 lb. a.i. (1.92 pts. or 30.72 fl. oz. of product)/A per season.

Crop	Target Pests	Rate		Remarks
		lb. a.i./A	fl. oz./A	
PEANUT	Cutworm spp. Green Cloverworm Velvetbean Caterpillar Red-necked Peanut Worm Potato Leafhopper	0.015 - 0.025	1.92 - 3.20	Apply as required by scouting, usually at intervals of 7 or more days. Base timing and frequency of applications upon insect populations reaching locally determined economic thresholds.
	Corn Earworm Fall Armyworm ¹ Bean Leaf Beetle Southern Corn Rootworm (Adult) Vegetable Weevil Whitefringed Beetle (Adult) Stink Bug spp. Tobacco Thrips Grasshopper spp.	0.02 - 0.03	2.56 - 3.84	Apply with ground or air equipment using sufficient water to obtain full coverage of foliage. When applying by air, apply in a minimum of 2 gals. of water/A. ¹ Use higher label rates for large larvae. ² Suppression only.
	Beet Armyworm ^{2,3} Soybean Looper ^{2,3} Lesser Cornstalk Borer ² Spider Mite spp. ² Aphid spp. ²	0.03	3.84	³ See resistance statement under PRODUCT INFORMATION.

Restrictions:

- **DO NOT** apply within 14 days of harvest.
- **DO NOT** apply more than 0.12 lb. a.i. (0.96 pt. or 15.36 fl. oz. of product)/A per season.
- **DO NOT** graze livestock in treated areas.
- **DO NOT** use treated vines or hay for animal feed.

Crop	Target Pests	Rate		Remarks
		lb. a.i./A	fl. oz./A	
POME FRUITS:				
Apple	Leafroller spp.	0.02 - 0.04	2.56 - 5.12	Apply as required by scouting, usually at intervals of 5 or more days. Base timing and frequency of applications upon insect populations reaching locally determined economic thresholds.
Crabapple	Codling Moth			
Loquat	Tufted Apple Budworm			
Mayhaw	Oriental Fruit Moth			
Oriental Pear	Lesser Appleworm			
Pear	Green Fruitworm			
Quince	Tent Caterpillar spp.			
	Tentiform Leaf Miner spp.			
	Apple Maggot (Adult)			
	Cherry Fruit Fly spp. (Adult)			
	Pear Sawfly			
	Plum Curculio			
	Japanese Beetle			
	Plant Bug spp.			
	Stink Bug spp.			
	Leafhopper spp.			
	Periodical Cicada			
	Apple Aphid			
	Rosy Apple Aphid			
	Pear Psylla ¹			
	San Jose Scale (fruit infestations only)			
	Orange Tortrix			
	Omnivorous Leafroller			
	Spirea Aphid ¹			
	Tree Borer spp.			
	Webworm spp.			
Restrictions:				
<ul style="list-style-type: none"> • DO NOT apply within 21 days of harvest. • DO NOT apply more than 0.04 lb. a.i. (0.32 pt. or 5.12 fl. oz. of product)/A in a single application. • DO NOT apply more than 0.2 lb. a.i. (1.6 pts. or 25.6 fl. oz. of product)/A per year. • DO NOT apply more than 0.16 lb. a.i. (1.28 pts. or 20.48 fl. oz. of product)/A per year post bloom. 				

Crop	Target Pests	Rate		Remarks
		lb. a.i./A	fl. oz./A	
STONE FRUITS: Apricot Sweet and Tart Cherry Nectarine Peach Plum Chickasaw Plum Damson Plum Japanese Plum Plumcot Prune	Leafroller spp. Peach Twig Borer Oriental Fruit Moth Peachtree Borer spp. Green Fruitworm Tent Caterpillar spp. American Plum Borer Cherry Fruit Fly spp. (Adult) Plum Curculio Rose Chafer Japanese Beetle Plant Bug spp. Stink Bug spp. Leafhopper spp. Periodical Cicada Black Cherry Aphid Apple Maggot (Adult) Codling Moth June Beetle Pear Sawfly Thrips spp.	0.02 - 0.04	2.56 - 5.12	Apply as required by scouting, usually at intervals of 5 or more days. Base timing and frequency of applications upon insect populations reaching locally determined economic thresholds and IPM.

