

66222-104

01/04/2007

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

OFFICE OF
PREVENTION, PESTICIDES
AND TOXIC SUBSTANCES

January 04, 2007

Jane Rothwell,
Registration Specialist
Makhteshim-Agan of North America, Inc.
4515 Falls of Neuse Road, Suite 300
Raleigh, NC 27609

Subject: Amend Basic Formulation (Change Nominal Conc.), and Labeling.
Lambda-CY IEC
EPA Reg. No. 66222-104
Submission dated July 28, 2006

Dear Ms. Rothwell:

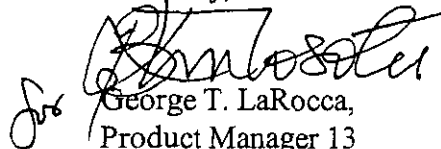
The above referenced submission, in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), as amended, is acceptable subject to the comments listed below. Two (2) copies of the finished labeling must be submitted prior to releasing the product for shipping. A stamped copy of the label is enclosed for your record.

1. Include "**Protective eyewear**" in the list of PPE, in the "Agricultural Use Requirements" box.
2. Replace "Mixing Instructions" with "**Tank Mix Application**".
3. Reinstate "**Lambda Cy IEC is an aqueous based formulation**" on pg 5.
4. Under "Alfalfa and Alfalfa Grown for Seed", reinstate the first two statements under remarks (i.e., "Apply only to fields . . . etc.", and "Apply as required by scouting").
5. Throughout the labeling under the "Remarks" column:
 - a. Delete the statement ". . . repeat applications as necessary" or qualify it with a specific interval based upon the efficacy data.
 - b. Reinstate the instruction "Timing and frequency of applications should be based upon insect populations reaching locally determined economic thresholds or other locally recommended methods".
6. Under Warranty:
 - a. Replace "expressly provided herein" with "warranted by this label" (i.e., "Except as warranted by this label, Makhteshim Agan . . . etc.").
 - b. Add "To the extent consistent with applicable law" to the beginning of the last sentence (i.e., to read "To the extent consistent with applicable law, the exclusive remedy of any buyer or user . . . etc.").

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The Basic Confidential Statement of Formula (CSF) dated 07/28/06 supersedes all previously accepted ones, and we have included a copy in the record for the subject product. Also, please find enclosed copies of the acute toxicity and product chemistry reviews. If you have any questions concerning this action, please contact Dr. B.A. Akinlosotu at (703) 605-0653.

Sincerely,



George T. LaRocca,
Product Manager 13
Insecticide Branch
Registration Division (7505P)

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RESTRICTED USE PESTICIDE
DUE TO TOXICITY 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.

LAMBDA-CY 1EC

ACTIVE INGREDIENT:	% BY WT.
Lambda-cyhalothrin; [1α(S*),3α(Z)]-(±)-cyano-(3-phenoxyphenyl)methyl-3-(2-chloro-3,3,3-trifluoro-1-propenyl)-2,2-dimethylcyclopropanecarboxylate	12.7
OTHER INGREDIENTS:	87.3
	TOTAL 100.0%

ACCEPTED
with COMMENTS
In EPA Letter Dated:

JAN 4 2007

Under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, for the pesticide registered under EPA Reg. No.

Contains 1 pound of active ingredient per gallon
Contains Petroleum Distillate
SHAKE WELL BEFORE USING

KEEP OUT OF REACH OF CHILDREN
WARNING/AVISO

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

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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 a 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 for 15-20 minutes.
 - Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.
 - Call a poison control center or doctor for treatment advice.
- IF ON SKIN OR 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 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 doctor or going for treatment. For Medical emergencies call Prozar 24 hours a day at 1-877-250-9291.

NOTE TO PHYSICIAN: Contains Petroleum Distillate. Vomiting may cause aspiration pneumonia.

PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS WARNING

May be fatal if swallowed. Causes substantial but temporary eye injury. Harmful if absorbed through skin or inhaled. Avoid breathing vapor or spray mist. Do not get in eyes, on skin, or on clothing. Wear appropriate protective clothing and eyewear as specified in the Personal Protective Equipment (PPE) section of this label. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, or using tobacco. Remove and wash contaminated clothing before reuse.

Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals. Skin exposure may also result in a sensation described as a tingling, itching, burning, or prickly feeling. Onset may occur immediately to 4 hours after exposure and may last 2-30 hours, without damage. Wash exposed areas once with soap and water. Relief from the skin sensation may be obtained by applying an oil-based cream.

NET CONTENTS: _____ GALLONS

EPA Reg. No. 66222-104
EPA Est. No. 11678-IS-001

Makhteshim Agan of North America, Inc.
4515 Falls of Neuse Road, Suite 300
Raleigh NC 27609

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PERSONAL PROTECTIVE EQUIPMENT (PPE)

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

Applicators and other handlers must wear:

- Long sleeve shirt and long pants
- Chemical resistant gloves, such as barrier laminate or Viton \geq 14 mils
- Shoes plus socks
- Protective eyewear

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

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

User 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 directly to water, or to areas where surface water is present, or to intertidal areas below the mean high water mark. 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. Do not contaminate water when disposing of equipment wash water.

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

PHYSICAL AND CHEMICAL HAZARDS

Combustible. Do not use or store near heat or open flame.

DIRECTIONS FOR USE

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

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the Agency responsible for pesticide regulation.

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.

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 of barrier laminate or Viton \geq 14 mils
- Shoes plus socks

GENERAL INFORMATION

Apply in sufficient water for thorough coverage of listed crops unless otherwise specifically noted. Rate of application should be based upon pest pressure, timing of sprays and field scouting. Use higher rates under heavy pest pressure and lower rates under low to moderate pest pressure. For ground and air applications, unless otherwise noted the following spray volumes are recommended:

Row Crops: By ground, apply in a minimum of 10 gallons of finished spray per acre. By air apply in a minimum of 2 gallons of finished spray per acre.

Orchard and Vine Crops: By ground, apply in a minimum of 50 gallons of finished spray per acre. By air, apply in a minimum of 10 gallons of finished spray per acre.

For cutworm control, Lambda-Cy 1EC may be applied before, during, or after planting. For soil incorporated applications, use higher rates for improved control.

