

#### OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION

WASHINGTON, D.C. 20460

September 30, 2024

Kresti Lyddon Lewis & Harrison, LLC Agent for Drexel Chemical Company 2461 S. Clark St. Ste 710 Arlington, VA 22202

Subject: Label Amendment – Label changes based on the 2022 National Marine

Fisheries Service Biological Opinion on Chlorpyrifos

Product Name: Drexel Lambdafos EPA Registration Number: 19713-671 Application Date: February 29, 2024

Decision Number: 582862

#### Dear Kresti Lyddon:

The Agency, in accordance with the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA), as amended, has completed reviewing all of the information submitted with your application to support the Registration Review of the above referenced product in connection with the Chlorpyrifos 2022 Biological Opinion. The Agency has concluded that your submission is acceptable. This approval does not affect any conditions that were previously imposed on this registration. You continue to be subject to existing conditions on your registration and any deadlines connected with them.

A stamped copy of your labeling is enclosed for your records. This labeling supersedes all previously accepted labeling. The next label printing of this product must use this labeling unless subsequent changes have been approved by the Agency. In accordance with 40 CFR § 152.130(c), Drexel Chemical Company (Drexel) may distribute or sell this product under the previously approved labeling until April 30, 2025. After April 30, 2025, Drexel may only distribute or sell this product if it bears this new revised labeling or subsequently approved

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labeling. "To distribute or sell" is defined under FIFRA section 2(gg) and its implementing regulation at 40 CFR § 152.3.

Should you wish to add/retain a reference to the company's website on your label, please be aware that the website becomes labeling under FIFRA and is subject to review by the Agency. If the website is false or misleading, the product would be misbranded and unlawful to sell or distribute under FIFRA section 12(a)(1)(E). 40 CFR 156.10(a)(5) lists examples of statements EPA may consider false or misleading. In addition, regardless of whether a website is referenced on your product's label, claims made on the website may not substantially differ from those claims approved through the registration process. Therefore, should the Agency find or if it is brought to our attention that a website contains false or misleading statements or claims substantially differing from the EPA approved registration, the website will be referred to the EPA's Office of Enforcement and Compliance Assurance.

Your release for shipment of the product constitutes acceptance of these conditions. If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA section 6.

If you have any questions, please contact Patricia Biggio at 202-566-1938 or at biggio.patricia@epa.gov.

Sincerely,

Dana Friedman Branch Chief

Risk Management and Implementation Branch I Pesticide Re-evaluation Division

Dana L Trudman

**Enclosure** 

CC: Michael Walsh, Registration Division, PM11

CHLORPYRIFOS GROUP 1B INSECTICIDE LAMBDA-CYHALOTHRIN GROUP 3A INSECTICIDE

## RESTRICTED USE PESTICIDE

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.



ACCEPTED

Sep 30, 2024

Under the Federal Insecticide, Fungicide and Rodenticide Act as amended, for the pesticide registered under

EPA Reg. No. 19713-671

# Lambdafos™

For the control of listed insects in Field, Fruit and Vegetable crops.

#### **ACTIVE INGREDIENTS:**

Chlorpyrifos	
Lambda-cvhalothrin	
OTHER INGREDIENTS:	
TOTAL:	100 000/

This product contains 2.56 pounds of Chlorpyrifos and 0.13 pound of Lambda-cyhalothrin active ingredients per gallon. Contains petroleum distillate.

# 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 the label, find someone to explain it to you in detail.)

See FIRST AID Below SHAKE WELL BEFORE USING [Recirculate Contents Before Use]

EPA Reg. No. 19713-671 EPA Est. No. 19713-GA-1 Net Content: 2.5 Gals. (9.46 L)

## FIRST AID

(Organophosphate)

#### IF SWALLOWED:

- · Immediately call a poison control center or doctor.
- Do not induce vomiting unless told to do so by a poison control center or doctor.
- Do not give any liquid to the person.
- Do not give anything by mouth to an unconscious person.

#### IF INHALED:

- Move person to fresh air.
- If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth, if possible.
- Call a poison control center or doctor for further treatment advice.

#### IF IN EYES

- Hold eye open and rinse slowly and gently with water for 15 to 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 to 20 minutes.
- · Call a poison control center or doctor for treatment advice.

Have the product container or label with you when calling a poison control center or doctor or going for treatment. You may also call CHEMTREC at 800-424-9300 for emergency.

NOTE TO PHYSICIAN: Chlorpyrifos is a cholinesterase inhibitor. Treat symptomatically. If exposed, plasma and red blood cell cholinesterase tests may indicate significance of exposure (baseline data are useful). Atropine, only by injection, is the preferable antidote. Oximes, such as 2-PAM/protopam, may be therapeutic if used early; however, use only in conjunction with atropine. In case of severe acute poisoning, use antidote immediately after establishing an open airway and respiration. Contains petroleum distillate – vomiting may cause aspiration pneumonia.



#### PRECAUTIONARY STATEMENTS

#### **Hazards To Humans And Domestic Animals**

**WARNING:** May be fatal if swallowed. Harmful if inhaled. Causes moderate eye irritation. Wash thoroughly with soap and water and after handling and before eating, drinking, chewing gum or using tobacco or the toilet. Avoid breathing spray mist. Remove and wash contaminated clothing before reuse. Avoid contact with eyes or clothing. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

#### PERSONAL PROTECTIVE EQUIPMENT (PPE)

Materials that are chemical-resistant to this product are barrier laminate and viton ≥14 mils.

Mixers and loaders using a mechanical transfer loading system and applicators using aerial application equipment must wear: Long-sleeved shirt and long pants, shoes and socks and protective eyewear.

In addition to the above, mixers and loaders using a mechanical transfer loading system must wear: Chemical-resistant gloves, chemical-resistant apron, a NIOSH-approved particulate respirator with an R or P filter with NIOSH approval number prefix TC-84A or a NIOSH approved powered air purifying respirator with an HE filter with NIOSH approval number prefix TC-21C.

See "ENGINEERING CONTROLS" for additional requirements.

All other mixers, loaders, applicators and handlers must wear: Coveralls over long-sleeved shirt and long pants, chemical-resistant gloves, chemical-resistant apron when mixing or loading or exposed to the concentrate, chemical-resistant footwear plus socks, chemical-resistant headgear for overhead exposure and a NIOSH-approved particulate respirator with an R or P filter with NIOSH approval number prefix TC-84A or a NIOSH approved powered air purifying respirator with an HE filter with NIOSH approval number prefix TC-21C.

