U.S. ENVIRONMENTAL PROTECTION AGENCY Office of Pesticide Programs Registration Division (7505P) 1200 Pennsylvania Ave., N.W. Washington, D.C. 20460	EPA Reg. Number: 19713-671	Date of Issuance: 11/10/15	
NOTICE OF PESTICIDE: <u>X</u> Registration <u>Reregistration</u>	Term of Issuance: Conditional		
(under FIFRA, as amended)	Name of Pesticide Product: Drexel Lambdafos Insecticide		
Name and Address of Registrant (include ZIP Code): Drexel Chemical Company P.O. Box 13327 Memphis, TN 38113-0327			
<b>Note:</b> Changes in labeling differing in substance from that accepted in connection with this registration registration Division prior to use of the label in commerce. In any correspondence on this product alwa	nust be submitted to and ys refer to the above EP/	accepted by the A registration number.	
On the basis of information furnished by the registrant, the above nam under the Federal Insecticide, Fungicide and Rodenticide Act.	ned pesticide is h	ereby registered	
Registration is in no way to be construed as an endorsement or recommendation of this product by the Agency. In order to protect health and the environment, the Administrator, on his motion, may at any time suspend or cancel the registration of a pesticide in accordance with the Act. The acceptance of any name in connection with the registration of a product under this Act is not to be construed as giving the registrant a right to exclusive use of the name or to its use if it has been covered by others.			
This product is conditionally registered in accordance with FIFRA sec with the following conditions:	ction 3(c)(7)(A).	You must comply	
1. Submit and/or cite all data required for registration/reregistration/registration review of your product under FIFRA when the Agency requires all registrants of similar products to submit such data.			
2. Make the following label changes before you release the product for shipment:			
• Revise the EPA Registration Number to read, "EPA Reg. No. 19713-671."			
Signature of Approving Official:	Date:		
aller	11/10/2	15	
Michael Walsh, Product Manager 11 Invertebrate & Vertebrate Branch #2, Registration Division (7505P)			
EPA Form 8570-6			

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- 3. You are required to comply with the data requirements described in the DCI and EDSP Orders identified below:
  - a. Chlorpyrifos GDCI-059101-967
  - b. Lambda-Cyhalothrin GDCI-128897-1249
  - c. Chlorpyrifos EDSP-059101

You must comply with all of the data requirements within the established deadlines. If you have questions about the Generic DCI or EDSP Order listed above, you may contact the Chemical Review Manager in the Pesticide Reevaluation Division: <u>http://www.epa.gov/oppsrtd1/contacts\_prd.htm</u>

4. Submit one copy of the final printed label for the record before you release the product for shipment.

Should you wish to add/retain a reference to the company's website on your label, then please be aware that the website becomes labeling under the Federal Insecticide Fungicide and Rodenticide Act 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) list 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.

If you fail to satisfy these data requirements, EPA will consider appropriate regulatory action including, among other things, cancellation under FIFRA section 6(e). Your release for shipment of the product constitutes acceptance of these conditions. A stamped copy of the label is enclosed for your records. Please also note that the record for this product currently contains the following CSFs:

• Basic CSF dated 07/15/2015

If you have any questions, please contact Carlyn Petrella by phone at 703-347-0439, or via email at petrella.carlyn@epa.gov.

Enclosure

# **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.



For the control of listed insects in field, fruit, nut and vegetable crops.

## **ACTIVE INGREDIENTS:**

Chlorpyrifos	28.12%
Lambda-cyhalothrin	1.44%
OTHER INGREDIENTS:	<u>70.44%</u>
TOTAL:	100.00%

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

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

EPA	Reg. No. 19713-ATR	
EPA	Est. No. 19713-XX-X	

# See FIRST AID Below

SHAKE WELL BEFORE USE

Net Content:

# 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 the personal protective equipment required
 Wear protective exemption

• 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**

# GROUP 1B 3A INSECTICIDES

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.

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, 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 out of any waterproof material, 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 washoff 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 feet 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		Required Setback (Buffer Zones) In Feet		
(Lb. Chlorpyrifos a.i./Acre)	(Fl. oz. of This Product / Acre)	Nozzle Droplet 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
*Aerial application of greater than 2 pounds a.i. per acre is only permitted for Asian Citrus psylla control, up to 2.3 pounds					

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

\*\*NA means application is Not Allowed.

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, Corn (field and sweet), Cotton, Sorghum, 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.

#### **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 of a.i. per acre per year by using other lambda-cyhalothrin or gammacyhalothrin 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)
Alfalfa	0.12	0.06
Brussels sprout	0.24	0.12
Corn	0.12	0.06
Cotton	0.20	0.10
Sorghum	0.08	0.04
Soybeans	0.06	0.03
Sunflower	0.20	0.10
Tree fruits	0.20	0.10
Tree nuts	0.16	0.08
Wheat	0.06	0.03

\*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 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.