RESISTANCE

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

If resistance to this product develops in your area, this product or other products with a similar mode of action, may not provide adequate control. If poor performance cannot be attributed to improper application or extreme weather conditions, a resistant strain of insect may be present. If you experience difficulty with control and resistance is a reasonable cause, immediately consult your local company representative or agricultural advisor for the best alternative method of control for your area.

SPRAY DRIFT PRECAUTIONS

Observe the following precautions when spraying in the vicinity of aquatic areas such as lakes, reservoirs, rivers, permanent streams, marshes or natural ponds, estuaries, and commercial fish farm ponds.

- Do not apply by ground within 25 feet or by air within 150 feet of lakes, reservoirs, rivers, permanent streams, marshes, pot holes or natural ponds, estuaries, and commercial fish farm ponds. Increase the buffer zone to 450 feet when ultra-low volume (ULV) application is made.
- All aerial and ground application equipment must be properly maintained and calibrated using appropriate carriers.
- For aerial applications, the spray boom should be mounted on the aircraft so as to minimize drift caused by wing tip vortices. The minimum practical boom length should be used and must not exceed 75% of wing span or rotor diameter.
- Use the largest droplet size consistent with good pest control. Formation of very small droplets may be minimized by appropriate nozzle selection, by orienting nozzles away from the air stream as much as possible, and by avoiding excessive spray boom pressure.
- Spray should be released at the lowest height consistent with pest control and flight safety. Applications more than 10 feet above the crop canopy should be avoided.
- Make aerial or ground applications when the wind velocity favors on-target product deposition (approximately 3-10 mph). Do not apply when wind velocity exceeds 15 mph. Avoid applications when wind gusts approach 15 mph.
- Risk of exposure to aquatic areas can be reduced by avoiding applications when wind direction is toward the aquatic area.
- Do not cultivate within 10 feet of the aquatic area so as to allow growth of a vegetative filter strip.
- Low humidity and high temperatures increase the evaporation rate of spray droplets and therefore the likelihood of increased spray drift to aquatic areas. Avoid spraying during conditions of low humidity and/or high temperature.
- Do not make aerial or ground applications during temperature inversions. Inversions are characterized by stable air and increasing temperatures with height above the ground. Mist or fog may indicate the presence of an inversion in humid areas. The applicator may detect the presence of an inversion by producing smoke and observing a smoke layer near the ground surface.
- In the state of New York, a 25 foot 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 or ground application. For aerial applications, the 25 foot vegetated non-cropped buffer strip for runoff protection would be part of the larger 150 foot buffer strip (or 450 foot buffer strip for ULV application) required for spray drift.

MIXING INSTRUCTIONS

Fill the spray tank at least one-third full of clean water or diluent. With the pump and agitator running continuously, add the recommended amount of each product in the tank mix to the spray tank and allow to fully disperse, adding Lambda Cy 1EC last. Add the remainder of water or diluent to the spray tank. Follow the precautions and limitations of the most restricted product in the tank mixture.

Compatibility testing for tank mixing partners: Test compatibility of the intended tank mixture by adding proportionate amounts of each ingredient to a pint or quart jar, cap, shake, and let set 15 minutes. Formation of precipitates that do not readily redisperse indicates an incompatible mixture that should not be used.

Non-emulsifiable oils are not recommended for use in combination with Lambda-Cy 1EC. If adjuvants are used, use only:

- Nonionic Surfactant (NIS) containing at least 75% surface agent, or
- Non-phytotoxic Crop Oil Concentrate (COC) including once refined Vegetable Oil concentrate (VOC), or
- Methylated Seed Oils (MSO) containing a minimum of 17% emulsifier.

Adjuvants other than NIS or COC may be used providing the product;

1. Contains only EPA exempt ingredients.
2. Is non-phytotoxic to the target crop.
3. Is compatible in mixture (may be established through a jar test).
4. Is supported locally for use with Lambda-Cy 1EC on the target crop through proven field trials and through university and extension recommendations.

The following may be used as diluents:

- Crop Oil Concentrate
- Methylated Seed Oils
- Urea-Ammonium Nitrate

The following should not be used in combination with Lambda-Cy 1EC as diluents or adjuvants:

- Non-emulsifiable Oils
- Diesel Fuel
- Straight Mineral Oil

CHEMIGATION

Sprinkler Irrigation Application

Apply Lambda-Cy 1EC at rates and timing described elsewhere in this label. Consult your local State Extension Service or other local experts for recommendations pertinent for your area.

Thorough, uniform 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 recommended rate of Lambda-Cy 1EC 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. The product should 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.

Additionally, if application is being made during a normal irrigation set of a stationary sprinkler, the recommended rate of Lambda-Cy 1EC 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 Lambda-Cy 1EC 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 and average of at least 25 individuals daily at least 60 days out of the year.

Use Precautions: Sprinkler Irrigation Application

Apply this product only through sprinkler irrigation systems (including center pivot, lateral move, end tow, side (wheel) roll, traveler, big gun, solid set, or hand move). Do not apply this product through any other type of irrigation system. Crop injury, lack of effectiveness, or illegal pesticide residues in the crop can result from non-uniform distribution of treated water.

If you have questions about calibration, you should contact state extension service specialist, equipment manufacturers, or other experts.

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.

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.

The system must contain a functional check valve, vacuum relief valve, and a 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.