Restrictions:

- **DO NOT** apply within 14 days of harvest.
- **DO NOT** apply more than 0.04 lb. a.i. (0.32 pt. or 5.12 fl. oz. of product)/A in a single application.
- **DO NOT** apply more than 0.2 lb. a.i. (1.6 pts. or 25.6 fl. oz. of product)/A per year.
- **DO NOT** apply more than 0.16 lb. a.i. (1.28 pts. or 20.48 fl. oz. of product)/A per year post bloom.

Crop	Target Pests	Rate		Remarks
		lb. a.i./A	fl. oz./A	
SUGARCANE	Sugarcane Borer ¹ Rice Stalk Borer ¹ Sugarcane Beetle (Adult) ² Yellow Sugarcane Aphid ³ Mexican Rice Borer ¹ Pygmy Mole Cricket Sugarcane Aphid ³ West Indian Cranefly	0.025 - 0.04	3.20 - 5.12	Apply as required by scouting, usually at intervals of 7 or more days. Base timing and frequency of applications upon insect populations reaching locally determined economic threshold. Apply with ground or air equipment using sufficient water to obtain full coverage of the foliage or target area. When applying by air, apply a minimum of 2 gals. of water/A. ¹ For control before the larva bores into the plant stalk. ² Suppression only of beetles active above ground. ³ See resistance statement under PRODUCT INFORMATION.

Restrictions:

- DO NOT apply within 21 days of harvest.
- DO NOT apply more than 0.16 lb. a.i. (1.28 pts. or 20.48 fl. oz. of product)/A per season.

Crop	Target Pests	Rate		Remarks
		lb. a.i./A	fl. oz./A	
SUNFLOWER	Sunflower Beetle Cutworm spp.	0.015 - 0.025	1.92 - 3.20	Apply as required by scouting, usually at intervals of 5 or more days. Base timing and frequency of applications upon insect populations reaching locally determined economic thresholds.
	Sunflower Moth Banded Sunflower Moth Fall Armyworm ¹ Woollybear Caterpillar Spotted Cabbage Looper Painted Lady (Thistle) Caterpillar Seed Weevil (Adult) Stem Weevil (Adult) Head-Clipper Weevil (Adult) Japanese Beetle (Adult) Sunflower Maggot (Adult) Leafhopper spp. Meadow Spittlebug Stink Bug spp. Grasshopper spp.	0.02 - 0.03	2.56 - 3.84	Apply with ground or air equipment using sufficient water to obtain full coverage of sunflower heads and/or foliage. When applying by air, apply in a minimum of 2 gals. of water/A.
	Beet Armyworm ^{2,3} Spider Mite spp. ²	0.03	3.84	¹ Use higher rates for large larvae. ² Suppression only. ³ See resistance statement under PRODUCT INFORMATION.
Restrictions:				
• DO NOT apply within 45 days of harvest.				
• DO NOT apply more than 0.12 lb. a.i. (0.96 pt. or 15.36 fl. oz. of product)/A per season.				
• DO NOT apply more than 0.09 lb. a.i. (0.72 pt. or 11.52 fl. oz. of product)/A per season after bloom initiation.				
• DO NOT apply as an ultra-low volume (ULV) spray.				

Crop	Target Pests	Rate		Remarks
		lb. a.i./A	fl. oz./A	
TOBACCO	Tobacco Budworm ² Tobacco Hornworm Cabbage Looper Corn Earworm Salt Marsh Caterpillar Armyworm spp. ¹ Cutworm spp. Webworm spp. Tobacco Flea Beetle (Adult) Cucumber Beetle spp. (Adult) Blister Beetle spp. Vegetable Weevil (Adult) Japanese Beetle (Adult) Grasshopper spp. Tree Cricket spp. Katydid spp. Plant Bug spp. ³ Stinkbug spp. Tobacco Thrips spp. ² Tobacco Aphid spp. ^{2,3} Tobacco Hornworm Potato Tuberworm	0.015 - 0.03	1.92 - 3.84	Apply as required by scouting, usually at intervals of 7 or more days. Base timing and frequency of applications upon insect populations reaching locally determined economic threshold. Apply with ground or air equipment using sufficient water to obtain full coverage of the foliage. When applying by air, apply in a minimum of 2 gals. of water/A. ¹ For control of first and second instar only. ² Suppression only. ³ See resistance statement under PRODUCT INFORMATION.

Restrictions:

- DO NOT apply within 40 days of harvest.
- DO NOT apply more than 0.09 lb. a.i. (0.72 pt. or 11.52 fl. oz. of product)/A per year.