# USES

# ALFALFA

**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.

Corn rootworm adults (Spotted cucumber beetle)       6 to 13 fl. ozs.         Grasshoppers       6 to 13 fl. ozs.         Alfalfa caterpillar       11 to 26 fl. ozs.         Blue alfalfa aphid       11 to 26 fl. ozs.         Cutworm spp.       Green cloverworm         Pea aphid       14 to 26 fl. ozs.         Webworm spp.       16 to 38 fl. ozs.         Alfalfa blotch leafminer       16 to 38 fl. ozs.         Alfalfa seed chalcid (Adult)       14 flafa seed chalcid (Adult)         Affalfa seed chalcid (Adult)       16 to 38 fl. ozs.         Alfalfa seed chalcid (Adult)       16 to 38 fl. ozs.         Alfalfa seed chalcid (Adult)       16 to 38 fl. ozs.         Alfalfa seed chalcid (Adult)       16 to 38 fl. ozs.         Alfalfa seed chalcid (Adult)       16 to 38 fl. ozs.         Clover root curculic spp.       Clover root curculic spp.         Clover root curculic spp. (Adult)       10 to 38 fl. ozs.         Cover sen curculic (Adult)       10 to 38 fl. ozs.         Cover root curculic spp.       10 to 38 fl. ozs.         Cover root curculic spp. (Adult)       10 to 38 fl. ozs.         Cover root curculic spp. (Adult)       10 to 38 fl. ozs.         Cover root curculic spp. (Adult)       10 to 38 fl. ozs.         Cowea curculic (Adult)       10 to 38	Target Pest	This Product/Acre
Alfalfa caterpillar       11 to 26 fl. ozs.         Blue alfalfa aphid       11 to 26 fl. ozs.         Green cloverworm       Pea aphid         Spotted alfalfa aphid*       Velvetbean caterpillar         Webworm spp.       16 to 38 fl. ozs.         Alfalfa blotch leafminer       16 to 38 fl. ozs.         Alfalfa blotch leafminer       16 to 38 fl. ozs.         Alfalfa seed chalcid (Adult)       Affalfa seed chalcid (Adult)         Armyworms       Bean leaf beetle         Blister beetle sp.       Clover root borer (Adult)         Clover root borer (Adult)       Clover stem borer (Adult)         Clover root occuli ospp. (Adult)       Corpea aphid         Cowpea aphid       Cowpea aphid         Cowpea aphid       Copea spi. (Adult)         Caper sp.       Green une beetle (Adult)         Green peach aphid       Japanese beetle (Adult)         Green peach aphid       Japanese beetle (Adult)         Japanese beetle (Adult)       Pan beetle Adult)         Green peach aphid       Pan beetle (Adult)         Japanese beetle (Adult)       Pan beetle Adult)         Pae weevil (Adult)       Pan beetle Adult)         Pae weevil (Adult)       Pan beetle Adult)         Pae weevil (Adult)       Pan beetle Adult)      <	Corn rootworm adults (Spotted cucumber beetle) Grasshoppers Leafhoppers	6 to 13 fl. ozs.
Alfalfa blotch leafminer       16 to 38 fl. ozs.         Alfalfa seed chalcid (Adult)       Alfalfa seed chalcid (Adult)         Alfalfa weevil (Larva and Adult)       Armyworms         Bean leaf beetle       Bilister beetle sp.         Clover root borer (Adult)       Clover root borer (Adult)         Clover root borer (Adult)       Clover root curculio spp. (Adult)         Clover sem borer (Adult)       Cover semworm         Corne arworm       Cowpea aphid         Cowpea curculio (Adult)       Cowpea weevil (Adult)         Green June beetle (Adult)       Green June beetle (Adult)         Green June beetle (Adult)       Green June beetle (Adult)         Green June beetle (Adult)       Looper spp.         Mexican bean beetle       Pea weevil (Adult)         Panese beetle (Adult)       Plant bugs         Spider mites       Spittebug spp.         Stink bug spp.       Sweet clover weevil (Adult)         Three-cornered alfalfa hopper       Thrips spp.         Withicfiburg spp.       Metalfa hopper         Thrips spp.       Metalfa hopper	Alfalfa caterpillar Blue alfalfa aphid Cutworm spp. Green cloverworm Pea aphid Spotted alfalfa aphid* Velvetbean caterpillar Webworm spp.	11 to 26 fl. ozs.
WhiteHinged beelle spp. (Adult)	Webworm spp.         Alfalfa blotch leafminer         Alfalfa seed chalcid (Adult)         Alfalfa weevil (Larva and Adult)         Armyworms         Bean leaf beetle         Blister beetle sp.         Clover leaf weevil spp.         Clover root borer (Adult)         Clover root curculio spp. (Adult)         Clover stem borer (Adult)         Cover aphid         Cowpea aphid         Cowpea weevil (Adult)         Cowpea weevil (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-connered alfalfa hopper         Thrips spp.         Whitefringed beetle spp. (Adult)	16 to 38 fl. ozs.

# 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 6 to 13 fl. ozs. of this product per acre, within 14 days after application of 13 to 26 fl. ozs. per acre or within 21 days after application of rates above 26 fl. ozs. per acre.
- Maximum single application rate is 38 fl. ozs. of this product (0.75 lb. a.i. chlorpyrifos and 0.04 lb. a.i. lambda-cyhalothrin) per acre.
- Do not apply more than a total of 119 fl. ozs. of this product (2.3 lbs. a.i. chlorpyrifos and 0.12 lb. a.i. lambda-cyhalothrin) per acre per year.
- Do not apply any product containing chlorpyrifos more than once per Alfalfa cutting.
- Do not make a second application of this product or other products containing chlorpyrifos within 10 days of the first 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)
Alfalfa	0.12	0.06

\*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.