Do not apply through chemigation systems connected to public water systems

CROP USE RECOMMENDATIONS AGRICULTURAL USES

CROP	TARGET PESTS	RATE		REMARKS
		lb. a.i./A	fl. oz./A	
ALFALFA AND ALFALFA GROWN FOR SEED	Alfalfa Caterpillar Army cutworm Cutworm spp. Green Cloverworm Leafhopper spp. Looper spp. Three-cornered Alfalfa Hopper Valtvo bean Caterpillar Webworm spp.	0.015-0.025	1.92-3.20	<p>Ground application: Apply in a minimum of 10 gals. per acre or sufficient spray volume to obtain full coverage of the foliage or target area.</p> <p>Air application: Apply in a minimum of 2 gals. per acre or sufficient spray volume to obtain full coverage of the foliage or target area.</p> <p>Make applications when pests appear and repeat applications as necessary. Apply in sufficient volume to ensure sufficient coverage of foliage.</p> <p>When foliage is dense and/or pest populations are high, use 5-10 gals./A by air or 20 gals./A by ground and higher use rates. Use higher rates for increased residual control.</p> <p>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.</p> <p>¹For control of first and second instars only. ²Suppression only. ³See resistance statement under GENERAL INFORMATION. ⁴Does not include Western Flower Thrips</p>
	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 Grape Colaspis (Adult) Grasshopper spp. Green June Beetle (Adult) Green Peach Aphid ² Japanese Beetle (Adult) Meadow Spittlebug Mexican Bean Beetle Pea Aphid Pea Weevil (Adult) Plant Bug spp., including Lygus spp. 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	
	Beet Armyworm ^{1,3} Blotch Leafminer ³ Spider Mites ²	0.03	3.84	
	<ul style="list-style-type: none"> • Do not apply more than 0.03 lb. a.i. (0.24 pt.) per acre per cutting. • Do not apply more than 0.12 lb. a.i. (0.96 pt.) per acre per season. • Do not apply within 1 day of harvest for forage or within 7 days of harvest for hay. 			
CANOLA	Armyworm spp. Cabbage Seedpod Weevil Cutworm spp. Diamondback Moth Flea Beetle Grasshoppers Looper spp. Lygus Bug	0.015-0.03	1.92-3.84	<p>Ground application: Apply in a minimum of 10 gals. per acre or sufficient spray volume to obtain full coverage of the foliage or target area.</p> <p>Air application: Apply in a minimum of 2 gals. per acre or sufficient spray volume to obtain full coverage of the foliage or target area.</p> <p>Make applications when pests appear and repeat applications as necessary, usually at intervals of 5 or more days. Apply in sufficient volume to ensure sufficient coverage of foliage.</p>
	Cabbage Aphid	0.03	3.84	
	<ul style="list-style-type: none"> • Do not apply within 7 days of harvest. • Do not apply more than 0.09 lb. a.i. (0.72 pt.) per acre per year 			

CROP	TARGET PESTS	RATE		REMARKS			
		lb. a.i./A	fl. oz./A				
CEREAL GRAINS: Corn (At-Plant): Field Corn Popcorn Seed Corn Sweet Corn	Corn Rootworm Larvae (Western, Northern, Southern, Mexican) Cutworm spp Seedcorn Maggot Seedcorn Beetle Lesser Cornstalk Borer White Grub spp. Wireworm spp Red Imported Fire Ant ¹	0.005 lb a.i. per 1000 ft. of row ²	0.66 fl. oz. per 1000 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			
	¹lbs. ai and fl. oz./A of Lambda-Cy 1EC applied at 0.66 fl. oz./1000 ft. of row for various row spacings:						
	Row Spacing	40"	38"	36"	34"	32"	30"
	Linear Ft. per acre	13,068	13,756	14,520	15,374	16,395	17,424
	Lbs. a.i. per acre	0.067	0.07	0.075	0.079	0.084	0.09
Fl. oz. per acre	8.6	9.1	9.6	10.1	10.8	11.5	
<ul style="list-style-type: none"> Do not harvest or graze livestock or cut treated crops for feed within 21 days of at-plant application Do not apply more than 0.09 lb. a.i. (0.72 pt.) per acre per crop at-plant Do not apply more than 0.12 lb. a.i. per acre per crop from at-plant and foliar applications for field corn, popcorn, and seed corn. For sweet corn, do not apply more than 0.48 lb. a.i. per acre per crop from at-plant and foliar applications 							
CEREAL GRAINS Corn (Foliar): Field Corn Popcorn Seed Corn	Corn Earworm ¹ Cutworm spp. Green Cloverworm Meadow Spittlebug Western Bean Cutworm ¹	0.015-0.025	1.92-3.20	Ground application: Apply in a minimum of 10 gals. per acre or 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 of the foliage or target area Make applications when pests appear and repeat applications as necessary, usually at intervals of 7 or more days. Apply in sufficient volume to ensure sufficient coverage of foliage 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 3-5 day intervals if needed. Lambda-Cy 1EC may only suppress heavy infestations and/or subsequent migrations. Adult corn rootworm beetles (<i>Diabrotica</i> species): Use a minimum of 3.84 fl. oz. per acre (0.03 lb. a.i. per acre) as part of an aerial-applied corn rootworm control program. ¹ For control before the larva bores into the plant stalk or ear. ² For control of first and second instar only ³ Suppression only ⁴ See resistance statement under GENERAL INFORMATION			
	Armyworm ¹ Bean Leaf Beetle Bird Cherry-Oat Aphid ¹ Cereal Leaf Beetle Corn Leaf Aphid ² English Grain Aphid ³ European Corn Borer ¹ Fall Armyworm ¹ Flea Beetle spp. Grasshopper spp. Hop Vine Borer ¹ Japanese Beetle (Adult) Lesser Cornstalk Borer Mexican Corn Rootworm Beetle (Adult) Northern Corn Rootworm Beetle (Adult) Sap Beetle (Adult) Seedcorn Beetle Southern Corn Rootworm Beetle (Adult) Southwestern Corn Borer ¹ Stalk Borer ¹ Stink Bug spp. Tobacco Budworm ^{1,4} Webworm spp. Western Corn Rootworm Beetle (Adult) Yellow-striped Armyworm ¹	0.02-0.03	2.56-3.64				
	Beet Armyworm ¹ Chinch Bug Green Bug ⁴ Southern Corn Leaf Beetle ¹ Rice Stalk Borer ¹ Mexican Rice Borer ¹ Sugarcane Borer ¹	0.03	3.84				
	<ul style="list-style-type: none"> 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 0.12 lb. a.i. (0.96 pt.) per acre per crop from at-plant and foliar applications. Do not apply more than 0.06 lb. a.i. (0.48 pt.) after silk initiation Do not apply more than 0.03 lb. a.i. (0.24 pt.) after corn has reached the milk stage (yellow kernels with milky fluid) 						

