



OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION

WASHINGTON, D.C. 20460

September 30, 2024

Marcia Trostle, PhD, BCE
Senior Crop Protection Regulatory Specialist
3005 Rocky Mountain Ave
Loveland, CO 80538

Subject: Label Amendment – Label changes based on the 2022 National Marine Fisheries Service Biological Opinion on Chlorpyrifos
Product Name: Warhawk
EPA Registration Number: 34704-857
Application Date: March 14, 2024
Decision Number: 595206

Dear Marcia Trostle:

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

A stamped copy of your labeling is enclosed for your records. This labeling supersedes all previously accepted labeling. The next label printing of this product must use this labeling unless subsequent changes have been approved by the Agency. In accordance with 40 CFR § 152.130(c), you may distribute or sell this product under the previously approved labeling until April 30, 2025. After April 30, 2025, you may only distribute or sell this product if it bears this new revised labeling or subsequently approved labeling. "To distribute or sell" is defined under FIFRA section 2(gg) and its implementing regulation at 40 CFR § 152.3.

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

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

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

Sincerely,

A handwritten signature in blue ink that reads "Dana L. Friedman". The signature is written in a cursive, flowing style.

Dana L. Friedman
Branch Chief
Risk Management and Implementation Branch I
Pesticide Re-evaluation Division

Enclosure

CC: Michael Walsh, Registration Division, PM11

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.

CHLORPYRIFOS

GROUP

1B

INSECTICIDE



[In specific geographies,] [For control of insects infesting
Alfalfa; Apple; Asparagus; Cherry (Tart); Citrus; Cotton;
Peach; Soybean; [Strawberry,] Sugar Beet and Wheat
(Spring and Winter).]

[For control of insects infesting Non-bearing Fruit and
Nut Trees in commercial nurseries and tree plantations;
Christmas Trees; Tobacco; Commercial Sod Farms and
Fallow Conservation Tillage.]

ACCEPTED

Sep 30, 2024

Under the Federal Insecticide, Fungicide
and Rodenticide Act as amended, for the
pesticide registered under
EPA Reg. No. 34704-857

ACTIVE INGREDIENT:

chlorpyrifos: O,O-diethyl-O-(3,5,6-trichloro-2-pyridinyl) phosphorothioate **44.9%**

OTHER INGREDIENTS* **55.1%**
TOTAL **100.0%**

Contains 4.0 pounds of chlorpyrifos per gallon.

*Contains petroleum distillates.

**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.)

FIRST AID Organophosphate	
If swallowed:	<ul style="list-style-type: none"> • 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 in eyes:	<ul style="list-style-type: none"> • 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:	<ul style="list-style-type: none"> • 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.

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.

Have the product container or label with you when calling a poison control center or doctor, or going for treatment.

FOR A MEDICAL EMERGENCY INVOLVING THIS PRODUCT CALL: 1-800-424-9300.

[See] [inside] [label] [booklet] [for] [First Aid][,] [additional] [Precautionary Statements][,] [and] [Directions for Use] [including] [Storage and Disposal] [instructions][.]

For Medical Emergencies or for Chemical Spill, Leak, Fire, or Exposure, Call CHEMTREC at 1-800-424-9300.

EPA REG. NO. 34704-857

EPA EST. NO. _____

Net Contents: _____

[Note to Reviewer: internal label version Identifier may be included on final printed label.]

[MANUFACTURED FOR:

LOVELAND PRODUCTS, INC.

P.O. BOX 1286

GREELEY, COLORADO 80632-1286]

[May include a logo for Loveland Products, Inc.]

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**PRECAUTIONARY STATEMENTS
HAZARD TO HUMANS AND DOMESTIC ANIMALS
WARNING**

May Be Fatal If Swallowed • Harmful If Absorbed Through Skin • Causes Moderate Eye Irritation • Prolonged or Frequently Repeated Skin Contact May Cause Allergic Reactions In Some Individuals

Avoid contact with skin, eyes or clothing.