# BRUSSELS SPROUT

**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 with conventional power-operated spray equipment in 20 to 150 gallons of water per acre. For aerial applications, apply a minimum of 5 gallons of water per acre. Use a higher rate in the rate range when there is increased pest pressure. Consult your state agricultural experiment station, extension service specialist or integrated pest control advisor for proper time to treat in your area.

Target Pest	This Product/Acre
Cabbage aphid	11 to 19 fl. ozs.
Grasshoppers	
Cutworms	11 to 26 fl. ozs.
Fall armyworms	
Imported cabbage worm	
Beet armyworm	16 to 38 fl. ozs.
Cabbage looper	
Cabbage webworm	
Southern cabbage worm	
Stink bugs	
Striped flea beetle (Adult)	
Yellow striped armyworm	

# Specific Use Restrictions

- Pre-harvest Interval: Do not apply within 21 days before harvest.
- Maximum single application rate is 38 fl. ozs. of this product (0.75 lb. a.i. chlorpyrifos and 0.04 lb. a.i. lambda-cyhalothrin) per acre.
- Do not apply more than a total of 114 fl. ozs. of this product (2.25 lb. a.i. chlorpyrifos and 0.11 lb. a.i. lambda-cyhalothrin) per acre per year.
- Do not make more than 3 applications of this product or other products containing chlorpyrifos per acre per year.
- If 3 applications are made at the maximum application rate of 38 fl. ozs., then a fourth application of a product containing chlorpyrifos is not permitted. More applications with a product containing lambda-cyhalothrin are permitted as long as no more than the maximum amount of 0.24 lb. a.i. per acre per year is applied.

- Do not make a second application of this product or other products containing chlorpyrifos within 10 days of the first 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)
Brussels sprout	0.24	0.12

\*When the maximum application rate of this product is reached, no gamma-cyhalothrin product can be used. The gammacyhalothrin quantity can be multiplied by 2 to calculate the total a.i. based upon lambda-cyhalothrin.

# CORN (Field, Sweet, Seed)

**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: Pre-plant, 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 used in combination with this product. Follow the most restrictive label.

Target Pest	This Product/Acre
Armyworms	11 to 38 fl. ozs.
Cutworms	

# At-Plant T-Band Application

Apply as a liquid T-band in fields with no more than 30% cover of crop residue remaining on the soil surface. Position a flat fan nozzle over the open seed furrow immediately behind the planter shoe, in front of the press wheel and adjust to provide a 5 to 6 inch band width centered over the row. Incorporate into the top 1 inch of soil using tines, chains or other suitable equipment.

The following table provides equivalent application rates for various row spacings when this product is applied at the rate of 2.87 fl. ozs. per 1000 feet of row for Grubs, Seed corn beetle, Seed corn maggot and Wireworms or applied at a rate of 1.89 fl. ozs. per 1000 feet of row for Cutworms alone.

	Required Amount of This Product			
Target Pest	Row Spacing (inches)	FI. ozs./Acre		
Cutworms	30	33		
	36	28		
	38	27		
	40	26		
Grubs	30	50		
Seed corn beetle	36	42		
Seed corn maggot	38	40		
Wireworms	40	38		

## **Sprayer Calibration Information For Band Application**

Fluid Ounces of Spray Required Per 100 Feet of Row for Various Row Spacings and Spray Volumes				
Volume of Spray	30"	36"	38"	40"
5	3.67	4.41	4.65	4,90
10	7.34	8.82	9.30	9.80
15	11.00	13.23	13.95	14.70
20	14.68	17.64	18.60	19.69

## **Post-emergence Application**

European corn borer\*\* Hop vine borer Sap beetle

Stalk borer Stink bug spp. Tarnished plant bug

Southwestern corn borer\*\*\*

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. This product may be tank mixed with glyphosate products when application is to be made to glyphosate tolerant Corn.

**Chemigation:** This product may be broadcast applied post-emergence through sprinkler irrigation systems at specified application rates to control listed foliar pests. For best results, tank mix this product with 2 pints of non-emulsifiable oil. See *"CHEMIGATION APPPLICATION"* section for application instructions.