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CROP	TARGET PESTS	RATE		REMARKS
		lb. a./A	fl. oz./A	
CEREAL GRAINS Corn (Foliar): Sweet Corn	Aphid spp. ¹ Armyworm ¹ Aster Leafhopper Beet Armyworm ¹ Chinch Bug Common Cornstalk Borer Corn Earworm Cutworm spp. European Corn Borer Fall Armyworm ¹ Flea Beetle spp. Grasshopper spp. Japanese Beetle (Adult) Mexican Corn Rootworm Beetle (Adult) Northern Corn Rootworm Beetle (Adult) Sap Beetle (Adult) Southern Armyworm ¹ Southern Corn Rootworm Beetle (Adult) Southwestern Corn Borer Spider Mite spp. Stink Bug spp. Tarnished Plant Bug Webworm spp. Western Bean Cutworm Western Corn Rootworm Beetle (Adult) Yellow-Striped Armyworm ¹	0.02-0.03	2.56-3.84	Ground application: Apply in a minimum of 10 gals. per acre or 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 of the foliage or target area. Make applications when pests appear and repeat applications as necessary, usually at intervals of 4 or more days and before insects enter the stalk or ear. Apply in sufficient volume to ensure sufficient coverage of foliage and ears (if present). Adult corn rootworm beetles (<i>Diabrotica</i> species) Use a minimum of 3.2 fl. oz. per acre (0.025 lb. a.i. per acre) as part of an aerial-applied corn rootworm control program. For control of first and second instar only. *Suppression only *See resistance statement under GENERAL INFORMATION
	Corn Silky (Adult) ¹	0.03	3.84	
	<ul style="list-style-type: none"> 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 0.48 lb. a.i. (3.84 pts.) per acre per crop from at plant and foliar applications 			
CEREAL GRAINS: Rice	Bird Cherry-Oat Aphid Chinch Bug European Corn Borer ¹ Fall Armyworm Grasshopper spp. Greenbug Leafhopper spp. Mexican Rice Borer ¹ Rice Seed Midge Rice Stalk Borer ¹ Rice Stink Bug Rice Water Weevil (Adult) Sharpshooter spp. Sugarcane Borer True Armyworm Yellow Sugarcane Aphid Yellow-striped Armyworm	0.025-0.04	3.20-5.12	Ground application: Apply in a minimum of 10 gals. per acre or 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 of the foliage or target area. Adding 1 pint per acre of an emulsifiable crop oil will help improve coverage, reduce evaporation, and improve efficacy. Make applications when pests appear and repeat applications as necessary, usually at intervals of 5-7 days. Apply in sufficient volume to ensure sufficient coverage of foliage. Lambda-Cy 1EC can be safely used when propanil products are being used for weed control.

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CROP	TARGET PESTS	RATE		REMARKS
		lb. a.i./A	fl. oz./A	
CEREAL GRAINS: Rice (continued)				<p>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 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. 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.</p> <p>California: In addition to above directions, for control of rice water weevil in water seeded rice, Lambda Cy 1EC 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.</p> <p>Green Bug: Known to have many biotypes, Lambda-Cy 1EC may only provide suppression. If satisfactory control is not achieved, a resistant biotype may be present. Use alternate chemistry for control.</p> <p>For control before the larvae bores into the plant stalk.</p>
	<ul style="list-style-type: none"> Do not release floodwater within 7 days of an application Do not apply more than 0.12 lb a.i. (0.96 pt.) per acre per season Do not apply more than 0.04 lb a.i. (0.32 pt.) per acre 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 			
CEREAL GRAINS: Sorghum (Grain)	Cutworm spp. Sorghum Midge	0.015-0.02	1.92-2.56	<p>Ground application: Apply in a minimum of 10 gals. per acre or sufficient spray volume to obtain full coverage of the foliage or target area.</p> <p>Air application: Apply in a minimum of 2 gals. per acre or sufficient spray volume to obtain full coverage of the foliage or target area.</p> <p>Make applications when pests appear and repeat applications as necessary, usually at intervals of 5 or more days. Apply in sufficient volume to ensure sufficient coverage of foliage.</p> <p>Sorghum Midge: Begin applications when 25% of the sorghum heads have emerged and are in tip bloom. Repeat applications at 5 day intervals if needed.</p>
	Armyworm Beet Armyworm Corn Earworm European Corn Borer Fall Armyworm Flea Beetle spp. Grasshopper spp. Lesser Cornstalk Borer Southwestern Corn Borer Stink Bug spp. Webworm spp. Yellow-striped Armyworm	0.02-0.03	2.56-3.84	
	Chinch Bug Mexican Rice Borer Rice Stalk Borer Sugarcane Borer	0.03	3.84	<p>Chinch Bug: 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. Lambda-Cy 1EC may only suppress heavy infestations and/or subsequent migrations. For control of first and second instar only. For control before the larva bores into the plant stalk.</p> <p>See resistance statement under GENERAL INFORMATION.</p>
	<ul style="list-style-type: none"> Do not apply within 30 days of harvest Do not apply more than 0.08 lb a.i. (0.64 pt.) per acre per season Do not apply more than 0.08 lb a.i. (0.48 pt.) per acre per season after crop emergence Do not apply more than 0.02 lb a.i. (0.16 pt.) per acre per season once crop is in soft dough stage 			