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

#### **ENGINEERING CONTROLS**

Mixers and loaders supporting aerial applications must use a mechanical transfer system that meets the requirements listed in the Worker Protection Standard (WPS) for Agricultural Pesticides [40 CFR 170.240(d)(4)] for dermal protection and must:

- Wear the personal protective equipment required above for mixers/loaders.
- Wear protective eyewear.

Pilots must use an enclosed cockpit in a manner that meets the requirements listed in the WPS for Agricultural Pesticides [40 CFR 170.240(d) (6)].

Use of human flaggers is prohibited. Mechanical flagging equipment must be used.

When handlers use closed cab motorized ground application equipment in a manner that meets the requirements listed in the 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:** 1) Wash hands thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. 2) Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. 3) 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 product is toxic to fish, aquatic invertebrates, small mammals and birds. Do not apply directly to water or to areas where surface water is present or to intertidal areas below the mean high water mark. Drift and runoff from treated areas may be hazardous to aquatic organisms in water adjacent to treated areas. Do not contaminate water when disposing of equipment washwaters or rinsate.

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.

#### RESISTANCE MANAGEMENT

This product is a Group 1B and 3A insecticides or acaricide. Insect/mite biotypes with acquired resistance to Groups 1B and 3A may eventually dominate the insect/mite population if Group 1B and 3A insecticides or acaricides are used repeatedly in the same field or in successive years as the primary method of control for targeted species. This may result in partial or total loss of control of those species by this product or other Group 1B and 3A insecticides or acaricides.

To delay insecticide or acaricide resistance, consider:

- Avoiding the consecutive use of this product or other Group 1B and 3A insecticides/acaricides that have similar target site of action on the same insect/mite species.
- Using tank-mixtures or premixes with insecticides/acaricides from a different target site action Group as long as the involved products are all registered for the same use and have different sites of action.
- Basing insecticide/acaricide use on a comprehensive IPM program.
- Monitoring treated insect/mite populations for loss of field efficacy.
- Contacting your local extension specialist, certified crop advisors, and/or manufacturer for insecticide/acaricide resistance management and/or IPM recommendations for specific site and resistant pest problems.

#### **DIRECTIONS FOR USE**

#### RESTRICTED USE PESTICIDE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. Read all directions for use carefully before applying. Use as a wide area/general outdoor treatment for ants and other miscellaneous pests (excludes wide-area mosquito adulticide use) is prohibited.

- 1. Do not apply within 25 feet of aquatic habitats (such as, but not limited to, lakes, reservoirs, rivers, permanent streams, wetlands or natural ponds, estuaries, and commercial fish farm ponds).
- 2. Do not apply directly to, or allow the product to enter 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.
- 3. 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 to vertical surfaces directly above pervious or impervious surfaces that drain into ditches, storm drains, gutters, or surface waters.
- 5. Do not apply or irrigate to the point of runoff.

#### **Endangered Species Protection Requirements:**

It is a Federal offense to use any pesticide in a manner that results in an unauthorized "take" (e.g., kill or otherwise harm) of an endangered species and certain threatened species under the Endangered Species Act section 9. When using this product, you must follow the measures contained in the Endangered Species Protection Bulletin for the area in which you are applying the product. You must obtain a Bulletin no earlier than six months before using this product. To obtain Bulletins, consult http://www.epa.gov/espp/, call 1-844-447-3813, or email ESPP@epa.gov. You must use the Bulletin valid for the month in which you will apply the product.

Reporting Ecological Incidents: To report ecological incidents, including mortality, injury, or harm to plants and animals, call 901-774-4370.

#### AGRICULTURAL USE REQUIREMENTS

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.

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, restricted entry interval and notification to workers (as applicable). 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). The REI for each crop is listed in the directions for use associated with each crop.

**Exception:** If the product is soil-injected or soil-incorporated, the Worker Protection Standard, under certain circumstances, allows workers to enter the treated area if there will be no contact with anything that has been treated. Certified crop advisors or persons entering under their direct supervision under certain circumstances may be exempt from the early reentry requirements pursuant to 40 CFR Part 170.

PPE required for early entry into treated areas that is permitted under the Worker Protection Standard and involves contact with anything that has been treated, such as plants, soil or water, is: Coveralls over short-sleeved shirt and short pants, chemical-resistant gloves made of barrier laminate or Viton ≥14 mils, chemical-resistant footwear plus socks and chemical-resistant headgear for overhead exposure.

Notify workers of the application by warning them orally and by posting warning signs at entrances to treated areas.

#### PRODUCT INFORMATION

LAMBDAFOS is an emulsifiable concentrate for use in listed crops. This product resists wash off once it is dry. Target pests and application rates are provided in the accompanying tables.

#### **USE PRECAUTIONS**

Insect control may be reduced at low spray volumes under high temperature and wind conditions. Some reduction in insect control may occur under unusually cool conditions.

Flood Irrigation: To avoid contamination of irrigation tail waters, do not flood irrigate within 24 hours following a soil surface or foliar application of this product.

#### SPRAY DRIFT MANAGEMENT

#### **BUFFER ZONES**

#### **New York State**

In New York State, a 25 foot vegetated, non-cropped buffer strip not traversed 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 foot vegetated non-cropped buffer strip for runoff protection would be part of the larger 50 feet buffer strip (or 450 ft. buffer strip for ULV application) required for spray drift.

#### **Vegetative Buffer Strip**

Construct and maintain a minimum 10 foot wide vegetative filter strip of grass or other permanent vegetation between the field edge and down gradient aquatic habitat (such as, but not limited to lakes, reservoirs, rivers, permanent streams, marshes or natural ponds, estuaries and commercial fish farm ponds). Only apply products containing Lambda-cyhalothrin onto fields where a maintained vegetative buffer strip of at least 10 feet exists between the field and down gradient aquatic habitat.

For guidance, refer to the following publication for information on constructing and maintaining effective buffers: *Conservation Buffers to Reduce Pesticide Losses. Natural Resources Conservation Services.* USDA, NRCS. 2000. Fort Worth, Texas. 21 pp., http://www.nrcs.usda.gov/Internet/FSE\_DOCUMENTS/nrcs143\_023819.pdf.

#### Buffer Zone for Ground Application (Groundboom or Overhead Chemigation)

Do not apply within 25 feet of aquatic habitats (such as lakes, reservoirs, rivers, streams, marshes, ponds, estuaries and commercial fish ponds).

#### **Buffer Zone for Ground Application (Airblast)**

Do not apply within 50 feet of aquatic habitats (such as lakes, reservoirs, rivers, streams, marshes, ponds, estuaries and commercial fish ponds).