Target Pest	This Product/Acre
Grasshoppers	6 to13 fl. ozs.
Aphids Armyworms Bean leaf beetle Cereal leaf beetle Corn rootworm (Adults)* Cutworms** Flea beetle (Adults)*** Green cloverworm Greenbug Meadow spittlebug Southern corn leaf beetle Webworms**** Western bean cutworm	11 to 26 fl. ozs.
<ul> <li>SPECIFIC USE DIRECTIONS:</li> <li>*The specified dosage will control silk clipping by adult Corn rootworm.</li> <li>** For Cutworms, it is preferable to apply this product when soil is moist and worms are active on or near the soil surface of the plant. Norms may be protected from the spray and effectiveness be reduced. Shallow incorporation using a rotary hoe or other suitable equipment immediately before or soon a treatment may improve control. A second application may be required if damage or density levels exceed economic thresholds established for your area.</li> <li>***For best control of Flea beetle, ground apply in a minimum spray volume of 20 to 40 gallons per acre at 40 psi. If C is less than 6 inches tall, apply in a 9 to 12 inch wide band over the row. For Corn more than 6 inches tall, apply u drop nozzles directed to the base of the plant. Do not reduce the application rate for banded or directed application Concentrate the full labeled dosage rate in the treated zone.</li> <li>****For control of Webworms, shallow incorporation using a rotary hoe or other suitable equipment immediately before or soon after treatment is necessary.</li> </ul>	
Aster leafhopper Chinch bugs* Corn earworm	16 to 38 fl. ozs.

<ul> <li>SPECIFIC USE DIRECTIONS:</li> <li>* For best control of Chinch bug, apply by ground in a minimum spray volume of 20 to 40 gallons per acre at 40 psi. If Corn is less than 6 inches tall, apply in a 9 to 12 inch wide band over the row. For Corn greater than 6 inches tall, apply using drop nozzles directed to the base of the plant. Do not reduce the application rate for banded or directed applications. Concentrate the full labeled dosage rate in the treated zone. When chinch bugs continue to immigrate to Corn over a prolonged period or under extreme pest pressure, a second application may be needed.</li> <li>**For control of European corn borer, use 22 to 38 fl. ozs. per acre when application is made with power-operated ground or aerial equipment or 16 to 38 fl. ozs. per acre when application is made through a sprinkler irrigation system. University research indicates that achieving greater than 50% control of first generation European corn borer with a single liquid insecticide treatment is highly dependent upon timing, insecticide placement and weather conditions.</li> <li>**For Southwestern corn borer, a second application may be applied 21 days later if needed due to re-infestation.</li> </ul>		
Billbugs*	32 to 42 fl. ozs.	
Common stalk borer**		
Corn rootworm larvae***		
Japanese beetle adult		
Lesser cornstalk borer		
SPECIFIC USE DIRECTIONS:		
For best control of Billbug, apply by ground in a minimum spray volume of 20 to 40 gallons per acre at 40 psi. If Corn is less than 6 inches tall, apply in a 9 to 12 inch wide band over the row. For Corn greater than 6 inches tall, apply using drop nozzles directed to the base of the plant. Do not reduce the application rate for banded or directed applications. Concentrate the full labeled dosage rate in the treated zone.		
**Do not use this product in combination with a burndown herbicide to control Common stalk borer. To control Common stalk borer, treat approximately 11 days after application of glyphosate or after burndown with paraquat herbicide is complete (3 to 5 days).		
***For post-emergence control of Corn rootworm larvae, apply at cultivation. Direct the spray to both sides of the row at the base of the plants just ahead of the cultivator shovels. Cover the insecticide with soil around the brace roots. A cultivation application of this product may be made in addition to an at-planting application of a granular chlorpyrifos insecticide. This product may also be applied through sprinkler irrigation systems at the rate of 32 to 42 fl. ozs. per acre to control Corn rootworm larvae. Time application to coincide with the appearance of the second instar larvae. Apply with enough water to wet the root zone to the depth control needed. If soils are wet, allow enough soil drying to occur such that an application using a minimum amount of water will not produce surface runoff. See "CHEMIGATION APPLICATION" section for application instructions.		

# **Specific Use Restrictions**

- Pre-harvest Interval: Do not apply within 21 days before harvest of grain, ears, forage or fodder.
- Do not make more than 3 applications of this product or other products containing chlorpyrifos per acre per year including the maximum allowed of 2 granular applications at the 1 lb. a.i. chlorpyrifos rate.
- Maximum single application rate is 43 fl. ozs. of this product (0.83 lb. a.i. chlorpyrifos and 0.04 lb. a.i. lambda-cyhalothrin) per acre.
- Do not apply more than 129 fl. ozs. of this product (2.5 lbs. a.i. chlorpyrifos and 0.13 lb. a.i. lambda-cyhalothrin) per acre per year.
- Do not make a second application of this product or other products containing chlorpyrifos within 10 days of the flrst application.
- If more than 1 lb. a.i. granular chlorpyrifos per acre is applied at-plant (for a maximum of 1.3 lbs. a.i. per acre per year), only one additional application of a liquid product containing chlorpyrifos at 42 fl. ozs. of this product (0.82 lb. a.i. chlorpyrifos) per acre is allowed per year, for a total of 2.12 lbs. a.i. chlorpyrifos per acre per year.
- Do not apply in tank mixes with imazapyr, imazethapyr, nicosulfuron or rimsulfuron herbicides.
- Do not apply more than a total of 79 fl. ozs. of this product (1.52 lbs. a.i. chlorpyrifos) after silk initiation.
- Do not apply more than a total of 39.5 fl. ozs. of this product (0.76 lb. a.i. chlorpyrifos) after Corn has reached the milk stage (yellow kernels with milky fluid).
- Do not allow meat or dairy animals to graze in treated areas nor harvest treated Corn forage as feed for meat or dairy animals within 1 day after last treatment.
- 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:

	Lambda-Cyhalothrin	Gamma-Cyhalothrin
Сгор	(Lb. a.i./Acre/Season)	(Lb. a.i./Acre/Season)
Corn	0.12	0.06

\*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

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 (see separate rate table for Arizona and California). Use a higher rate in the rate range when there is increased pest pressure. 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. Increase spray volume when foliage is dense and/or pest population is high and/or under high temperature and wind conditions. 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.