CROP	TARGET PESTS	RATE		REMARKS
		lb. a./A	fl. oz./A	
CEREAL GRAINS: Wheat Wheat Hay Triticale	Army Cutworm Cutworm spp	0.015-0.025	1.92-3.20	<p>Ground application: Apply in a minimum of 10 gals. per acre or sufficient spray volume to obtain full coverage of the foliage or target area.</p> <p>Air application: Apply in a minimum of 2 gals. per acre or sufficient spray volume to obtain full coverage of the foliage or target area.</p> <p>Make applications when pests appear and repeat applications as necessary, usually at intervals of 5 or more days. Apply in sufficient volume to ensure sufficient coverage of foliage.</p> <p>Chinch Bug: Repeat applications at 3 to 5 day intervals if needed. Lambda-Cy 1EC may only suppress heavy infestations and/or migrations.</p> <p>Green Bug: Known to have many biotypes. Lambda-Cy 1EC may only provide suppression if satisfactory control is not achieved, a resistant biotype may be present. Use alternate chemistry for control.</p> <p>¹Best control is obtained before insects begin to roll leaves. Once wheat has started to boot, Lambda-cy 1EC may provide suppression only. Higher rates and increased coverage will be necessary.</p> <p>²Suppression only.</p> <p>³See resistance statement under GENERAL INFORMATION.</p> <p>⁴Make applications when adults emerge.</p>
	Bird Cherry-Oat Aphid ¹ Cereal Leaf Beetle English Grain Aphid ¹ Fall Armyworm Flea Beetle spp Grasshopper spp Hessian fly ² Orange Blossom Wheat Midge Russian Wheat Aphid ¹ Stink Bug spp Yellow-striped Armyworm	0.02-0.03	2.56-3.84	
	Grass Sawfly	0.025-0.03	3.20-3.84	
	Chinch Bug Corn Leaf Aphid ¹ Greenbug ² Mite spp ²	0.03	3.84	
	<ul style="list-style-type: none"> 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 treatment. Do not feed treated straw to meat or dairy animals within 30 days after the last treatment. Do not apply more than 0.08 lb. a. (0.48 pt.) per acre per season. 			
COLE CROPS (HEAD AND STEM BRASSICA) Broccoli Brussels Sprouts Cabbage Cavalo Broccolo Cauliflower Chinese Broccoli (gai lan) Chinese Cabbage (napa) Chinese Mustard Cabbage (gai choy) Kohlrabi	Alfalfa Looper Cabbage Looper Cabbage Webworm Cutworm spp. Imported Cabbageworm Southern Cabbageworm	0.015-0.025	1.92-3.20	<p>Ground application: Apply in a minimum of 10 gals. per acre or sufficient spray volume to obtain full coverage of the foliage or target area.</p> <p>Air application: Apply in a minimum of 2 gals. per acre or sufficient spray volume to obtain full coverage of the foliage or target area.</p> <p>Make applications when pests appear and repeat applications as necessary, usually at intervals of 5 or more days. Apply in sufficient volume to ensure sufficient coverage of foliage.</p> <p>¹For control of first and second instar only.</p> <p>²Suppression only.</p> <p>³See resistance statement under GENERAL INFORMATION.</p>
	Aphid spp. ^{1,2} Armyworm Beet Armyworm ^{1,2} Corn Earworm Diamondback Moth ³ Fall Armyworm Flea Beetle spp Grasshopper spp Japanese Beetle (Adult) Leafhopper spp. Meadow Spittlebug Plant Bug spp. including Lygus spp. ¹ Spider Mite spp. ² Stink Bug spp. Thrips spp. Vegetable Weevil (Adult) Whitefly spp. ^{2,3} Yellow-striped Armyworm	0.02-0.03	2.56-3.84	
	<ul style="list-style-type: none"> Do not apply within 1 day of harvest. Do not apply more than 0.24 lb. a. (1.92 pts.) per acre per season. 			

CROP	TARGET PESTS	RATE		REMARKS
		lb. a.i./A	fl. oz./A	
COTTON	Cutworm spp. Soybean Thrips Tobacco Thrips	0.015-0.02	1.92-2.56	<p>Ground application: Apply in a minimum of 10 gals. per acre or sufficient spray volume to obtain full coverage of the foliage or target area.</p> <p>Air application: Apply in a minimum of 2 gals. per acre or sufficient spray volume to obtain full coverage of the foliage or target area.</p> <p>ULV application: Lambda-Cy 1EC may be mixed with once-refined vegetable oil and applied in a minimum of at least 1 qt. of finished spray per acre</p> <p>Make applications when pests appear and repeat applications as necessary, usually at intervals of 5 to 7 days. Apply in sufficient volume to ensure sufficient coverage of foliage.</p> <p>Under light bollworm/budworm infestation levels, 0.02 lb. a.i. per acre may be applied in conjunction with intense field monitoring.</p> <p>Boll Weevil: Spray on a 3- to 5-day schedule.</p> <p>Cotton Bollworm, Tobacco Budworm: Lambda-Cy 1EC also provides ovicidal control of unhatched <i>Heliothis</i> spp. eggs.</p> <p>¹For control of first and second instar only. ²Suppression only. ³See resistance statement under GENERAL INFORMATION.</p>
	Cabbage Looper Cotton Fleahopper Cotton Leafperforator Cotton Leafworm Lygus Bug spp. ³ Pink Bollworm Saltmarsh Caterpillar	0.02-0.03	2.56-3.84	
	Bandedwing Whitefly ^{2,3} Beet Armyworm ^{1,3} Boll Weevil Brown Stink Bug Cotton Aphid ^{2,3} Cotton Bollworm European Corn Borer Fall Armyworm Green Stink Bug Southern Green Stink Bug Sweetpotato Whitefly ^{2,3} Tobacco Budworm ³ Two-spotted Spider Mite ²	0.025-0.04	3.20-5.12	
	<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 1.6 pts. (0.2 lb.a.i.) per acre 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. Synthetic pyrethroid products include but are not limited to Ambush® insecticide (or other permethrin insecticide), Asana® XL insecticide (or other esfenvalerate insecticide), Baythroid® emulsifiable pyrethroid insecticide (or other cyfluthrin insecticide), Capture® insecticide/miticide (or other bifenthrin insecticide), Danitol® 2.4 EC Spray insecticide/miticide (or other fenpropathrin insecticide), Decis® insecticide, Fanfare® 2EC, Karate® insecticide (or other lambda-cyhalothrin insecticide), Karate® insecticide with Zeon® technology, Mustang® insecticide, and Warrior® or Warrior® insecticide with Zeon® technology (or other lambda cyhalothrin insecticide). 			
FRUITING VEGETABLES: Eggplant Ground Cherry Pepino Peppers (bell and nonbell) Tomatillo Tomato	Cabbage Looper Cutworm spp. Hornworm spp.	0.015-0.025	1.92-3.20	<p>Ground application: Apply in a minimum of 10 gals. per acre or sufficient spray volume to obtain full coverage of the foliage or target area.</p> <p>Air application: Apply in a minimum of 2 gals. per acre or sufficient spray volume to obtain full coverage of the foliage or target area.</p> <p>Make applications when pests appear and repeat applications as necessary, usually at intervals of 5 or more days. Apply in sufficient volume to ensure sufficient coverage of foliage.</p> <p>¹For control of first and second instar only. ²Suppression only. ³See resistance statement under GENERAL INFORMATION. ⁴For control before the larva bores into the plant stalk or fruit. ⁵ Does not include Western Flower Thrips.</p>
	Aphid spp. ^{2,3} Beet Armyworm ^{1,3} Blister Beetle spp. Colorado Potato Beetle ³ Cucumber Beetle spp. (Adult) European Corn Borer ⁴ Fall Armyworm ¹ Flea Beetle spp. Grasshopper spp. Japanese Beetle (Adult) Leafhopper spp. ² Leafminer spp. Meadow Spittlebug Pepper Weevil (Adult) ² Plant Bug spp. Southern Armyworm ¹ Spider Mite spp. ² Stalk Borer ⁴ Stink Bug spp. Thrips ⁵ Tobacco Budworm ³ Tomato Fruitworm Tomato Pinworm Tomato Psyllid ^{2,3} Vegetable Weevil (Adult) Whitefly spp. ^{2,3} Yellow-striped Armyworm ¹	0.02-0.03	2.56-3.84	
	<ul style="list-style-type: none"> Do not apply within 5 days of harvest. Do not apply more than 0.36 lb. a.i. (2.88 pts.) per acre 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 Edible Podded, Succulent Shelled or Dried Shelled <i>Phaseolus</i> spp. includes: field, kidney, lima, navy, pinto, runner, snap, tepary, and wax beans <i>Vigna</i> spp. includes: adzuki, asparagus, moth, mung, rice, urd and yardlong 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 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	Cutworm spp. Green Cloverworm Imported Cabbageworm Mexican Bean Beetle Saltmarsh Caterpillar Velvetleaf Caterpillar	0.015-0.025	1.92-3.20	Ground application: Apply in a minimum of 10 gals. per acre or 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 of the foliage or target area. Make applications when pests appear and repeat applications as necessary, usually at intervals of 5 or more days. Apply in sufficient volume to ensure sufficient coverage of foliage. ¹ For control before the larva bores into the plant stalk or pods. ² For control of the first and second instar only. ³ For suppression only. ⁴ See resistance statement under GENERAL INFORMATION. ⁵ Does not include Western Flower Thrips.
	Alfalfa Caterpillar Aphid spp. ⁴ Armyworm ² Bean Leaf Beetle Bean Leafskeltonizer Blister Beetle spp. Corn Earworm Corn Rootworm Beetle spp. (Adult) Cucumber Beetle spp. (Adult) Curculio and Weevil spp. ¹ (foliage and pod feeding adults and larvae) European Corn Borer Fall Armyworm ² Flea Beetle spp. (Adult) Flea Hopper spp. Grasshopper spp. Japanese Beetle (Adult) Leafhopper spp. Leaf-tier spp. Looper spp. Meadow Spittlebug Painted Lady Butterfly (larva) Plant Bug spp. including Lygus spp. ⁴ Stalk Borer ¹ Stink Bug spp. Three-cornered Alfalfa Hopper Thrips spp. ^{4,5} Tobacco Budworm ⁴ Webworm spp. Western Bean Cutworm Western Yellow-striped Armyworm ² Yellow-striped Armyworm ²	0.02-0.03	2.56-3.84	
	Beet Armyworm ^{3,4} Leafminer spp. ^{3,4} Lesser Cornstalk Borer ³ Soybean Looper ^{3,4} Spider Mite spp. ³ Whitefly spp. ^{3,4}	0.03	3.84	
	<ul style="list-style-type: none"> 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.) per acre per season. For succulent and dried shelled peas and beans, do not graze livestock in treated areas or harvest vines for forage or hay. 			