#### **Buffer Zone for ULV Aerial Application**

Do not apply within 450 feet of aquatic habitats (such as lakes, reservoirs, rivers, streams, marshes, 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, ponds, estuaries and commercial fish ponds).

#### SPRAY DRIFT REQUIREMENTS

#### Wind Direction and Speed

Only apply this product if the wind direction favors on-target deposition. Do not apply when the wind velocity exceeds 15 mph.

#### Temperature Inversion

Do not make 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.

#### **Droplet Size**

Use only medium or coarser spray nozzles (for ground and non-ULV aerial application) according to ASABE (S572.1) definition for standard nozzles. In conditions of low humidity and high temperatures, applicators should use a coarser droplet size.

#### Additional Requirements for Ground Applications

- · Wind speed must be measured adjacent to the application site on the upwind side immediately prior to application.
- For groundboom applications, apply using a nozzle height of no more than 4 feet above the ground or crop canopy.
- For airblast applications, turn off outward pointing nozzles at row ends and when spraying the outer two rows. To minimize spray loss over the top in orchard applications, spray must be directed into the canopy.

#### **Additional Requirements for Aerial Applications**

- Mount the spray boom on the aircraft so as to minimize drift caused by wingtip or rotor vortices. Use the minimum practical boom length and must not exceed 75% of the wingspan or 80% of the rotor diameter.
- Flight speed and nozzle orientation must be considered in determining droplet size.
- Release spray at the lowest height consistent with pest control and flight safety. Do not release spray at a height greater than 10 feet above the crop canopy unless a greater height is required for aircraft safety.
- When applications are made with a crosswind, the swath will be displaced downwind. The applicator must compensate for this displacement at the downwind edge of the application area by adjusting the path of the aircraft upwind.

The buffer distances specified in the table below are the distances in feet that must exist to separate sensitive sites from the targeted application site. Buffers are measured from the edge of the sensitive site to the edge of the application site.

Sensitive sites are areas frequented by non-occupational bystanders (especially children). These include residential lawns, pedestrian sidewalks, outdoor recreational areas such as school grounds, athletic fields, parks and all property associated with buildings occupied by humans for residential or commercial purposes. Sensitive sites include homes, farmworker housing, or other residential buildings, schools, daycare centers, nursing homes and hospitals. Non-residential agricultural buildings, including barns, livestock facilities, sheds and outhouses are not included in this prohibition.

Application Rate	Application Rate	Nozzle Droplet	Required S	etback (Buffer Zo	nes) In Feet
(Lb. Chlorpyrifos a.i./Acre)	(Fl. oz. of This Product / Acre)	Types	Aerial	Airblast	Ground
> 0.5 to 1	25.55 to 51.1	coarse or very coarse	10	10	10
> 0.5 to 1	25.55 to 51.1	medium	25	10	10
> 1 to 2	51.1 to 102.2	coarse or very coarse	50	10	10
> 1 to 2	51.1 to 102.2	medium	80	10	10
> 2 to 3	102.2 to 153.3	coarse or very coarse	80*	10	10
> 2 to 3	102.2 to 153.3	medium	100*	10	10
> 3 to 4	153.3 to 204.4	medium or coarse	NA**	25	10
> 4	>204.4	medium or coarse	NA**	50	10

<sup>\*</sup> Aerial application of greater than 2 lbs. a.i. per acre is only permitted for Asian Citrus psylla control, up to 2.3 lbs. a.i. per acre.

Only pesticide handlers are permitted in the setback area during application of this product. Do not apply this product if anyone other than a mixer, loader or applicator is in the setback area. **Exception:** Vehicles and persons riding bicycles that are passing through the setback area on public or private roadways are permitted.

## APPLICATION DIRECTIONS BROADCAST FOLIAR APPLICATION

Apply with conventional power-operated spray equipment using nozzles and spray pressures specified for insecticides. Apply this product in a spray volume of not less than 2 gallons per acre for aerial application equipment (fixed wing or helicopter) or not less than 10 gallons per acre for ground equipment, unless otherwise specified. Increase spray volume to ensure adequate coverage with increased density and height of crop canopy. See "SPRAY DRIFT REQUIREMENTS" section for droplet size.

#### **GROUND APPLICATION**

Orient the boom and nozzles so that uniform coverage is obtained. The swath width should not be wider than the boom. Follow nozzle manufacturer's specifications for insecticide nozzles with respect to nozzle type, pressure and spacing.

#### **BROADCAST SOIL APPLICATION**

Apply with conventional power-operated spray equipment that will apply the product uniformly to the soil surface. Use nozzles that produce medium or coarse droplets. Unless otherwise indicated, apply in a spray volume of 10 gallons per acre or more. For band application, use proportionally less spray volume.

#### **AERIAL APPLICATION**

Use a minimum spray volume of 2 gallons per acre. Mark swaths by mechanical flagging, permanent markers or use of GPS equipment.

#### CHEMIGATION APPLICATION

Apply this product through properly equipped chemigation systems for insect control in Alfalfa, Cotton, Soybeans and Wheat or other crops as specified in manufacturer supplemental labeling. Do not apply this product by chemigation unless specified in crop specific directions in this label or manufacturer supplemental labeling. Do not apply to labeled crops through any other type of irrigation system.

Note: Unless otherwise indicated in specific use directions, the application rates for chemigation are the same as those for broadcast application.

#### **Directions for Sprinkler Chemigation**

Apply this product only through overhead sprinkler irrigation systems that will apply water uniformly, including center pivot, lateral move, end tow, side (wheel) roll, traveler, big gun, solid set, micro sprinkler or hand move. Do not apply this product through any other type of irrigation system. Do not apply through sprinkler systems that deliver a low coefficient of uniformity such as certain water drive units.

For continuously moving systems, the mixture containing this product must be injected continuously and uniformly into the irrigation water line as the sprinkler is moving. If continuously moving irrigation equipment is used, apply in no more than 0.25 inch of water. For irrigation systems that do not move during operation, apply no more than 0.25 inch of irrigation immediately before the end of the irrigation cycle.

#### **Chemigation Equipment Preparation**

The following use directions must be followed when this product is applied through sprinkler irrigation systems. Thoroughly clean the chemigation system and tank of any fertilizer or chemical residues and dispose of the residues according to state and federal laws. Flush the injector system with soap and water. Determine the amount of this product needed to cover the desired acreage. Mix according to instructions in the "MIXING DIRECTIONS" section and bring mixture to desired volume. Continually agitate the mixture during mixing and application.