Crop	Target Pests	Rate		Remarks
		lb. a.i./A	fl. oz./A	
TREE NUTS:				
Almond	Leafroller spp.	0.02 - 0.04	2.56 - 5.12	Apply as required by scouting, usually at intervals of 5 or more days. Base timing and frequency of applications upon insect populations reaching locally determined economic threshold.
Beech Nut	Navel Orangeworm			
Brazil Nut	Coddling Moth			
Butternut	Filbertworm			
Cashew	Peach Twig Borer			
Chestnut	Walnut Husk Fly spp. (Adult)			
Chinquapin	Ants			
Filbert (Hazelnut)	Plant Bug spp.			
Hickory Nut	Stink Bug spp.			
Macadamia Nut (Bush Nut)	Chinch Bug			
Pistachio	Leaffooted Bug			
Walnut, Black	Walnut Aphid			
Walnut, English (Persian)				
Pecan	Hickory Shuckworm	0.02 - 0.04	2.56 - 5.12	Apply with ground or air equipment using sufficient water to obtain full coverage of the foliage or target area. When applying by air, apply in a minimum of 5 gals. of water/A, but use higher rates as appropriate for thorough coverage.
	Pecan Casebearer spp.			
	Pecan Weevil			
	Pecan Aphid spp.			
	Pecan Spittlebug			
	Pecan Phylloxera spp.			
	Stink Bug spp.			

Restrictions:

- **DO NOT** apply within 14 days of harvest.
- **DO NOT** apply more than 0.16 lb. a.i. (1.28 pts. or 20.48 fl. oz. of product)/A per year.
- **DO NOT** apply more than 0.12lb. a.i. (0.96 pt. or 15.36 fl. oz. of product)/A per year post bloom.

Crop	Target Pests	Rate		Remarks
		lb. a.i./A	fl. oz./A	
TUBEROUS AND CORM VEGETABLES CROP GROUP Including:				
Arracacha	Cutworm spp.	0.015 - 0.025	1.92 - 3.20	
Arrowroot	Leafhopper spp.			
Artichoke (Chinese and Jerusalem only)	Saltmarsh Caterpillar			
Canna (edible)	Sweet Potato Hornworm			
Cassava (bitter and sweet)	Woollybear Caterpillar spp.			
Chayote (root)				
Chufa	Aphid species ¹	0.02 - 0.03	2.56 - 3.84	
Dasheen	Armyworm spp. ¹			
Ginger	Blister Beetle spp.			
Leren	Colorado Potato Beetle ¹			
Potato	Corn Earworm			
Sweet Potato	Cricket spp.			
Tanier	Cucumber Beetle spp. (Adults)			
Turmeric	European Corn Borer			
Yam (bean and true)	Flea Beetle spp. (adults)			
	Grasshopper spp.			
	Looper spp. ¹			
	Lygus Bug spp. ¹			
	Plant Bug spp.			
	Potato Psyllid			
	Potato Tuberworm			
	Stink Bug spp.			
	Sweet Potato Leaf Beetle (Adults)			
	Sweet Potato Vine Borer			
	Thrips spp. ¹²			
	Tortoise Beetle spp.			
	Webworm spp.			
	Weevil spp. (Adults)			
	Leafminer spp. ¹³	0.03	3.84	
	Whitefly spp. ¹³			
	Spider Mite spp. ³			
Restrictions:				
· DO NOT apply more than 0.12 lb. a.i. (0.96 pt. or 15.36 fl. oz. of product)/A per season.				
· DO NOT apply within 7 days of harvest.				

NON-AGRICULTURAL USES

All outdoor spray applications must be limited to spot or crack-and-crevice treatments only, except for the following permitted uses:

1. Application to pervious surfaces such as soil, lawn, turf, and other vegetation;
2. Perimeter band treatments of 7 feet wide or less from the base of a man-made structure to pervious surfaces (e.g., soil, mulch, or lawn);
3. Applications to underside of eaves, soffits, doors, or windows permanently protected from rainfall by a covering, overhang, awning, or other structure;
4. Applications around potential exterior pest entry points into man-made structures such as doorways and windows, when limited to a band not to exceed one inch;
5. Applications to vertical surfaces (such as the side of a man-made structure) directly above impervious surfaces (e.g., driveways, sidewalks, etc.), up to 2 feet above ground level;
6. Applications to vertical surfaces directly above pervious surfaces, such as soil, lawn, turf, mulch or other vegetation) only if the pervious surface does not drain into ditches, storm drains, gutters, or surface waters

Spot treatments must not exceed two square feet in size (for example, 2 ft. by 1ft. or 4 ft. by 0.5ft.).