AII	States	Except	Arizona	and	California
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Target Pest	This Product/Acre
Cabbage looper	11 to 26 fl. ozs.
Cotton leaf perforator	
Cutworms	
Grasshoppers	
Bollworm*	16 to 38 fl. ozs.
Cotton aphid	
Cotton fleahopper**	
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 v	veek and apply when worms are 0.25 inch or less in
length.	
**Suppression will minimize damage from Cotton fleahoppe	ers and Plant bugs. Use higher specified rates for
increased levels of control.	
Beet armyworm	22 to 38 fl. ozs.
Boll weevil	
Pink bollworm	
Stink bug spp.	
Bandedwing whitefly	32 to 42 fl. ozs.
Sweet potato whitefly	
Tobacco whitefly	

# Arizona and California

Target Pest	This Product/Acre
Armyworms Bollworm* Cotton aphid Cotton fleahopper Cotton leaf perforator Cutworms Lygus Salt marsh caterpillar Silverleaf whitefly** Thrips	22 to 42 fl. ozs.
SPECIFIC USE DIRECTIONS: *For best results on Bollworms, scout the fie ** Apply in tank mix combination with the spec whitefly.	Ids twice per week and apply when worms are 0.25 inch or less in length. cified rate of another insecticide labeled for control or suppression of Silver
Pink bollworm	32 to 42 fl. ozs.

# Specific Use Restrictions

- Pre-harvest Interval: Do not apply within 21 days before harvest.
- Maximum single application rate is 42 fl. ozs. of this product (0.82 lb. a.i. chlorpyrifos and 0.05 lb. a.i. lambda-cyhalothrin) per acre.
- Do not make more than 3 applications of this product or other products containing chlorpyrifos per crop season.
- Do not apply more than a total of 126 fl. ozs. of this product (2.5 lbs. a.i. chlorpyrifos and 0.127 lb. a.i. lambda-cyhalothrin) per acre per year.
- Do not make a second application of this product or other products containing chlorpyrifos within 10 days of the first application.
- Do not allow meat or dairy animals to graze in treated areas.
- Do not feed gin trash or treated forage 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:

Сгор	Lambda-Cyhalothrin (Lb. a.i./Acre/Season)	Gamma-Cyhalothrin (Lb. a.i./Acre/Season)
Cotton	0.2	0.1

\*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.

# SORGHUM - GRAIN SORGHUM (Milo)

**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. Control may be reduced at low spray volumes under high temperature and wind conditions.

**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 to13 fl. ozs.
Sorghum midge*	
Yellow sugarcane aphid and other aphids	
SPECIFIC USE DIRECTIONS:	
*For Sorghum midge, apply when 30% to 50% of the	seed heads are in bloom
Chinch bugs*	11 to 38 fl. ozs.
Cutworms	
Fall armyworms	
Flea beetle spp.	
Greenbug**	
Lesser cornstalk borer*	
Yellowstriped armyworm	
SPECIFIC USE DIRECTIONS:	
* For Chinch bugs and Lesser cornstalk borer, ap	ply as a directed spray toward the base of the plant using power-
operated ground spray equipment with sufficient	water to ensure coverage of an 8 to 12 inch band centered in the
row. For plants less than 6 inches high, apply an	8 to 12 inch band centered over the row. Do not reduce the dosage
for banded or directed applications. Concentrate t	he full labeled dosage rate in the treated zone.
**For Greenbug, use a higher rate within the rate rate	nge when pest populations are high.
Beet armyworm	16 to 38 fl. ozs.
Corn earworm	
European and Southwestern corn borer	
Stink bug spp.	
Webworms	

## Specific Use Precautions

- To minimize the potential for chemical injury, do not apply this product to drought stressed Grain Sorghum within 3 days following irrigation or rain except where the product is applied in irrigation water.
- Be aware that Sorghum lines used in seed production fields may be more susceptible to chemical injury. Susceptible inbred lines or hybrids are likely to be at greater risk of yield-reducing chemical injury when treated at the higher application rates. Do not apply more than 26 fl. ozs. of this product per acre to Seed Sorghum if the additional risk of crop injury is unacceptable.

#### Specific Use Restrictions

- **Pre-harvest Interval:** Do not harvest for grain, forage, fodder, hay or silage within 30 days after application of 26 fl. ozs. of this product per acre or within 60 days after application of rates above 26 fl. ozs. per acre.
- Maximum single application rate is 38 fl. ozs. of this product (0.75 lb. a.i. chlorpyrifos and 0.04 lb. a.i. lambda-cyhalothrin) per acre.
- Do not make more than 3 applications of this product or other products containing chlorpyrifos per use season.
- Do not apply more than a total of 77 fl. ozs. of this product (1.5 lbs. a.i. chlorpyrifos and 0.08 lb. a.i. lambda-cyhalothrin) per acre per year.
- Do not make a second application of this product or other products containing chlorpyrifos within 10 days of the first application.
- Do not treat sweet varieties of Sorghum.
- Do not apply more than 28 fl. ozs. of this product (0.56 lb. a.i. chlorpyrifos) per acre per year once crop is in soft dough stage.
- 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)
Sorghum	0.08	0.04

\*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.