#### **Chemigation Equipment Calibration**

In order to calibrate the irrigation system and injector to apply the mixture containing this product, determine the following: 1) Calculate the number of acres irrigated by the system; 2) Calculate the amount of product required and premix; 3) Determine the irrigation rate and the number of minutes for the system to cover the intended treatment area; 4) Calculate the total gallons of insecticide mixture needed to cover the desired acreage. Divide the total gallons of insecticide mixture needed by the number of minutes (minus time to flush out) to cover the treatment area. This value equals the gallons per minute output that the injector or eductor must deliver. Convert the gallons per minute to milliliters or fluid ounces per minute if needed; 5) Calibrate the injector pump with the system in operation at the desired irrigation rate. It is suggested that the timed output of the injector pump be checked at least twice before operation and the system monitored during operation.

<sup>\*\*</sup>NA means application is Not Allowed.

#### **Chemigation Equipment Requirements**

- The system must contain an air gap, an approved back flow prevention device, a functional check valve, vacuum relieve valve (including inspection port) and low pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from back flow. Refer to the "American Society of Agricultural Engineer's Engineering Practice 409" for more information or State specific regulations.
- 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 that 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.
- To ensure uniform mixing of the insecticide into the water line, inject the mixture through a nozzle placed in the fertilizer injection port of just ahead of an elbow or tee in the irrigation line so that the turbulence will assist in mixing. The injection point must be located after all backflow prevention devices on the water line.
- The tank holding the insecticide mixture must be free of rust, fertilizer, sediment and foreign material and equipped with an in-line strainer situated between the tank and the injection point.

#### **Chemigation Operation**

Start the water pump and system and let the system achieve the desired pressure and speed before starting the injector. Check for leaks and uniformity and make repairs before any chemigation takes place. Start the injector system and calibrate according to manufacturer's specifications. This procedure is necessary to deliver a desired rate per acre in a uniform manner. When the application is finished, flush and clean the entire irrigation and injector system prior to shutting down the system.

#### **Chemigation Precautions**

- · 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, contact state extension service specialist, equipment manufacturers or other experts.
- A person knowledgeable of the chemigation system and responsible for its operation or under the supervision of the responsible person, shall operate the system and make necessary adjustments should the need arise and continuously monitor the injection.

#### **Chemigation Restrictions**

- Do not add crop oil when this product is applied by chemigation.
- · Do not connect an irrigation system used for pesticide applications (including greenhouse systems) to a public water system.
- The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection.
- The pesticide injection pipeline must 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 or in cases where there is no water pump, 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. End guns must be turned off during the application if they irrigate non-target areas.
- Do not allow irrigation water to collect or runoff and pose a hazard to livestock, wells or adjoining crops.
- Do not enter treated areas during the reentry interval unless required PPE is worn.
- Do not apply through sprinkler systems that deliver a low coefficient of uniformity such as certain water drive units.

#### **MAXIMUM APPLICATION RATE\***

Do not exceed the allowed maximum application rate as listed below by using other lambda-cyhalothrin or gamma-cyhalothrin containing products. The maximum rate allowed for use if both Lambda-cyhalothrin and Gamma-cyhalothrin products are used during the same crop growing season can be calculated based upon the listed maximum rates in the following table:

Crop	Lambda-cyhalothrin (Lb. a.i./Acre/Season)	Gamma-cyhalothrin (Lb. a.i./Acre/Season)
Alfalfa	0.12	0.06
Cotton	0.20	0.10
Soybeans	0.06	0.03
Peaches and Tart Cherries	0.20	0.10
Wheat	0.06	0.03

<sup>\*</sup> When the maximum application rate of Lambda-cyhalothrin is reached, no Gamma-cyhalothrin product can be used. The Gamma-cyhalothrin quantity can be multiplied by 2 to calculate the total a.i. based upon Lambda-cyhalothrin.

#### **MIXING DIRECTIONS**

#### **This Product Alone**

To prepare the spray, add a portion of the required amount of water to the spray tank and with the spray tank agitator operating, add this product. Complete filling the tank with the balance of water needed. Maintain sufficient agitation during both mixing and application to ensure uniformity of the spray mixture.

#### This Product In Tank-Mixture

This product is compatible with insecticides, herbicides, miticides and fungicides and non-pressure fertilizer solutions commonly used except for alkaline materials, such as Bordeaux mixture or Copper-based fungicides and lime. Conduct a small jar compatibility test prior to tank mixing. Prepare tank mixtures in the same manner above as for "This Product Alone". When tank-mixing this product with herbicides, add wettable powders first, flowables second and emulsifiable concentrates last. When a fertilizer solution is involved, for best results, use a fertilizer pesticide compatibility agent. Maintain constant agitation during both mixing and application to ensure uniformity of the spray mixture. Do not allow spray mixtures to stand overnight.

#### **Tank-Mix Compatibility Test**

Test compatibility of the intended tank-mixture before adding this product to the spray or mix tank. Add proportional amounts of each tank-mix ingredient to a clear pint or quart jar, cap it, invert the jar several times and let set for 15 minutes. If the mixture balls-up, forms flakes, sludge, jells, oily films or layers or other precipitates that do not readily redisperse, these type reactions indicate an incompatible mixture and must not be used.

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

#### **USES**

#### **ALFALFA**

## For use ONLY in the following states: AZ, CO, IA, ID, IL, KS, MI, MN, MO, MT, NE, ND, NM, NV, OK, OR, SD, TX, UT, WA, WI, WY

Worker Restricted Entry Interval: Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 24 hours unless PPE required for early entry is worn.

Apply as a broadcast foliar spray using aircraft or ground spray equipment. Use a higher rate in the rate range for increased pest pressure. Use a minimum spray volume of 2 gallons per acre for aerial application (fixed wing or helicopter) or 10 gallons per acre for ground equipment. Use a spray volume of 5 gallons per acre or more by air or up to 20 gallons per acre by ground when foliage is dense and/or pest population is high and/or under high temperature and wind conditions. Some reduction in insect control may occur under unusually cool conditions.

**Chemigation:** This product may be applied through sprinkler irrigation systems to control listed foliar pests. Use specified broadcast application rates. See "CHEMIGATION APPLICATION" section for application instructions.