Personal Protective Equipment (PPE)

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.

In addition to the above, **mixers and loaders** using a mechanical transfer loading system must wear:

- Chemical-resistant gloves made of barrier laminate or viton ≥ 14 mils,
- Chemical-resistant apron,
- Wear a minimum of a NIOSH approved particulate filtering facepiece respirator with any R or P filter (TC-84A); OR another NIOSH approved particulate respirator with any R or P filter; OR a NIOSH approved powered air purifying respirator with an HE filter.

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 made of barrier laminate or viton ≥ 14 mils,
- Chemical-resistant apron when mixing or loading or exposed to the concentrate,
- Chemical-resistant footwear plus socks,
- Chemical-resistant headgear for overhead exposure,
- Wear a minimum of a NIOSH approved particulate filtering facepiece respirator with any R or P filter (TC-84A); OR another NIOSH approved particulate respirator with any R or P filter; OR a NIOSH approved powered air purifying respirator with an HE filter.

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

Engineering Controls

Mixers and loaders supporting aerial applications must use a mechanical transfer system that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(d) (4)] for dermal protection, and must: Wear the personal protective equipment required above for mixers/loaders, wear protective eyewear if the system operates under pressure, and be provided and have immediately available for use in an emergency, such as broken package, spill, or equipment breakdown: coveralls, chemical resistant footwear and chemical-resistant headgear if overhead exposure.

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:

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

ENVIRONMENTAL HAZARDS

This pesticide is 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 actively visiting the treatment area.

PHYSICAL OR CHEMICAL HAZARDS

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

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. The Certified Applicator is responsible for understanding all use restrictions, including Endangered Species application restrictions.

Warhawk® insecticide is an emulsifiable concentrate for use in listed crops. Target pests and application rates are provided in the accompanying tables.

RESTRICTIONS and PRECAUTIONS

This product cannot be reformulated or repackaged into other end-use products.

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.

Do not aerially apply this product in Mississippi.

Use as a Wide Area/ General Outdoor Treatment for Ants and other Miscellaneous Pests (excludes wide-area mosquito adulticide use) is Prohibited.

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 Warhawk®.

Endangered Species Protection Requirements

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

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Reporting Ecological Incidents: To report ecological incidents, including mortality, injury or harm to plants and animals, call 1-800-424-9300.

Pollinator Best Management Practices

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

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

How to Report Bee Kills

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

AGRICULTURAL USE REQUIREMENTS

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

Do not enter or allow entry into treated areas during the restricted entry interval (REI). The REI for each crop is listed in the directions for use associated with each crop.

Exception: If the product is soil-injected or soil-incorporated, the Worker Protection Standard, under certain circumstances, allows workers to enter the treated area if there will be no contact with anything that has been treated.

Certified crop advisors or persons entering under their direct supervision under certain circumstances may be exempt from the early reentry requirements pursuant to 40 CFR Part 170.

PPE required for early entry into treated areas that is permitted under the Worker Protection Standard and involves contact with anything that has been treated, such as plants, soil, or water, is:

- Coveralls over short-sleeved shirt and short pants,
- Chemical resistant gloves made of barrier laminate or viton ≥ 14 mils,
- Chemical-resistant footwear plus socks,
- 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.

INSECTICIDE RESISTANCE MANAGEMENT (IRM)

Warhawk® contains a Group 1B insecticide. Insect/mite biotypes with acquired resistance to Group 1B may eventually dominate the insect/mite population if Group 1B insecticides 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 Warhawk® or other Group 1B insecticides.

To delay development of insecticide resistance, the following practices are recommended:

- Avoid consecutive use of insecticides with the same mode of action (same insecticide group) on the same

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insect species.