# SOYBEANS

**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 Grasshoppers Lesser cornstalk borer	11 to 38 fl. ozs.

#### **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 to13 fl. ozs.
Green cloverworm	
Velvetbean caterpillar	
Blister beetle spp.	11 to 26 fl. ozs.
Cabbage looper	
Cutworms	
Painted lady caterpillar	
Saltmarsh caterpillar	
Silverspotted skipper	
Soybean aphid	
Spider mites	
Webworm spp.	
Wollybear caterpillar	
Yellowstriped armyworm	
Bean leaf beetle	16 to 38 fl. ozs.
Brown marmorated stink bug	
Corn earworm	
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. ozs.
European corn borer	
Lesser cornstalk borer	

#### Specific Use Precautions

•On determinate Soybeans, do not make more than 1 application after pod set.

# Specific Use Restrictions

Pre-harvest Interval: Do not apply within 30 days before harvest.

- Maximum single application rate is 38 fl. ozs. of this product (0.75 lb. a.i. chlorpyrifos and 0.04 lb. a.i. lambda-cyhalothrin) per acre.
- Do not make more than 3 applications per year of this product or other products containing chlorpyrifos per year.
- Do not apply more than a total of 59 fl. ozs. of this product (1.15 lbs. a.i. chlorpyrifos and 0.06 lb. a.i. lambda-cyhalothrin) per acre per year.
- Do not make a second application of this product or other products containing chlorpyrifos within 14 days of the first application.
- 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:

Сгор	Lambda-Cyhalothrin (Lb. a.i. /Acre/Season)	Gamma-Cyhalothrin (Lb. a.i. /Acre/Season)
Soybeans	0.06	0.03

\*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.

# SUNFLOWER

**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.

# **Post-emergence Broadcast Application**

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

Target Pest	This Product/Acre
Grasshoppers	6 to 13 fl. ozs.
Banded sunflower moth	16 to 38 fl. ozs.
Cutworms	
Fall armyworm	
Painted lady caterpillar	
Seed weevil*	
Stem weevil**	
Sunflower beetle (Larva)***	
Sunflower beetle (Adult)***	
Sunflower moth****	
Woolly bears	
SPECIFIC USE DIRECTIONS:	
* To control Seed weevil, apply when field counts indicate 10 to 12	adults per plant for oil crop varieties and 1 to 3
adults per plant on confectionery crop varieties.	
** For Stem weevil, optimal treatment time is within 5 to 7 days after a	dult Weevils begin to appear.
To control larvae or adults of Sunflower beetle, treat when field coun	ts indicate 10 larvae or 1 to 2 adults per seedling.
To control Sunflower moth, make first application during early 1% to	5% bloom stage.
Beet armyworm	22 to 38 fl. ozs.
Head clipper weevil (Adult)	
Japanese beetle (Adult )	
Leafhopper spp.	
Meadow spittlebug	
Spotted cabbage looper	
Stink bug spp.	
Sunflower maggot (Adult)	
Tarnished plant bug (Lygus)*	

# SPECIFIC USE DIRECTIONS:

\*For Tarnished plant bug (Lygus), use a higher rate in the rate range where populations are heavy. Apply at the onset of pollen spread or approximately 10% bloom (R-5 growth stage). For best protection, make a second application 10 days later. Use sufficient water to ensure thorough coverage of treated plants.

## Specific Use Restrictions

• Pre-harvest Interval: Do not apply within 45 days before harvest.

- Maximum single application rate is 38 fl. ozs. of this product (0.75 lb. a.i. chlorpyrifos and 0.04 lb. a.i. lambda-cyhalothrin) per acre.
- Do not make more than 3 applications of this product or other products containing chlorpyrifos per acre per year.
- Do not apply more than a total of 114 fl. ozs. of this product (2.3 lbs. a.i. chlorpyrifos and 0.12 lb. a.i. lambda-cyhalothrin) per acre per year or after bloom initiation.
- Do not make a second application of this product or other products containing chlorpyrifos within 10 days of the first application.
- Do not allow meat or dairy animals to graze in treated areas.
- 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)	
Sunflower	0.2	0.1	

\*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\* AND ALMOND (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 and 24 hours for Almond unless PPE required for early entry is worn.