For soil or foliar applications, **DO NOT** apply by ground within 25 feet of lakes, reservoirs, rivers, permanent streams, marshes or natural ponds, estuaries and commercial fish farm ponds.

DO NOT apply the product into fish pools, ponds, streams, or lakes. **DO NOT** apply directly to sewers or storm drains, or to any area like a drain or gutter where drainage to sewers, storm drains, water bodies, or aquatic habitat can occur.

DO NOT allow the product to enter any drain during or after application.

DO NOT apply directly to impervious horizontal surfaces such as sidewalks, driveways, and patios except as a spot or crack-and-crevice treatment.

DO NOT apply or irrigate to the point of runoff.

DO NOT make applications during rain. Avoid making applications when rainfall is expected before the product has sufficient time to dry (minimum 4 hours). Rainfall within 24 hours after application may cause unintended runoff of pesticide application.

Treat surfaces to ensure thorough coverage but avoid runoff.

- To treat insects harbored in voids and cracks-and-crevices, applications must be made in such a manner to limit dripping and avoid runoff onto untreated structural surfaces and plants.

Crop	Target Pests	Rate		Remarks			
		lb. a.i./A	fl. oz./A				
CONIFER AND DECIDUOUS TREES: Plantations Nurseries	Pine Tip Moth spp.	0.02 - 0.04	2.56 - 5.12	To control exposed foliage, flower, cone, seed, and bark feeding insects, apply as required by scouting. Base timing and frequency of applications upon insect populations reaching locally determined economic thresholds.			
	Spruce Budworm						
	Bagworm						
	Tent Caterpillar spp.						
	Leafroller spp.						
	Gypsy Moth						
	Webworm spp.						
	Tussock Moth spp.						
	Pine Sawfly spp.						
	Sawfly spp.						
	Pine Chafer						
	Japanese Beetle						
	May Beetle spp.						
	June Beetle spp.						
	Pine Colaspis Beetle						
	Leaf Beetle spp.						
	Pales Weevil						
	Pine Weevil spp.						
	Pine Conelet Bug						
	Spittlebug spp.						
	Pine Leaf Chermid						
	Balsam Wooly Aphid						
	Balsam Twig Aphid						
	Birch Leafminer						
	Black Pine Weevil						
	Elm Leaf Beetle						
	European Elm Bark Beetle						
	Mealybug spp. ¹						
	Pine Needle Scale						
	Pine Tortoise Scale						
	Poplar Aphid spp.						
Restrictions:							
· DO NOT apply more than 0.24 lb. a.i. (1.92 pts. or 30.72 fl. oz. of product)/A per year.							

Crop	Target Pests	Rate		Remarks
		lb. a.i./A	fl. oz./A	
CONIFER AND DECIDUOUS TREES: Seed Orchards	Coneworm spp. Seed Bug spp. Thrips spp.	See Remarks	See Remarks	For high volume sprayers, dilute 5.12 fl. oz. per 100 gals. of water and apply 5-10 gals. of finished spray per tree. For low volume sprayers, dilute 20 fl. oz. per 100 gals. of water and apply 100 gals. of finished spray per/A. For aerial applications, apply 15 fl. oz./A in a minimum of 10 gals. finished spray/A. Restrictions: · DO NOT apply more than 0.5 lb. a.i. (4 pts. or 64 fl. oz. of product)/A per year.
NON-CROPLAND (Excluding Public Land)	See Crop Outlets on this label for target pest and rates.	See Crop Outlets	See Crop Outlets	Spray non-cropland adjacent to agricultural areas to control migratory insects, which may threaten crops. Follow use directions, rates, and spray recommendations found elsewhere in this label for the adjacent crop outlet and target pests. Use highest labeled rates for dense/large foliage, high insect populations, and larger larval stages. Repeat as necessary to maintain control.

Restrictions:

- DO NOT exceed 0.2 lb. a.i. (1.6 pts. or 25.6 fl. oz. of product)/A per year.
- DO NOT graze livestock in treated areas.