- Use tank mixtures or premix products containing insecticides with different modes of action (different insecticide groups) provided the products are registered for the intended use.
- Base insecticide use on comprehensive Integrated Pest Management (IPM) programs.
- Monitor treated insect populations in the field for loss of effectiveness.
- Contact your local extension specialist, certified crop advisor, and/or manufacturer for any additional insecticide resistance management and/or IPM recommendations for the specific site and resistant pest problems in your area.
- For further information or to report suspected resistance contact Loveland Products at www.lovelandproducts.com using the "Contact Us" feature or call 1-800-424-9300.

SPRAY DRIFT MANAGEMENT

Do not allow spray to drift from the application site and contact people, structures people occupy at any time and the associated property, parks and recreation areas, non-target crops, aquatic and wetland sites, woodlands, pastures, rangelands, or animals.

Avoiding spray drift at the application site is the responsibility of the applicator. The interaction of many equipment and weather-related factors determine the potential for spray drift. The applicator is responsible for considering all of these factors when making decision to apply this product.

Observe the following precautions when spraying Warhawk® adjacent to permanent bodies of water such as rivers, natural ponds, lakes, streams, reservoirs, marshes, estuaries, and commercial fishponds.

The following treatment setbacks or buffer zones must be utilized for applications around the above listed aquatic areas with the following application equipment:

Application Method	Required Setback (Buffer Zone) (Feet)
Ground boom	25
Chemigation	25
Orchard airblast	50
Aerial (fixed wing or helicopter)	150

Making applications when wind is blowing away from sensitive areas is the most effective way to reduce the potential for adverse effects.

The following spray drift **best management practices** are recommended to avoid off-target drift movement from applications.

Aerial Application (Do not apply aerially in Mississippi)

1. The boom width must not exceed 75% of the wingspan or 90% of the rotor blade.
2. Nozzles must always point backward, parallel with the air stream, and never be pointed downward more than 45 degrees.
3. Nozzles must produce a medium or coarser droplet size (255-340 microns volume median diameter) per ASE Standard 572 under application conditions. Airspeed, pressure, and nozzle angle can all effect droplet size. See manufacturer's catalog or USDA/NAAA Applicator's Guide for spray size quality ratings.
4. Applications must not be made at a height greater than 10 feet above the top of the target plants unless a greater height is required for aircraft safety. Making applications at the lowest height that is safe reduces exposure of droplets to evaporation and wind.
5. Use upwind swath displacement and apply only when wind speed is 3 to 10 mph as measured by an anemometer. Do not apply product when wind speed exceeds 10 mph.
6. If application includes a no-spray zone, do not release spray at a height greater than 10 feet above the ground or crop canopy.

Where states have more stringent regulations, they must be observed.

The applicator must be familiar with and take into account the information covered in the Aerial Drift Reduction

Advisory.

Aerial Drift Reduction Advisory

This section is advisory in nature and does not supersede the mandatory label requirements.

Information on Droplet Size: The most effective way to reduce drift potential is to apply large droplets. The best drift management strategy is to apply the largest droplets that provide sufficient coverage and control. Applying larger droplets reduces drift potential, but will not prevent adverse effects from drift if applications are made improperly, or under unfavorable environmental conditions (see Wind, Temperature and Humidity, and Temperature Inversions)

Controlling Droplet Size:

- Volume - Use high flow rate nozzles to apply the highest practical spray volume. Nozzles with higher rated flows produce larger droplets.
- Pressure - Do not exceed the nozzle manufacturer's recommended pressures. For many nozzle types, lower pressure produces larger droplets. When higher flow rates are needed, use higher flow rate nozzles instead of increasing pressure.
- Number of nozzles - Use the minimum number of nozzles that provide uniform coverage.
- Nozzle orientation - Orienting nozzles so that the spray is released parallel to the airstream produces larger droplets than other orientations and is the recommended practice. Significant deflection from horizontal will reduce droplet size and increase drift potential.
- Nozzle type - Use a nozzle type that is designed for the intended application. With most nozzle types, narrower spray angles produce larger droplets. Consider using low-drift nozzles. Solid stream nozzles oriented straight back produce the largest droplets and the lowest drift.