Target Pest	This Product/Acre
Corn rootworm adults (Spotted cucumber beetle)	6 to 13 fl. oz.
Grasshoppers	(0.12 to 0.26 lbs. Chlorpyrifos per acre
Leafhoppers	006 to 0.013 lbs. Lambda-Cyhalothrin per acre)
Alfalfa caterpillar	11 to 26 fl. oz.
Blue alfalfa aphid	(0.22 to 0.52 lbs. Chlorpyrifos per acre
Cutworm spp.	0.011 to 0.026 lbs. Lambda-Cyhalothrin per acre)
Green cloverworm	
Pea aphid	
Spotted alfalfa aphid*	
Velvetbean caterpillar	
Webworm spp.	
Alfalfa blotch leafminer	16 to 38 fl. oz.
Alfalfa seed chalcid (Adult)	(0.32 to 0.76 lbs. Chlorpyrifos per acre
Alfalfa weevil (Larva and Adult)	0.016 to 0.039 lbs. Lambda-Cyhalothrin per acre)
Armyworms	
Bean leaf beetle	
Blister beetle sp.	
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)	
Egyptian alfalfa weevil (Larva and Adult)	
Grape colapsis (Adult)	
Green June beetle (Adult)	
Green peach aphid	
Japanese beetle (Adult)	
Looper spp.	
Mexican bean beetle	
Pea weevil (Adult)	
Plant bugs	
Spider mites	
Spittlebug spp.	
Stink bug spp.	
Sweet clover weevil (Adult)	
Three-cornered alfalfa hopper	
Thrips spp. Whitefringed beetle spp. (Adult)	
*Suppression only.	

#### **Specific Use Precautions**

- Do not tank-mix this product with other pesticides, surfactants or fertilizer formulations unless prior use has shown the combination to be non-injurious to Alfalfa under current conditions of use. Some phytotoxic symptoms may be observed on young, tender, rapidly growing Alfalfa treated with this product. Alfalfa will outgrow these symptoms and no yield loss should be expected.
- This product is highly toxic to bees exposed to direct treatment on Alfalfa. Do not apply if nearby bees are clustered outside of hives and bees are actively foraging in the treated area. Protective information may be obtained from your Agricultural Extension Service.
- To avoid contamination of irrigation tail waters, do not flood irrigate within 24 hours following an application of this product.

#### **Specific Use Restrictions**

- Pre-Harvest Interval: Do not cut or graze treated Alfalfa within 7 days after application of this product
- Maximum single application rate is 38 fluid ounces of this product (0.75 lb. a.i. Chlorpyrifos and 0.04 lb. a.i. Lambda-cyhalothrin) per acre.
- Do not apply any product containing Chlorpyrifos more than once per year.

• Maximum Application Rate\*: Do not exceed the maximum application rate of 0.04 lb a.i. per acre per year allowed by using other Lambda-cyhalothrin or Gamma-cyhalothrin containing products. The maximum rate allowed for use if both Lambda-cyhalothrin and Gamma-cyhalothrin products are used during the same crop growing season can be calculated based upon the listed maximum rates in the following table:

Crop	Lambda-cyhalothrin (Lb. a.i./Acre/Season)	Gamma-cyhalothrin (Lb. a.i./Acre/Season)
Alfalfa	0.12	0.06

<sup>\*</sup> When the maximum application rate of Lambda-cyhalothrin is reached, no Gamma-cyhalothrin product can be used. The Gamma-cyhalothrin quantity can be multiplied by 2 to calculate the total a.i. based upon Lambda-cyhalothrin.

#### COTTON

#### For use ONLY in the following states: AL, FL, GA, NC, SC, VA

Apply as a broadcast foliar spray using aircraft or ground spray equipment. Use sufficient spray volume to ensure thorough coverage of treated plants, but no less than 10 gallons per acre for ground spray equipment or 2 gallons per acre for aircraft equipment. Treat when field counts indicate damaging insect populations are developing or present.

Chemigation: This product may be applied through sprinkler irrigation systems at specified broadcast application rates to control listed foliar pests. See "CHEMIGATION APPLICATION" section for application instructions. Proper application methods are necessary to ensure thorough spray coverage, correct rate and minimize off-target drift. Refer to "APPLICATION DIRECTIONS" for ground and aerial applications and "SPRAY DRIFT MANAGEMENT" sections of this label for instructions.

Do not make more than one application of this product or other products containing chlorpyrifos per year.

Target Pest	This Product/Acre
Cabbage looper	11 to 26 fl. oz.
Cotton leaf perforator	(0.22 to 0.52 lbs. Chlorpyrifos
Cutworms	0.011 to 0.026 lbs. Lambda-Cyhalothrin)
Grasshoppers	
Bollworm*	16 to 38 fl. oz.
Cotton aphid	(0.32 to 0.76 lbs. Chlorpyrifos
Cotton fleahopper**	0.016 to 0.039 lbs. Lambda-Cyhalothrin)
Cotton leaf worm	·
Cutworms spp.	
European corn borer	
Fall armyworm	
Plant bugs (Lygus, Mirids)**	
Saltmarsh caterpillar	
Thrips spp.	
Yellow striped armyworm	
SPECIFIC USE DIRECTIONS:	
* For best results on Bollworms, scout the fields twice per we	ek and apply when worms are 0.25 inch or less in length.
** Suppression will minimize damage from Cotton fleahoppers and	d Plant bugs. Use higher specified rates for increased levels of control.
Beet armyworm	22 to 38 fl. oz.
Boll weevil	(0.44 to 0.76 lbs. Chlorpyrifos
Pink bollworm	0.022 to 0.039 lbs. Lambda-Cyhalothrin)
Stink bug spp.	
Bandedwing whitefly	32 to 42 fl. oz.
Sweet potato whitefly	(0.64 to 0.84 lbs. Chlorpyrifos
Tobacco whitefly	0.033 to 0.04 lbs. Lambda-Cyhalothrin)

#### **SOYBEANS**

## For use ONLY in the following states: AL, CO, FL, GA, IA, IL, IN, KS, KY, MN, MO, MT, NC, ND, NE, NM, OH, OK, PA, SC, SD, TN, TX, VA, WI, WV, WY

Worker Restricted Entry Interval: Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 24 hours unless PPE required for early entry is worn.

#### Conservation Tillage: At-Plant or Pre-emergence Applications

Apply as a broadcast spray to surface trash and exposed soil using power-operated ground spray equipment. Use a total spray volume of 20 gallons per acre or more. Use a higher rate in the rate range to extend residual control.

#### Tank-Mixing

This product may also be applied in tank-mixtures with Paraquat or Glyphosate herbicide and/or liquid fertilizer solutions. See "MIXING DIRECTIONS" section for tank-mixing instructions. Read and carefully follow all applicable directions, restrictions and precautions on labeling for each product use in combination with this product. Follow the most restrictive label.