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CROP	TARGET PESTS	RATE		REMARKS
		lb. a.i./A	fl. oz./A	
LETTUCE (HEAD AND LEAF)	Alfalfa Looper Cabbage Looper Cutworm spp. Green Cloverworm Imported Cabbageworm Saltmarsh Caterpillar	0.015-0.025	1.92-3.20	Ground application: Apply in a minimum of 10 gals. per acre or 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 of the foliage or target area. Make applications when pests appear and repeat applications as necessary, usually at intervals of 5 or more days. Apply in sufficient volume to ensure sufficient coverage of foliage. ¹ For control of first and second instar only. ² Suppression only. ³ See resistance statement under GENERAL INFORMATION.
	Aphid spp. ^{2,3} Armyworm Beet Armyworm ^{1,3} Corn Earworm Diamondback Moth ³ European Corn Borer Fall Armyworm ¹ Flea Beetle spp. Grasshopper spp. Japanese Beetle (Adult) Leafhopper spp. Meadow Spittlebug Plant Bug spp. including Lygus spp. ³ Southern Armyworm Spider Mite spp. ² Stink Bug spp. Tobacco Budworm ³ Vegetable Weevil (Adult) Whitefly spp. ^{2,3}	0.02-0.03	2.56-3.84	
<ul style="list-style-type: none"> Do not apply within 1 day of harvest. Do not apply more than 0.3 lb. a.i. (2.4 pts.) per acre per season. 				
ONION (BULB) AND GARLIC	Cutworm spp. Leafminer spp. (Adult) Onion Maggot (Adult) Seedoron Maggot (Adult)	0.015-0.025	1.92-3.20	Ground application: Apply in a minimum of 10 gals. per acre or 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 of the foliage or target area. Make applications when pests appear and repeat applications as necessary, usually at intervals of 5 or more days. Apply in sufficient volume to ensure sufficient coverage of foliage. Use the higher label rates as thrips population increases and avoid rescue situations. For thrips control by aerial application, the addition of 1% COC v/v, ¼% 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 GENERAL INFORMATION.
	Aphid spp. ² Armyworm spp. ¹ Flower Thrips ^{2,3} Onion Thrips ³ Plant Bug spp. Stink Bug spp. Tobacco Thrips ³ Western Flower Thrips ^{2,3}	0.02-0.03	2.56-3.84	
<ul style="list-style-type: none"> Do not apply within 14 days of harvest. Do not apply more than 0.24 lb. a.i. (1.92 pts.) per acre per season. 				