Boom Length: For some use patterns, reducing the effective boom length to less than 3/4 of the wingspan or rotor length may further reduce drift without reducing swath width.

Application Height: Applications should not be made at a height greater than 10 feet above the top of the target plants unless a greater height is required for aircraft safety. Making applications at the lowest height that is safe reduces exposure of droplets to evaporation and wind.

Swath Adjustment: When applications are made with a crosswind, the swath will be displaced downwind. Therefore, on the up and downwind edges of the field, the applicator must compensate for this displacement by adjusting the path of the aircraft upwind. Swath adjustment distance should increase, with increasing drift potential (higher wind, smaller drops, etc.).

Wind: Drift potential is lowest between wind speeds of 2 to 10 mph. However, many factors, including droplet size and equipment type, determine drift potential at any given speed. Application should be avoided below 1.5 mph due to variable wind direction and high inversion potential. **Note:** Local terrain can influence wind patterns. Every applicator must be familiar with local wind patterns and how they affect spray drift.

Temperature and Humidity: When making applications in low relative humidity, set up equipment to produce larger droplets to compensate for evaporation. Droplet evaporation is most severe when conditions are both hot and dry.

Temperature Inversions: Applications should not occur during a temperature inversion because drift potential is high. Temperature inversions restrict vertical air mixing, which causes small, suspended droplets to remain in a concentrated cloud. This cloud can move in unpredictable directions due to the light variable winds common during inversions. Temperature inversions are characterized by increasing temperatures with altitude and are common on nights with limited cloud cover and light to no wind. They begin to form as the sun sets and often continue into the morning. Their presence can be indicated by ground fog; however, if fog is not present, inversions can also be identified by the movement of smoke from a ground source or an aircraft smoke generator. Smoke that layers and moves laterally in a concentrated cloud (under low wind conditions) indicates an inversion, while smoke that moves upward and rapidly dissipates indicates good vertical air mixing.

Sensitive Areas: The pesticide should only be applied when the potential for drift to adjacent sensitive areas (e.g. residential areas, bodies of water, known habitat for threatened or endangered species, non-target crops) is minimal (e.g. when wind is blowing away from the sensitive areas).

Ground Boom Application

The following mandatory spray drift best management practices are required to reduce the likelihood of off-target drift movement from ground applications.

1. Choose only nozzles and pressures that produce a medium or coarse droplet size (255 to 400 microns volume median diameter), per ASAE Standard 572. See manufacturer's catalog or USDA/NAAA Applicator's Guide for spray size quality ratings.
2. Apply with nozzle height no more than 4 feet above the ground or crop canopy.
3. Do not apply product when wind speed exceeds 10 mph as measured by an anemometer.

Orchard Airblast Application

The following mandatory spray drift best management practices are required to reduce the likelihood of off-target drift movement from airblast applications.

1. Nozzles must be directed so spray is not projected above the canopies.
2. Apply only when wind speed is 3 to 10 mph at the application site as measured by an anemometer outside of the orchard/vineyard on the upwind side.
3. Outward pointing nozzles must be shut off when turning corners at row ends.

The applicator must take into account the following best management practices to reduce off-site spray drift. This section is advisory and does not supersede mandatory label requirements.

1. Number of nozzles, nozzle orientation and spray volume, air speed and wind direction are key factors in adjusting airblast spray delivery to match the height and density of the crop canopy. Airblast equipment should be adjusted to provide uniform coverage while minimizing the amount of spray movement over-the-top or completely through the crop canopy.
 - High air volumes deliver spray more efficiently than air at high speed. Reducing forward travel speed decreases the air speed necessary to deliver the spray to the top of the crop canopy.
 - Use air guides along with the number and orientation of spray nozzles to achieve the desired spray coverage and directional control.
2. The following steps must be taken to minimize drift and the amount of non-target spray:
 - Orient nozzles and adjust air speed/volume/direction to force the spray through the crop canopy but not allow drift past the canopy.
 - Shut off spray delivery when passing gaps in crop canopy within rows.
 - Spray the outside rows of orchards from outside in, directing the spray into the orchard and shutting off nozzles on the side of the sprayer away from the orchard.
 - When treating smaller trees, vines or bushes, shut off top nozzles to minimize over-the-top spray movement.