Target Pest	This Product/Acre
Cutworms	11 to 38 fl. oz.
Grasshoppers	(0.22 to 0.76 lbs. Chlorpyrifos
Lesser cornstalk borer	0.011 to 0.039 lbs. Lambda-Cyhalothrin)

#### Post-emergence Applications

Apply as a post-emergence broadcast spray using sufficient spray volume to ensure thorough coverage of treated plants, but no less than 10 gallons per acre for ground spray equipment or 2 gallons per acre for aircraft equipment. Use higher carrier volume when foliage is dense and/or pest pressure is high and/or under high temperatures and wind conditions. Apply when field counts indicate damaging pest populations are developing or present. This product may be tank-mixed with Glyphosate products when application is to be made to Glyphosate-tolerant Soybeans. Use a higher rate in the rate range when there is increased pest pressure.

**Chemigation:** This product may be applied through sprinkler irrigation systems at specified broadcast application rates to control listed foliar pests. See "CHEMIGATION APPLICATION" section for application instructions.

Target Pest	This Product/Acre
Grasshoppers	6 to 13 fl. oz.
Green cloverworm	(0.12 to 0.26 lbs. Chlorpyrifos
Velvetbean caterpillar	0.006 to 0.013 lbs. Lambda-Cyhalothrin)
Blister beetle spp.	11 to 26 fl. oz.
Cabbage looper	(0.22 to 0.52 lbs. Chlorpyrifos
Cutworms	0.011 to 0.026 lbs. Lambda-Cyhalothrin)
Painted lady caterpillar	
Saltmarsh caterpillar	
Silverspotted skipper	
Soybean aphid	
Spider mites	
Webworm spp.	
Wollybear caterpillar	
Yellowstriped armyworm	
Bean leaf beetle	16 to 38 fl. oz.
Brown marmorated stink bug	(0.32 to 0.76 lbs. Chlorpyrifos
Corn earworm	0.016 to 0.039 lbs. Lambda-Cyhalothrin)
Japanese beetle (Adult)	
Mexican bean beetle	
Mexican corn rootworm (Adult)	
Northern corn rootworm (Adult)	
Potato leafhopper	
Southern corn rootworm beetle (Adult)	
Stink bug spp.	
Three-cornered alfalfa hopper	
Thrips spp.	
Western corn rootworm beetle (Adult)	
Beet armyworm	22 to 38 fl. oz.
European corn borer	(0.44 to 0.76 lbs. Chlorpyrifos
Lesser cornstalk borer	0.022 to 0.039 lbs. Lambda-Cyhalothrin)

#### **Specific Use Restrictions**

- Do not make more than 1 application per year of this product or other products containing chlorpyrifos.
- Pre-Harvest Interval: Do not apply within 30 days before harvest.
- Maximum single application rate is 38 fluid ounces of this product (0.75 lb. a.i. Chlorpyrifos and 0.04 lb. a.i. Lambda-cyhalothrin) per acre.
- Do not allow meat or dairy animals to graze in treated areas or otherwise feed treated Soybean forage, hay and straw to meat or dairy animals.
- Maximum Application Rate\*: Do not exceed the maximum application rate of a.i. per acre per year allowed by using other Lambda-cyhalothrin or Gamma-cyhalothrin containing products. The maximum rate allowed for use if both Lambda-cyhalothrin and Gamma-cyhalothrin products are used during the same crop growing season can be calculated based upon the listed maximum rates in the following table:

Crop	Lambda-cyhalothrin (Lb. a.i./Acre/Season)	Gamma-cyhalothrin (Lb. a.i./Acre/Season)
Soybeans	0.06	0.03

<sup>\*</sup>When the maximum application rate of Lambda-cyhalothrin is reached, no Gamma-cyhalothrin product can be used. The Gamma-cyhalothrin quantity can be multiplied by 2 to calculate the total a.i. based upon Lambda-cyhalothrin.

#### TREE FRUITS\* (Dormant or Delayed Dormant Sprays)

Worker Restricted Entry Interval: Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 4 days for tree fruits unless PPE required for early entry is worn.

## APPLE: For use ONLY in the following states: AL, DC, DE, GA, IN, KY, MD, MI, NJ, NY, OH, PA, TN, VA, VT, WV

#### TART CHERRY: For use ONLY in the following state: MI

## PEACH: For use ONLY in the following states: AL, DC, DE, FL, GA, MD, MI, NC, NJ, NY, OH, PA, SC, VA, VT, WV

Apply as a dormant or delayed dormant spray. While this product may be used without oil, use oil to control additional pests for best results. See precautions for use of oil below.

Apply as a concentrate or dilute spray using conventional, power-operated spray equipment. For dilute sprays (greater than 200 gals. per acre), use sufficient spray volume to completely wet tree foliage, but not to point of runoff. For concentrate sprays (less than 200 gals. per acre), uniformly apply an equivalent amount of this product per acre.

Use a higher rate in the rate range when there is increased pest pressure.

#### **Use Precautions for Tree Fruits**

- Cold or dry conditions may cause this product plus oil sprays to infuse into trees resulting in bud damage or bud drop. Do not apply until Winter rains or irrigation has replenished soil moisture such that bark and twigs are not desiccated.
- To avoid contamination of irrigation tail waters, do not flood irrigate within 24 hours of application of this product.

#### Use Restrictions for Tree Fruits

- Do not make more than 1 application of Chlorpyrifos or other products containing Chlorpyrifos per year.
- Maximum single application rate is 100 fluid ounces of this product (2 lbs. a.i. Chlorpyrifos and 0.1 lb. a.i. Lambda-cyhalothrin) per acre.
- Do not allow meat or dairy animals to graze in treated orchards.
- Maximum Application Rate\*: Do not exceed the maximum application rate of 0.2 lb a.i. per acre per year allowed by using other Lambda-

<sup>\*</sup> Apple, Tart Cherry, Peach

cyhalothrin or Gamma-cyhalothrin containing products. The maximum rate allowed for use if both Lambda-cyhalothrin and Gamma-cyhalothrin products are used during the same crop growing season can be calculated based upon the listed maximum rates in the following table:

Crop	Lambda-cyhalothrin (Lb. a.i./Acre/ Season)	Gamma-cyhalothrin (Lb. a.i./Acre/Season)
Peach, Tart Cherry (See state restrictions above)	0.2	0.1

<sup>\*</sup>When the maximum application rate of Lambda-cyhalothrin is reached, no Gamma-cyhalothrin product can be used. The Gamma-cyhalothrin quantity can be multiplied by 2 to calculate the total a.i. based upon Lambda-cyhalothrin.