#### \*Apple, Cherry, Nectarine, Peach, Pear, Plum, Prune

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 gallons per acre), use sufficient spray volume to completely wet tree foliage, but not to point of runoff. For concentrate sprays (less than 200 gallons 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 and Almond**

- 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 and Almond**

- Do not make more than 1 application of chlorpyrifos or other products containing chlorpyrifos during the dormant season. • For Apple, do not make more than 1 application of this product or other products containing chlorpyrifos to the Apple tree
- trunk per acre per year as either a pre-bloom or post-bloom application.
- Maximum single application rate is 100 fl. ozs. of this product (2 lbs. a.i. chlorpyrifos and 0.1 lb. a.i. lambda-cyhalothrin) per acre.
- Do not apply more than a total of 100 fl. ozs. of this product (2 lbs. a.i. chlorpyrifos and 0.1 lb. a.i. lambda-cyhalothrin) per acre per year as a dormant or delayed dormant application.
- 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:

Сгор	Lambda-Cyhalothrin (Lb. a.i./Acre/Season)	Gamma-Cyhalothrin (Lb. a.i./Acre/Season)
Tree fruits	0.2	0.1
Almond	0.16	0.08

\*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.

# ALMOND, CHERRY, NECTARINE, PEACH, PEAR, PLUM, PRUNE

Target Pest	This Product/Acre
American plum borer	64 to 100 fl. ozs.
Greater peach tree borer	
Lesser peach tree borer	
Peach twig borer	

#### Specific Use Precautions for Almond, Cherry, Nectarine, Peach, Pear, Plum, Prune

• Avoid contact with foliage in Sweet cherry as premature leaf drop may result.

#### Specific Use Restrictions for Almond, Cherry, Nectarine, Peach, Pear, Plum, Prune

- 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.
- Do not exceed the maximum rate of 0.08 lb. a.i. per acre per year allowed by using other lambda-cyhalothrin or gammacyhalothrin 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.

#### Additional Restrictions Specific to California for Almond, Cherry, Nectarine, Peach, Pear, Plum, Prune

- Do not use more than 1% dormant oil in Almond orchards less than 4 years old.
- Use a minimum of 100 gallons per acre of total spray volume.
- Use up to 2% supreme oil with no more than 4 gallons per acre on Almond.
- Use up to 2% supreme oil with no more than 6 gallons per acre on Nectarine and Peach.
- Refer to the University of California pest management guide for Pear, Plum and Prune.
- Do not use any adjuvants or surfactants in addition to, or as a substitute for a petroleum spray oil in a tank mix with this product.
- Do not apply on Almond in the following counties in California: Butte, Colusa, Glenn, Solano, Sutter, Tehama, Yolo and Yuba.

# APPLE

Target Pest	This Product/Acre
Rosy apple aphid	64 to 100 fl. ozs.
San Jose scale	

## **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 AND TREE NUTS (Trunk Spray or Preplant Dip)" section of the label.

## Additional Restrictions Specific to California for Apple

•Use a minimum of 100 gallons per acre of total spray volume.

•Refer to the University of California pest management guide for Apple.

•Do not use any adjuvants or surfactants in addition to, or as a substitute for a petroleum spray oil in a tank mix with this product.

# TREE FRUITS\* AND TREE NUTS (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 4 days for tree fruits and 24 hours for tree nuts unless PPE required for early entry is worn.

\*Apple, Cherry, Nectarine, Peach

# **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. ozs.
Apple bark borer	
Broadnecked root borer	
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 fl. ozs. 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 to the Apple tree trunk either as a pre-bloom or post-bloom application.
- Do not apply more than a total of 41.6 fl. ozs. 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 a pre-bloom 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.

# ALMOND, CHERRY, NECTARINE, PEACH

Apply this product to tree trunks and lower branches using a coarse, low pressure spray to control pests listed in the following table. Apply as required by scouting, usually at intervals of 5 days or more. Timing and frequency of applications should be based upon insect populations reaching locally determined economic thresholds and IPM recommendations. Use a higher rate in the rate range when there is increased pest pressure. Unless otherwise specified, a second application may be made after 2 weeks and a third application may be made after harvest. Avoid spray contact with foliage in Sweet Cherry as premature leaf drop may result. Consult your state agricultural experiment station or extension service specialist for proper application timing for your area.

Crop	Target Pest	This Product/100 Gals.
Cherry	American plum borer Greater peach tree borer Lesser peach tree borer	76.8 to 153.6 fl. ozs.
Almond Nectarine Peach	Peach tree borers*	153.6 fl. ozs.

#### SPECIFIC USE DIRECTIONS:

\*Nectarine and 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. per 100 gallons 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.

\*Almond, Nectarine, 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 Almond, Nectarine and Peach or within 21 days before harvest of Cherry.
- Do not make more than 1 application of chlorpyrifos per acre per year in Almond, Nectarine, Peach and Plum and no more than 3 applications of chlorpyrifos per acre per year in Cherries.
- Do not apply more than a total of 153.6 fl. ozs. of this product (3.0 lbs. a.i. chlorpyrifos) per acre per year in Almonds, Cherries, Nectarine, Peach and Plum per acre per year.
- Do not exceed the maximum rate of 0.16 lb. a.i. per acre per year allowed by using other lambda-cyhalothrin or gammacyhalothrin 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:

Сгор	Lambda-Cyhalothrin (Lb. a.i./Acre/Season)	Gamma-Cyhalothrin (Lb. a.i. /Acre/Season)
Tree fruits	0.2	0.1
Tree nuts	0.16	0.08

\*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 NUTS\* (Foliar Sprays)

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.