Crop	Target Pests	Rate		Remarks
		lb. a.i./A	fl. oz./A	
CONIFER AND DECIDUOUS TREES: Plantations Nurseries	Pine Tip Moth spp. Spruce Budworm Bagworm Tent Caterpillar spp. Leafroller spp. Gypsy Moth Webworm spp. Tussock Moth spp. Pine Sawfly spp. Sawfly spp. Pine Chafer Japanese Beetle May Beetle spp. June Beetle spp. Pine Colaspis Beetle Leaf Beetle spp. Pales Weevil Pine Weevil spp. Pine Conelot Bug Spittlebug spp. Pine Leaf Chermid Balsam Wooly Aphid Balsam Twig Aphid Birch Leafminer Black Pine Weevil Elm Leaf Beetle European Elm Bark Beetle Mealybug spp. ¹ Pine Needle Scale Pine Tortoise Scale Poplar Aphid spp.	0.02 - 0.04	2.56 - 5.12	To control exposed foliage, flower, cone, seed, and bark feeding insects, apply as required by scouting. Timing and frequency of applications should be based upon insect populations reaching locally determined economic thresholds. Apply with ground equipment using sufficient water to obtain full coverage of target site. When applying by air, apply a minimum of 2 gals. of water/A. ¹ Suppression only.

Restrictions:

- DO NOT apply more than 0.24 lb. a.i. (1.92 pts. or 30.72 fl. oz. of product)/A per year.

Crop	Target Pests	Rate		Remarks
		lb. a.i./A	fl. oz./A	
CONIFER AND DECIDUOUS TREES: Seed Orchards	Coneworm spp. Seed Bug spp. Thrips spp.	See Remarks	See Remarks	For high volume sprayers, dilute 5.12 fl. oz. per 100 gals. of water and apply 5-10 gals. of finished spray per tree. For low volume sprayers, dilute 20 fl. oz. per 100 gals. of water and apply 100 gals. of finished spray per/A. For aerial applications, apply 15 fl. oz./A in a minimum of 10 gals. finished spray/A.

Restrictions:

DO NOT apply more than 0.5 lb. a.i. (4 pts. or 64 fl. oz. of product)/A per year.

Crop	Target Pests	Rate		Remarks
		lb. a.i./A	fl. oz./A	
NON-CROPLAND (Excluding Public Land)	See Crop Outlets on this label for target pest and rates.	See Crop Outlets	See Crop Outlets	Spray non-cropland adjacent to agricultural areas to control migratory insects, which may threaten crops. Follow use directions, rates, and spray recommendations found elsewhere in this label for the adjacent crop outlet and target pests. Use highest labeled rates for dense/large foliage, high insect populations, and larger larval stages. Repeat as necessary to maintain control.

Restrictions:

- **DO NOT** exceed 0.2 lb. a.i. (1.6 pts. or 25.6 fl. oz. of product)/A per year.
- **DO NOT** graze livestock in treated areas.

Rate Conversion Chart

Lb. A.I. Per Acre	Fl. Oz. Per Acre	Pints Per Acre	Treated Acres Per Gallon
0.015	1.92	0.12	66
0.02	2.56	0.16	50
0.025	3.20	0.20	40
0.03	3.84	0.24	33
0.04	5.12	0.32	25

STORAGE AND DISPOSAL

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

Pesticide Storage: Store in original containers only. Keep container closed when not in use. **DO NOT** store near food or feed. In case of spill or leak on floor or paved surfaces, soak up with sand, earth, or synthetic absorbent. Remove to chemical waste area.

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 at the nearest EPA Regional Office for guidance.

Container Handling: Nonrefillable Container – **DO NOT** reuse or refill container. Triple rinse container (or equivalent) promptly after emptying. Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or incineration, or, if allowed by State and local authorities, by burning. If burned, stay out of smoke. Triple rinse as follows:

Containers 5 gallons or less: 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 $\frac{1}{4}$ 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. Once cleaned, offer for recycling or reconditioning if appropriate.

For Chemical Emergency: Spill, Leak, Fire, Exposure, or Accident, call CHEMTREC 1-800-424-9300

WARRANTY DISCLAIMER AND NOTICE

IMPORTANT: READ BEFORE USE

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

By using this product, user or buyer accepts the following Conditions, Disclaimer of Warranties and Limitations of Liability.

CONDITIONS: The directions for use of this product are believed to be adequate and must be followed carefully. However, it is impossible to eliminate all risks associated with the use of this product. To the extent consistent with applicable law, all such risks shall be assumed by the user or buyer.

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

LIMITATIONS OF LIABILITY: To the extent consistent with applicable law, THE EXCLUSIVE REMEDY OF THE USER OR BUYER FOR ANY AND ALL LOSSES, INJURIES OR DAMAGES RESULTING FORM THE USE OR HANDLING OF THIS PRODUCT, WHETHER IN CONTRACT, WARRANTY, TORT, NEGLIGENCE, STRICT LIABILITY OR OTHERWISE, SHALL NOT EXCEED THE PURCHASE PRICE PAID, OR AT ACTYLYS'S ELECTION, THE REPLACEMENT OF PRODUCT.