Buffer Zones

The buffer distances specified in the below table 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.

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Application Rate (Lb AI/Acre)	Nozzle Droplet Type	Required Setback (Buffer Zones) (feet)		
		Aerial	Airblast	Ground
>0.5 to 1	coarse or very coarse	10	10	10
>0.5 to 1	medium	25	10	10
>1 to 2	coarse or very coarse	50	10	10
>1 to 2	medium	80	10	10
>2 to 3	coarse or very coarse	80 ¹	10	10
>2 to 3	medium	100 ¹	10	10
>3 to 4	medium or coarse	NA ²	25	10
>4	medium or coarse	NA	50	10

¹ Aerial application of greater than 2.0 pounds active ingredient per acre is only permitted for Asian Citrus Psylla control, up to 2.3 pounds active ingredient per acre.

² NA 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 INSTRUCTIONS

Broadcast Foliar Application

Apply with conventional power-operated spray equipment using nozzles and spray pressures specified for insecticides. Apply Warhawk® in a spray volume of not less than 2.0 gallons per acre for aerial application equipment (fixed wing or helicopter) or not less than 10.0 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 Precautions section for specifications on 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 recommendations 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 (235 to 400 microns). Unless otherwise indicated, a spray volume of 10.0 gallons or more per acre is recommended. For band application, use proportionally less spray volume.

Aerial Application

Use a minimum spray volume of 2.0 gallons per acre and follow recommendations for **best management practices** for aerial application, above.

Marking of swaths by flagging, permanent markers or use of GPS equipment is recommended.

Chemigation (Sprinkler Irrigation)

Warhawk® may be applied to the following crops through sprinkler irrigation equipment: alfalfa, cotton, soybeans, sugar beet, and wheat, or other crops as specified in Loveland Products, Inc.'s supplemental labeling. Do not apply this product by chemigation unless specified in crop-specific directions in this label or Loveland Products, Inc.'s 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 specified for broadcast application.

Use Directions for Sprinkler Irrigation

The following use directions must be followed when Warhawk® is applied through sprinkler irrigation

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systems. Thoroughly clean the injection system and tank of any fertilizer or chemical residues, and dispose of the residues according to state and federal laws. Flush the injector with soap and water. Determine the amount of Warhawk® needed to cover the desired acreage. Mix according to instructions in the Mixing Directions section and bring mixture to desired volume. Do not add crop oil when Warhawk® is applied by chemigation. Maintain continuous agitation during mixing and throughout the application period. Set the sprinkler system to deliver the desired inches of water per acre. Start the water pump and sprinkler, and let the system achieve the desired pressure and speed before starting the injector. Start the injector and calibrate the injector system according to Calibration Instructions in the following Special Use Precautions section. The mixture containing Warhawk® must be injected continuously and uniformly into the irrigation water line as the sprinkler is moving to ensure uniform application at the correct rate. When the application is finished, flush and clean the entire irrigation and injector system prior to shutting down the system.

Use Precautions for Sprinkler Irrigation

The following use precautions will result in a safe and successful application of mixtures containing Warhawk®:

1. Apply this product only through the following sprinkler irrigation systems: 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.
2. Crop injury, lack of effectiveness, or illegal pesticide residues in the crop can result from nonuniform distribution of treated water.
3. If you have questions about calibration, you should contact state extension service specialists, equipment manufacturers, or other experts.
4. Do not connect an irrigation system (including greenhouse systems) used for pesticide application to a public water system.
5. A person knowledgeable of the chemigation system and responsible for its operation, or under the supervision of the responsible person, shall shut the system down and make necessary adjustments should the need arise.
6. The system must contain a functional check valve, vacuum relief valve, and low-pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from back flow. Refer to the American Society of Agricultural Engineer's Engineering Practice 409 for more information.
7. The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.
8. 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.
9. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.
10. 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.
11. 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. The metering pump must provide a greater pressure than that of the irrigation system at the point of injection. The pump must meet Section 675 for "Electrically Driven or Controlled Irrigation Machines" NEC 70 and must contain Viton or Teflon seals.
12. To ensure uniform mixing of the insecticide into the water line, inject the mixture through a nozzle placed in the fertilizer injection port or just ahead of an elbow or tee in the irrigation line so that the turbulence will assist in mixing. It is suggested that the injection point be higher than the insecticide tank to prevent siphoning.
13. The tank holding the insecticide mixture should be large enough to allow the system to complete the application with 1 filling. It must be free of rust, fertilizer, sediment, and foreign material, and equipped with an in-line strainer situated between the tank and the injector pump.
14. **Calibration:** In order to calibrate the irrigation system and injector to apply the mixture of Warhawk®, determine the following: 1) Calculate the number of acres irrigated by the system; 2) Set the irrigation rate and determine the number of minutes for the system to cover the intended treatment area; 3) Calculate the total gallons of insecticide mixture needed to cover the desired acreage. Divide the total gallons of

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insecticide mixture needed by the number of minutes to cover the treatment area. This value equals the gallons per minute output that the injector must deliver. Convert the gallons per minute to milliliters or ounces per minute. 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.

15. 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.
16. Do not allow irrigation water to collect or run off and pose a hazard to livestock, wells, or adjoining crops.
17. Reentry: Follow requirements in the Agricultural Use Requirements section or crop-specific sections of this label.
18. Do not apply through sprinkler systems that deliver a low coefficient of uniformity such as certain water drive units.

Mixing Directions

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 Warhawk®. 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.

Warhawk® is compatible with insecticides, miticides, and fungicides and non-pressure fertilizer solutions commonly recommended except for alkaline materials such as Bordeaux mixture and lime. It is always recommended that a small jar compatibility test be run prior to tank mixing. Prepare tank mixtures in the same manner as recommended above for use of Warhawk® alone. When tank mixing Warhawk® with herbicides, add wettable powders first, flowables second, and emulsifiable concentrates last. When a fertilizer solution is involved, it is strongly recommended that a fertilizer pesticide compatibility agent such as E-Z Mix be used. 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 Warhawk® to the spray or mix tank. Add proportional amounts of each tank mix ingredient to a pint or quart jar, cap, shake, and let set 15 minutes. Formation of precipitates that do not readily redisperse indicates an incompatible mixture that should not be used.

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

CROP SPECIFIC USES

[Note to Reviewer: If needed, parenthesis may be added round a state's abbreviation. For example, (AZ).]

Alfalfa

For use [only] in the following states:

[Arizona][AZ][,] [Colorado][CO][,] [Iowa][IA][,] [Idaho][ID][,] [Illinois][IL][,] [Kansas][KS][,]
[Michigan][MI][,] [Minnesota][MN][,] [Missouri][MO][,] [Montana][MT][,] [North Dakota][ND][,]
[Nebraska][NE][,] [New Mexico][NM][,] [Nevada][NV][,] [Oklahoma][OK][,] [South Dakota][SD][,]
[Texas][TX][,] [Utah][UT][,] [Washington][WA][,] [Wisconsin][WI][,] [Wyoming][WY] [Oregon][OR][,]

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.

Aerial Application: Aerial application permitted only in [CO,] [ID,] [KS,] [MO,] [MT,] [ND,] [NE,] [OK,] [SD,] [UT,] [WA,] [WY]

Apply as a broadcast foliar spray using aircraft equipment. Use a higher rate in the rate range for increased pest pressure. Use a minimum spray volume of 2.0 gallons per acre for aerial application (fixed wing or helicopter). Use a spray volume of 5.0 gallons per acre or more by air when foliage is dense and/or pest population is high and/or under high temperature and wind conditions. Some reduction in insect control may

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occur under unusually cool conditions.