#### CHERRY (tart), PEACH

Target Pest	This Product/Acre
American plum borer	64 to 100 fl. oz.
Greater peach tree borer	(1.28 to 2 lbs. Chlorpyrifos
Lesser peach tree borer	0.07 to 0.1 lb. Lambda-Cyhalothrin)
Peach twig borer	

- Specific Use Restrictions for Tart Cherry, Peach: Do not make more than 1 application of Chlorpyrifos or other products containing Chlorpyrifos per year.
- Do not make a soil or foliar application of this product or other products containing Chlorpyrifos within 10 days of a dormant or delayed dormant application of Chlorpyrifos to the orchard.
- Maximum single application rate is 100 fluid ounces of this product (2 lbs. a.i. Chlorpyrifos and 0.1 lb. a.i. Lambda-cyhalothrin) per acre.
- Do not exceed the maximum rate of 0.08 lb. a.i. per acre per year allowed by using other Lambda-cyhalothrin or Gamma-cyhalothrin containing products. The maximum rate allowed for use if both Lambda-cyhalothrin and Gamma-cyhalothrin products are used during the same crop growing season can be calculated based upon the listed maximum rates in the "Maximum Application Rate" table above.

#### **APPLE**

## For use ONLY in the following states: AL, DE, DC, GA, IN, KY, MD, MI, NJ, NY, OH, PA, TN, VA, VT, WV.

Target Pest	This Product/Acre
Rosy apple aphid	64 to 100 fl. oz.
San Jose scale	(1.28 to 2 lbs. Chlorpyrifos
	0.07 to 0.1 lbs. Lambda-Cyhalothrin)

#### Specific Use Restrictions for Apple

Only 1 application of any Chlorpyrifos containing product can be made per acre per year. The application can be either a pre-bloom dormant or delayed dormant spray to the canopy or the trunk or a post-bloom application to the lower 4 feet of the trunk. For post-bloom application instructions and restrictions on Apple, refer to "TREE FRUITS (Trunk Spray or Pre-plant Dip)" section of the label.

#### **APPLE AND TREE FRUITS\* (Trunk Spray or pre-plant dip)**

Worker Restricted Entry Interval: Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 24 hours unless PPE required for early entry is worn.

#### **APPLE TREE TRUNK (Post-Bloom Application)**

Apply as a post-bloom application to the lower 4 feet of the Apple tree trunk for Borer control in States east of the Rockies only. Mix with water and apply directly to trunk from a distance of no more than 4 feet using low volume handgun or shielded spray equipment. Do not allow spray to contact foliage or fruit.

Target Pest	This Product/100 Gals.
American plum borer	41.6 fl. oz.
Apple bark borer	(0.83 lbs. a.i. Chlorpyrifos
Broadnecked root borer	0.04 lbs. a.i. Lambda-cyhalothrin)
Dogwood borer	
Flatheaded apple tree borer	
Roundheaded apple tree borer Tilehorned prionus	

#### **Specific Use Restrictions**

- Pre-Harvest Interval: Do not apply within 28 days before harvest.
- Maximum single application rate is 41.6 fluid ounces of this product (0.81 lb. a.i. Chlorpyrifos and 0.05 lb. a.i. Lambda-cyhalothrin) per 100 gallons per acre.
- Do not make more than 1 application of this product per acre per year
- Do not apply more than a total of 41.6 fluid ounces of this product (0.81 lb. a.i. Chlorpyrifos and 0.05 lb. a.i. Lambda-cyhalothrin) per 100 gallons per acre per year.
- This product may not be used if an application of any other products containing Chlorpyrifos has been made during the year.
- Do not allow meat or dairy animals to graze in treated orchards.
- Treat only the lower 4 feet of the Apple tree trunk.
- Do not apply when wind speed is greater than 10 mph.

#### **CHERRY (tart), PEACH**

Apply this product to tree trunks and lower branches using a coarse, low pressure spray to control pests listed in the following table. Do not make more than 1 application per year of this product or other products containing Chlorpyrifos. Use a higher rate in the rate range when there is increased pest pressure. Consult your State agricultural experiment station or extension service specialist for proper application timing for your area.

<sup>\*</sup> Apple, Tart Cherry, Peach

Crop	Target Pest	This Product/100 Gals.
Cherry (tart)	American plum borer	76.8 to 100 fl. oz.
	Greater peach tree borer	(1.54 to 2.0 lbs. Chlorpyrifos
	Lesser peach tree borer	0.078 to 0.102 lbs. Lambda-Cyhalothrin)
Peach	Peach tree borers*	153.6 fl. oz.
		(3.07 lbs. Chlorpyrifos
		0.16 lbs. Lambda-Cyhalothrin)

#### SPECIFIC USE DIRECTIONS:

- Peach Only Pre-plant Dip Application: For pre-plant control of Peach tree borer, use this product at the equivalent application rate of 96 fl. Ozs (2 lbs. a.i. Chlorpyrifos and 0.1 lb. a.i. Lambda-cyhalothrin). per 100 gals. of water. Dip trees several inches above the grafting bud scar and plant immediately or allow them to dry before returning to storage. Do not allow Peach trees to remain in contact with the dip solution.
- Peach (Established Trees): For control of Peach tree borer in established trees, apply before newly hatched Borers enter the tree. Use as a coarse, low-pressure trunk spray and thoroughly wet all bark areas from ground level to scaffold limbs. Do not allow spray to contact fruit. Consult written recommendations provided by your State agricultural experiment station or extension service specialist for proper time to treat in your area.

#### Specific Use Restrictions

- Pre-Harvest Interval: Do not apply within 14 days before harvest of Peach or within 21 days before harvest of Tart Cherry.
- Do not make more than 1 application per year of this product or other products containing Chlorpyrifos.
- Maximum single application rate is 100 fluid ounces of this product (2 lbs. a.i. Chlorpyrifos and 0.1 lb. a.i. Lambda-cyhalothrin) per acre.
- Do not exceed the maximum rate of 0.16 lb. a.i. per acre per year allowed by using other Lambda-cyhalothrin or Gamma-cyhalothrin containing products. The maximum rate allowed for use if both Gamma-cyhalothrin and Lambda-cyhalothrin products are used during the same crop growing season can be calculated based upon the listed maximum rates in the "Maximum Application Rate" table below.
- · Do not allow meat or dairy animals to graze in treated orchards.
- Maximum Application Rate\*: Do not exceed the maximum application rate of a.i. per acre per year allowed by using other Lambda-cyhalothrin or Gamma-cyhalothrin containing products. The maximum rate allowed for use if both Lambda-cyhalothrin and Gamma-cyhalothrin products are used during the same crop growing season can be calculated based upon the listed maximum rates in the following table:

Crop	Lambda-cyhalothrin (Lb. a.i./Acre/Season)	Gamma-cyhalothrin (Lb. a.i./Acre/Season)
Tree fruits	0.2	0.1

<sup>\*</sup> When the maximum application rate of Lambda-cyhalothrin is reached, no Gamma-cyhalothrin product can be used. The Gamma-cyhalothrin quantity can be multiplied by 2 to calculate the total a.i. based upon Lambda-cyhalothrin.