All trademarks are the property of their respective owners.

Formulated in USA & packaged in USA

RESTRICTED USE PESTICIDE

Due to Toxicity to Fish and Aquatic Organisms

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

LAMBDA-CYHALOTHIN | GROUP 3A INSECTICIDE

Actylis Lambda-Cy Insecticide

For the Control of a Variety of Insect Pests on Selected Crops
Contains the same active ingredient as Karate® Insecticide.
For outdoor use only.

Active Ingredient:

Lambda-cyhalothrin..... 11.4%

Other Ingredients: 88.6%

Total: 100.0%

Contains petroleum distillates.

Contains 1 lb. of active ingredient per gallon.

EPA Reg. No. 2749-661 EPA Est. No. 070989-MO-001

KEEP OUT OF REACH OF CHILDREN WARNING/AVISO

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

FIRST AID

If swallowed: Call a poison control center or doctor immediately for treatment advice. **DO NOT** give any liquid to the person. **DO NOT** induce vomiting unless told to do so by the poison control center or doctor. **DO NOT** give anything by mouth to an unconscious person. **If in eyes:** Hold eye open and rinse slowly and gently with water 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continuing rinsing eye. Call a poison control center or doctor for treatment advice. **If on skin or clothing:** Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice. **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. Have the product container or label with you when calling a poison control center or physician or going for treatment. FOR MEDICAL EMERGENCIES INVOLVING THIS PRODUCT, CALL CHEMTREC® TOLL FREE 1-800-424-9300 or 1-703-527-3887 (24 Hours per Day, 7 Days per Week). **Note to Physician**
- Contains petroleum distillate - vomiting may cause aspiration pneumonia.

1 gallon (3.78 liters)

NET CONTENTS

Manufactured for **Actylis**, 4 Tri Harbor Court, Port Washington, NY 11050

PRECAUTIONARY STATEMENTS

Hazards to Humans and Domestic Animals

WARNING - AVISO: May be fatal if swallowed. Harmful if inhaled or absorbed through skin. Causes moderate eye irritation. Avoid contact with skin, eyes or clothing. Avoid breathing spray mist. Wash hands thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet. Remove contaminated clothing and wash clothing before reuse.

STORAGE AND DISPOSAL

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

Pesticide Storage: Store in original containers only. Keep container closed if not in use. **DO NOT** store near food or feed. In case of

spill or leak on floor or paved surfaces, soak up with sand, earth, or synthetic absorbent. Remove to chemical waste area. **Pesticide**

Dispose: 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 at the nearest EPA Regional Office for guidance. **Container Handling:** Nonrefillable

Container - **DO NOT** reuse or refill container. Triple rinse container (or equivalent) promptly after emptying. Then offer for recycling or

reconditioning, or puncture and dispose of in a sanitary landfill, or incineration, or, if allowed by State and local authorities, by burning. If burned, stay out of smoke. Triple rinse as follows. **Containers**

5 gallons or less: 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 1/4 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. Once cleaned, offer for recycling or reconditioning if appropriate.

For Chemical Emergency: Spill, Leak, Fire, Exposure, or Accident, call CHEMTREC 1-800-424-9300

See inside booklet for additional Precautionary Statement, First Aid, and Directions for Use

PEEL BACK BOOK HERE AND RESEAL AFTER OPENING

PF 257459

PROOF

THIS PROOF IS TO BE
CHECKED FOR ACCURACY

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

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

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

THIS PROOF IS NOT ACCURATE FOR COLOR-MATCH.

Dieline does not print.



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

DATE	JOB NUMBER	CUSTOMER
10-14-2025	257459	Aceto Life Science, LLC
LABEL SIZE	BOOKLET SIZE	
5" X 4.75"	4.75" X 3.75"	
LABEL COLORS	BOOKLET OUTSIDE COLORS	BOOKLET INSIDE COLORS
 BLK	 BLK  7657	 BLK
PATTERN VARNISH: <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO		

Form: CS 006B - 3/29/2017

ARTWORK IS APPROVED

REVISED PROOF NEEDED

**WE CANNOT PROCESS
THIS ORDER WITHOUT AN
AUTHORIZED SIGNATURE**

Signed _____

Date _____