CROP	TARGET PESTS	RATE		REMARKS
		lb. a.i./A	fl. oz./A	
PEANUT	Cutworm spp. Green Cloverworm Potato Leafhopper Red-necked Peanut Worm Threecornered Alfalfa Hopper Velvetbean Caterpillar	0.015-0.025	1.92-3.20	Ground application: Apply in a minimum of 10 gals. per acre or 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 of the foliage or target area. Make applications when pests appear and repeat applications as necessary, usually at intervals of 7 or more days. Apply in sufficient volume to ensure sufficient coverage of foliage. ¹ Use higher rates for large larvae. ² Suppression only. ³ See resistance statement under GENERAL INFORMATION.
	Bean Leaf Beetle Corn Earworm Fall Armyworm ¹ Grasshopper spp. Southern Corn Rootworm (Adult) Stink Bug spp. Tobacco Thrips Vegetable Weevil Whitefringed Beetle (Adult)	0.02-0.03	2.56-3.84	
	Aphid spp. ² Beet Armyworm ^{2,3} Lesser Cornstalk Borer ² Soybean Looper ^{2,3} Spider Mite spp. ²	0.03	3.84	
	<ul style="list-style-type: none"> Do not apply within 14 days of harvest. Do not apply more than 0.12 lb. a.i. (0.96 pt.) per acre per season. 			
POME FRUITS: Apple Crabapple Loquat Mayhaw Oriental Pear Pear Quince	Apple Aphid Apple Maggot (Adult) Cherry Fruit Fly spp. (Adult) Codling Moth Green Fruitworm Japanese Beetle Leafhopper spp. Leafroller spp. Lesser Appleworm Omnivorous leafroller Orange Tortrix Oriental Fruit Moth Pear Psylla ¹ Pear Sawfly Periodical Cicada Plant Bug spp. Plum Curculio Rosy Apple Aphid San Jose Scale (fruit infestations only) Spirea Aphid ¹ Stink Bug spp. Tent Caterpillar spp. Tentiform Leaf Miner spp. Tree Borer spp. Tufted Apple Budworm Webworm spp.	0.02-0.04	2.56-5.12	Ground application: Apply in a minimum of 50 gals. per acre or sufficient spray volume to obtain full coverage of the foliage or target area. Air application: Apply in a minimum of 10 gals. per acre or sufficient spray volume to obtain full coverage of the foliage or target area. Make applications when pests appear and repeat applications as necessary, usually at intervals of 5 or more days. Apply in sufficient volume to ensure sufficient coverage of foliage. ¹ Suppression only.
	<ul style="list-style-type: none"> Do not apply within 21 days of harvest. Do not apply more than 0.2 lb. a.i. (1.6 pts.) per acre per year. Do not apply more than 0.16 lb. a.i. (1.28 pts.) per acre per year post bloom. 			
STONE FRUITS: Apricot Sweet and Tart Cherry Neclarine Peach Plum Chickasaw Plum Damson Plum Japanese Plum Plumcot Prune	American Plum Borer Apple Maggot (Adult) Black Cherry Aphid Cherry Fruit Fly spp. (Adult) Codling Moth Green Fruitworm Japanese Beetle June Beetle Leafhopper spp. Leafroller spp. Oriental Fruit Moth Peach Twig Borer Peachtree Borer spp. Pear Sawfly Periodical Cicada Plant Bug spp. Plum Curculio Rose Chaler Stink Bug spp. Tent Caterpillar spp. Thrips spp.	0.02-0.04	2.56-5.12	Ground application: Apply in a minimum of 50 gals. per acre or sufficient spray volume to obtain full coverage of the foliage or target area. Air application: Apply in a minimum of 10 gals. per acre or sufficient spray volume to obtain full coverage of the foliage or target area. Make applications when pests appear and repeat applications as necessary, usually at intervals of 5 or more days. Apply in sufficient volume to ensure sufficient coverage of foliage.
	<ul style="list-style-type: none"> Do not apply within 14 days of harvest. Do not apply more than 0.2 lb. a.i. (1.6 pts.) per acre per year. Do not apply more than 0.16 lb. a.i. (1.28 pts.) per acre per year post bloom. 			

CROP	TARGET PESTS	RATE		REMARKS
		lb. a.i./A	fl. oz./A	
SUGARCANE	Mexican Rice Borer ¹ Pygmy Mole Cricket Rice Stalk Borer ¹ Sugarcane Aphid ³ Sugarcane Beetle (Adult) ² Sugarcane Borer ¹ Western Indian Craneffy Yellow Sugarcane Aphid ³	0.025-0.04	3.20-5.12	<p>Ground application: Apply in a minimum of 10 gals. per acre or sufficient spray volume to obtain full coverage of the foliage or target area</p> <p>Air application: Apply in a minimum of 2 gals. per acre or sufficient spray volume to obtain full coverage of the foliage or target area.</p> <p>Make applications when pests appear and repeat applications as necessary, usually at intervals of 7 or more days. Apply in sufficient volume to ensure sufficient coverage of foliage.</p> <p>¹For control before the larva bores into the plant stalk.</p> <p>²Suppression only of beetles active above ground.</p> <p>³See resistance statement under GENERAL INFORMATION.</p>
	<ul style="list-style-type: none"> Do not apply within 21 days of harvest. Do not apply more than 0.16 lb. a.i. (1.28 pts.) per acre per season. 			
SUNFLOWER	Cutworm spp. Sunflower Beetle	0.015-0.025	1.92-3.20	<p>Ground application: Apply in a minimum of 10 gals. per acre or sufficient spray volume to obtain full coverage of the foliage or target area</p> <p>Air application: Apply in a minimum of 2 gals. per acre or sufficient spray volume to obtain full coverage of the foliage or target area.</p> <p>Make applications when pests appear and repeat applications as necessary, usually at intervals of 5 or more days. Apply in sufficient volume to ensure sufficient coverage of foliage.</p> <p>¹For control of first and second instar only.</p> <p>²Suppression only.</p> <p>³See resistance statement under GENERAL INFORMATION.</p>
	Banded Sunflower Moth Fall Armyworm ¹ Grasshopper spp. Head-Clipper Weevil (Adult) Japanese Beetle (Adult) Leafhopper spp. Meadow Spittlebug Painted Lady (Thistle) Caterpillar Seed Weevil (Adult) Spotted Cabbage Looper Stem Weevil (Adult) Stink Bug spp. Sunflower Maggot (Adult) Sunflower Moth Woollybear Caterpillar	0.02-0.03	2.56-3.84	
	Beet Armyworm ^{2,3} Spider Mite spp. ²	0.03	3.84	
<ul style="list-style-type: none"> Do not apply within 45 days of harvest. Do not apply more than 0.12 lb. a.i. (0.96 pt.) per acre per season. Do not apply more than 0.09 lb. a.i. (0.72 pt.) per acre per season after bloom initiation. Do not apply as an ultra-low volume (ULV) spray. 				
TOBACCO (AIR DRIED): Burley Tobacco and Flue-Cured Tobacco	Amyworm spp. Blister Beetle spp. Cabbage Looper Corn Earworm Cucumber Beetle spp. (Adult) Cutworm spp. Cutworm spp. Grasshopper spp. Japanese Beetle (Adult) Katydid spp. Plant Bug spp. ³ Potato Tuberworm Salt Marsh Caterpillar Stinkbug spp. Tobacco Aphid spp. ^{2,3} Tobacco Budworm ¹ Tobacco Flea Beetle (Adult) Tobacco Hornworm Tobacco Thrips spp. ² Tomato Hornworm Tree Cncket spp. Vegetable Weevil (Adult) Webworm spp.	0.015-0.03	1.92-3.84	<p>Ground application: Apply in a minimum of 10 gals. per acre or sufficient spray volume to obtain full coverage of the foliage or target area.</p> <p>Air application: Apply in a minimum of 2 gals. per acre or sufficient spray volume to obtain full coverage of the foliage or target area.</p> <p>Make applications when pests appear and repeat applications as necessary, usually at intervals of 7 or more days. Apply in sufficient volume to ensure sufficient coverage of foliage.</p> <p>¹For control of first and second instar only.</p> <p>²Suppression only.</p> <p>³See resistance statement under GENERAL INFORMATION</p>
	<ul style="list-style-type: none"> Do not apply within 40 days of harvest. Do not apply more than 0.09 lb. a.i. (0.72 pt.) per acre per year. 			