## SPRING WHEAT: For use ONLY in the following states: CO, KS, MT, NE, ND, SD, WY WINTER WHEAT: For use ONLY in the following states: CO, KS, MN, MT, NE, ND, OK, SD, TX,

Worker Restricted Entry Interval: Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 24 hours unless PPE required for early entry is worn.

Apply as a post-emergence broadcast spray using sufficient spray volume to ensure thorough coverage of treated plants, but no less than 10 gallons per acre for ground spray equipment or 2 gallons per acre for aircraft equipment. Apply when field counts indicate damaging pest populations are developing or present.

Chemigation: This product may be applied through sprinkler irrigation systems at specified broadcast application rates to control listed foliar pests. See "CHEMIGATION APPLICATION" section for application instructions.

Target Pest	This Product/Acre
Aphids spp. (such as English grain aphid, Greenbug, Oat bird-cherry aphid, Russian wheat aphid)*	6 to 13 fl. oz. (0.12 to 0.26 lbs. Chlorpyrifos
Brown Wheat mite	0.006 to 0.013 lbs. Lambda-Cyhalothrin)
Grasshoppers	0.000 to 0.010 lbs. Lambua-Oynalothiin)
SPECIFIC USE DIRECTIONS:	
*Consult university extension bulletins for local treatment recommendations.	
Army cutworms*	11 to 26 fl. oz.
Armyworm spp.	(0.22 to 0.52 lbs. Chlorpyrifos
Cereal leaf beetle**	0.011 to 0.026 lbs. Lambda-Cyhalothrin)
Cutworms*	
Flea beetle spp.	
Grass sawfly	
Orange blossom wheat midge	
Wheat midge***	
SPECIFIC USE DIRECTIONS:	
* Control may be reduced under high temperature conditions (greater than 8	0°F) under dry soil conditions or if larvae are more than 0.5 inc

- Control may be reduced under high temperature conditions (greater than 80°F), under dry soil conditions or if larvae are more than 0.5 inch
- \*\* For Cereal leaf beetle, target application when eggs are near hatching and larva is emerging as monitored by plant inspection.
- For control of Wheat midge, treat when 75% of the Wheat heads have emerged from the boot and when Midge adults are found in the crop (1 Midge per 4 to 5 heads). If possible, apply in the late afternoon or early evening when temperatures exceed 50°F and wind speed is less

unan 7 mpn.		
Stink bug spp.	16 to 25 fl. oz.	
	(0.32 to 0.5 lbs. Chlorpyrifos	
	0.016 to 0.025 lbs. Lambda-Cyhalothrin)	

#### **Specific Use Restrictions**

- Do not make more than 1 application of Chlorpyrifos or other products containing Chlorpyrifos per year.
- Pre-Harvest Interval: Do not apply within 14 days of harvest of forage and hay or within 30 days of harvest of grain and straw.
- FOR SPRING WHEAT: Do not apply more than a total of 37.5 fluid ounces of this product (0.75 lb. a.i. Chlorpyrifos and 0.038 lb. a.i. Lambda-cyhalothrin) per acre per year.

#### · FOR WINTER WHEAT,

- In CO, NE, ND, SD, KS, MT, and WY: do not apply more than 25 fluid ounces of this product (0.5 lb. a.i. Chlorpyrifos and 0.025 lb. a.i. Lambda-cyhalothrin) per acre per year.
- In OK, MN and TX do not apply more than 0.75 lbs of chlorpyrifos per year/37.5 fluid ounces of this product (0.75 lb. a.i. Chlorpyrifos and
  0.038 lb. a.i. Lambda-cyhalothrin) per acre per year.
- Do not allow meat or dairy animals to graze or otherwise feed on treated forage within 7 days after last treatment.
- Do not feed straw from treated Wheat within 30 days of application.
- Maximum Application Rate\*: Do not exceed the maximum application rate of a.i. per acre per year allowed by using other Lambda-cyhalothrin or Gamma-cyhalothrin containing products. The maximum rate allowed for use if both Lambda-cyhalothrin and Gamma-cyhalothrin products are used during the same crop growing season can be calculated based upon the listed maximum rates in the following table:

Сгор	Lambda-cyhalothrin (Lb. a.i./Acre/Season)	Gamma-cyhalothrin (Lb. a.i./Acre/Season)
Wheat	0.12	0.06

<sup>\*</sup> When the maximum application rate of Lambda-cyhalothrin is reached, no Gamma-cyhalothrin product can be used. The Gamma-cyhalothrin quantity can be multiplied by 2 to calculate the total a.i. based upon Lambda-cyhalothrin.

#### STORAGE AND DISPOSAL

Do not contaminate water, food, or feed by storage or disposal.

PESTICIDE STORAGE: Store in original container in secured dry storage area. Prevent cross-contamination with other pesticides and fertilizers

**PESTICIDE DISPOSAL:** Wastes resulting from the use of this product must be disposed of on site or at an approved waste disposal facility. **CONTAINER HANDLING:** 

Nonrefillable Container (rigid material; less than 5 gals.): Nonrefillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container one-fourth full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill or by other procedures approved by State and local authorities.

Nonrefillable Container (rigid material; 5 gals. up to < 250 gals.): Nonrefillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container one-fourth full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill or by other procedures approved by State and local authorities.

Refillable Container (≥ 250 gals. & Bulk): Refill this container with pesticide only. Do not reuse this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To clean the container before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container about 10% full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times. Then offer for recycling if available or reconditioning if appropriate or puncture and dispose of in a sanitary landfill or by other procedures approved by State and local authorities.

#### WARRANTY—CONDITIONS OF SALE

OUR DIRECTIONS FOR USE of this product are based upon tests believed reliable. Follow directions carefully. Timing and method of application, weather and crop conditions, mixtures with other chemicals not specifically directed and other influencing factors in the use of this product are beyond the control of the Seller. To the extent consistent with applicable law, Buyer assumes all risks of use, storage and handling of this material not in strict accordance with directions given herewith. To the extent consistent with applicable law, in no case shall the Manufacturer or the Seller be liable for consequential, special or indirect damages resulting from the use or handling of this product when such use and/or handling is not in strict accordance with directions given herewith. The foregoing is a condition of sale by the Seller and is accepted as such by the Buyer.

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