#### \*Almond, Filbert, Pecan, Walnut

Apply this product as a foliar spray at the dosages indicated to control pests listed in the following table. Mix the required dosage in sufficient water to ensure thorough and complete coverage of the foliage and crop and apply as a concentrate or dilute spray using conventional, power-operated spray equipment. For dilute sprays applied to tree nut crops, mix the required dosage in sufficient water to allow for spray to runoff. For concentrate sprays, apply an equivalent amount of this product per acre. Treat when pests appear or in accordance with local conditions. Aerial application may result in less effective insect control because of reduced coverage. Consult your State agricultural experiment station, certified pest control advisor or extension service specialist for specific use information in your area.

Crop	Target Pest	This Product/Acre
Almond	Ant spp.	22 to 57 fl. ozs.
	Leaf footed bug	
	Leaf roller spp.	
	Navel orange worm	
	Peach twig borer	
	Stink bug spp.	
Filbert	Brown marmorated stink bug	22 to 57 fl. ozs.
	Eye-spotted bud moth	
	Filbert aphid	
	Filbert leaf roller	
	Filbert worm	
	Oblique banded leaf roller	
	Omnivorous leaftier	
	Stink bug spp.	
	Winter moth	
Pecan	Black margined aphid	16 to 57 fl. ozs.
	Fall webworm	
	Pecan nut case bearer	
	Yellow pecan aphid	

Ant spp.	22 to 57 fl. ozs.
Black pecan aphid	
Brown marmorated stink bug	
Hickory shuck worm*	
Phylloxera spp.**	
Pecan leaf scorch mite (suppression)***	
Spittlebug****	
Stink bug spp.	
SPECIFIC USE DIRECTIONS:	
* For best results against Hickory shuckworm, make 2 applications 10 to 14 day	/s apart.
** For boat control of <i>Dhyllovara</i> app, make 2 applications at a 10 day interval up	sing a minimum of 26 fl and of this

<sup>\*\*</sup> For best control of *Phylloxera* spp., make 2 applications at a 10 day interval using a minimum of 26 fl. ozs. of this product per acre starting at bud swell.

\*\*\*For suppression of Pecan leaf scorch mite, use a preventative program.

\*\*\*\* For control of Spittlebug, use a dosage of 57 fl. ozs. per acre for concentrate sprays.

Walnut	Ant app.	22 to 57 fl. ozs.
	Codling moth	
	Leaf footed bug	
	Leaf rollers	
	Navel orange worm	
	Stink bug spp.	
	Walnut aphid	
	Walnut husk fly	
	Walnut scale	

# Specific Use Precautions

- This product is highly toxic to bees exposed to direct treatment and should not be applied when bees are foraging in the treated area.
- To avoid contamination of irrigation tail waters, do not flood irrigate within 24 hours of application of this product.

# **Specific Use Restrictions**

- Pre-harvest Interval: Do not apply within 14 days of harvest of Almonds, Filberts and Walnuts or 28 days before harvest of Pecans.
- Maximum single application rate is 57 fl. ozs. of this product (1.12 lbs. a.i. chlorpyrifos and 0.06 lb. a.i. lambda-cyhalothrin) per acre.
- Do not make more than 3 applications of this product or other products containing chlorpyrifos to Almonds, Filberts and Pecans per acre per year and no more than 2 applications on Walnuts per acre per year.
- Do not apply more than a total of 158 fl. ozs. of this product (3.09 lbs. a.i. chlorpyrifos and 0.16 lb. a.i. lambda-cyhalothrin) per acre per year as a foliar spray on Almonds.
- Do not make a second application of this product or other products containing chlorpyrifos within 10 days of the first application.
- 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:

Сгор	Lambda-Cyhalothrin (Lb. a.i./Acre/Season)	Gamma-Cyhalothrin (Lb. a.i. /Acre/Season)
Tree nuts	0.16	0.08

\*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.

# WHEAT

**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.

(For use only in Arizona, California, Colorado, Idaho, Kansas, Minnesota, Montana, Nebraska, New Mexico, Nevada, North Dakota, Oklahoma, Oregon, South Dakota, Texas, Utah, Washington and Wyoming)

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,	6 to13 fl. ozs.	
Russian wheat aphid)*		
Brown Wheat mite		
Grasshoppers		
SPECIFIC USE DIRECTIONS:		
*Consult university extension bulletins for local treatment recommendations.		
Army cutworms*	11 to 25 fl. ozs.	
Armyworm spp.		
Cereal leaf beetle**		
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 80°F), under dry soil conditions or if larvae are		
more than 0.5 inch long.		
**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 than 7 mph.		
Stink bug spp.	16 to 25 fl. ozs.	

# Specific Use Restrictions

- 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.
- Maximum single application rate is 25 fl. ozs. of this product (0.5 lb. a.i. chlorpyrifos and 0.025 lb. a.i. lambda-cyhalothrin) per acre.
- Do not apply more than a total of 50 fl. ozs. of this product (1 lb. a.i. chlorpyrifos and 0.05 lb. a.i. lambda-cyhalothrin) per acre per year.
- Do not make more than 2 applications of this product or other products containing chlorpyrifos 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

\*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 gallons):** 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 gallons up to < 250 gallons):** 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 gallons & 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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