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CROP	TARGET PESTS	RATE		REMARKS
		lb. a.i./A	fl. oz./A	
TREE NUTS: Almond Beech Nut Brazil Nut Butternut Cashew Chestnut Chinquapin Filbert (Hazlenut) Hickory Nut Macadamia Nut (Bush Nut) Walnut, Black Walnut, English (Persian)	Ants Chinch Bug Codling Moth Filbertworm Leaffooted Bug Leafroller spp. Navel Orangeworm Peach Twig Borer Plant Bug spp. Stink Bug spp. Walnut Aphid Walnut Husk Fly spp. (Adult)	0.02-0.04	2.56-5.12	Ground application: Apply in a minimum of 50 gals. per acre or sufficient spray volume to obtain full coverage of the foliage or target area. Air application: Apply in a minimum of 10 gals. per acre or sufficient spray volume to obtain full coverage of the foliage or target area. Make applications when pests appear and repeat applications as necessary, usually at intervals of 5 or more days. Apply in sufficient volume to ensure sufficient coverage of foliage.
Pecan	Hickory Shuckworm Pecan Casebearer spp. Pecan Weevil Pecan Aphid spp. Pecan Spittlebug Stink bug spp. Pecan Phylloxera spp.	0.02-0.04	2.56-5.12	
<ul style="list-style-type: none"> • Do not apply within 14 days of harvest. • Do not apply more than 0.10 lb. a.i. (1.26 pts.) per acre per year. • Do not apply more than 0.12 lb. a.i. (0.96 pt.) per acre per year post bloom. 				

**USE RECOMMENDATIONS
NONAGRICULTURAL USES**

CROP	TARGET PESTS	RATE		REMARKS
		lb. a.i./A	fl. oz./A	
CONIFER AND DECIDUOUS TREES: Plantations Nurseries	Bagworm Balsam Twig Aphid Birch Leafminer Black Pine Weevil Elm Leaf Beetle European Elm Bark Beetle Gypsy Moth Japanese Beetle June Beetle spp. Leaf Beetle spp. Leafroller spp. May Beetle spp. Mealybug spp. Pales Weevil Pine Chafer Pine Colaspis Beetle Pine Conelet Bug Pine Leaf Chermid Balsam Woolly Aphid Pine Needle Scale Pine Sawfly spp. Pine Tip Moth spp. Pine Tortoise Scale Pine Weevil spp. Poplar Aphid spp. Sawfly spp. Spittlebug spp. Spruce Budworm Tent Caterpillar spp. Tussock Moth spp. Webworm spp.	0.02-0.04	2.56-5.12	Ground application: Apply in a minimum of 10 gals. per acre or 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 of the foliage or target area. Make applications when pests appear and repeat applications as necessary. Apply in sufficient volume to ensure sufficient coverage of foliage. To control exposed foliage, flower, cone, seed, and bark feeding insects, apply as required by scouting. *Suppression only.
<ul style="list-style-type: none"> • Do not apply more than 0.24 lb. a.i. (1.92 pts.) per acre per year. 				

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 acre. For aerial applications, apply 15 fl. oz./A in a minimum of 10 gals. finished spray per acre.
• Do not apply more than 0.5 lb. a.i. (4 pts.) per acre per year.				
NON-CROPLAND (Excluding Public Land)	See Crop Outlets on this Lambda-cy 1EC label for target pests and rates.	See Crop Outlets	See Crop Outlets	Spray non-cropland adjacent to agricultural areas to control migratory insects, which may threaten crops. Follow general use directions, rates, and spray recommendations found elsewhere on this label for the adjacent crop out and target pests. Use highest labeled rates for dense/large foliage, high insect populations, and larger larval stages. Repeat as necessary to maintain control
• Do not exceed 0.2 lb. a.i. (1.6 pts.) per acre per year. • Do not graze livestock in treated areas.				

RATE CONVERSION CHART			
lb. ai/A	fl. oz./A	pts./A	treated acres/gal.
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.

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. **DO NOT ALLOW PRODUCT TO FREEZE.**

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 DISPOSAL: Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by State and local authorities, by burning. If burned, stay out of smoke.

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

WARRANTY STATEMENT

MAKHTESHIM AGAN OF NORTH AMERICA, INC. warrants that this product conforms to the chemical description on the label thereof and is reasonably fit for purposes stated on such label only when used in accordance with directions under normal use conditions. It is impossible to eliminate all risks inherently associated with use of this product. Crop injury, ineffectiveness, or other unintended consequences may result because of such factors as weather conditions, presence of other materials, or the manner of use or application, all of which are beyond the control of MAKHTESHIM AGAN OF NORTH AMERICA, INC. All such risks shall be assumed by the Buyer. Except as expressly provided herein, MAKHTESHIM AGAN OF NORTH AMERICA, INC. makes no warranties, guarantees, or representations of any kind, either expressed or implied, or by usage of trade, statutory or otherwise, with regard to the product sold, including, but not limited to merchantability, fitness for a particular purpose, use or eligibility of the product for any particular trade usage. The exclusive remedy of any buyer or user of this product for any and all losses, injuries, or damages resulting from or in any way arising from the use, handling, or application of this product, whether in contract, warranty, tort, negligence, strict liability, or otherwise, shall be damages not exceeding the purchase price paid for this product or, at MAKHTESHIM AGAN OF NORTH AMERICA, INC.'s election, the replacement of this product.

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