Ground Application: Apply as a broadcast foliar spray using ground spray equipment. Use a higher rate in the rate range for increased pest pressure. Use a minimum spray volume of 10.0 gallons per acre for ground equipment. Use a spray volume of 20.0 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 Application: Warhawk® may be applied through sprinkler irrigation systems to control listed foliar pests. Use specified broadcast application rates. See Chemigation (Sprinkler Irrigation) section for application instructions.

Alfalfa Target Pests	Application Rates pint/acre (lb a.i./acre)
corn rootworm adults (spotted cucumber beetle) grasshoppers leafhoppers	0.5 to 1.0 Pints/Acre (0.25 – 0.5 lb a.i./acre)
alfalfa blotch leaf miner alfalfa caterpillar alfalfa weevil larva and adults armyworms blue alfalfa aphid cowpea aphid cutworms Egyptian alfalfa weevil larvae and adults pea aphid plant bugs spittlebugs spotted alfalfa aphid (suppression)	1.0 to 2.0 Pints/Acre (0.5 – 1.0 lb a.i./acre)
alfalfa webworm	1.5 Pints/Acre (0.75 lb a.i./acre)

Specific Use Restrictions:

State	Maximum Number of Applications per Year	Yearly Maximum Application Rate	Single Maximum Application Rate
AZ, CO, IA, ID, IL, KS, MI, MN, MO, MT, ND, NE, NM, NV, OK, [OR], SD, TX, UT, WA, WI, WY	1	2.0 pints/acre (1.0 lb a.i./ac)	2.0 pints/acre (1.0 lb a.i./ac)

- **Preharvest Interval:** Do not cut or graze treated alfalfa within 7 days after application of 0.5 pint per acre of Warhawk®, within 14 days after application of 1.0 pint per acre, or within 21 days after application of rates above 1.0 pint per acre.
- **DO NOT** make more than 1 application per year of Warhawk® or other product containing chlorpyrifos.
- Warhawk® should not be tank mixed 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 Warhawk®. 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

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- information may be obtained from your Agricultural Extension Service.
- For each application, follow all chlorpyrifos Endangered Species Protection Requirements.
 - To avoid contamination of irrigation tail waters, do not flood irrigate within 24 hours following an application of Warhawk®.

[Note to Reviewer: ID and WA are not included in this section as they are West of the Rockies.]

Apple Tree Trunk (Bearing and Nonbearing)

Bearing Apple Tree Trunks - Only use only in the following states East of the Rockies where Chlorpyrifos can be applied to apple trees: Alabama (AL), Delaware (DE), Georgia (GA), Indiana (IN), Kentucky (KY), Michigan (MI), New Jersey (NJ), Ohio (OH), Pennsylvania (PA), Tennessee (TN), Virginia (VA), Vermont (VT), West Virginia (WV), Washington D.C. [Maryland (MD)] [New York (NY)]

Nonbearing Apple Tree Trunks – Only use in States East of the Rockies, except Mississippi

[(For Dormant/Delayed Dormant Sprays for Apples, see Tree Fruits (Dormant/Dormant Delayed Sprays) Section.)]

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

Bearing Apple Tree Trunks - Apply as a post-bloom application to the lower 4 feet of the apple tree trunk for borer control in AL, DC, DE, GA, IN, KY, [MD], MI, NJ, [NY], OH, PA, TN, VA, VT, WV (the states east of the Rockies that allow chlorpyrifos application to apples). 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.

Nonbearing Apple Tree Trunks - 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 (except Mississippi). 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.

Apple Tree Trunk Target Pests	Application Rates Quarts/100 gals (lb a.i./100 gal)
American plum borer Apple bark borer Broad necked root borer Dogwood borer Flatheaded Appletree borer Roundheaded apple tree borer Tilehorned prionus	1.5 Quarts/100 gals/0.75 acre (1.5 lb a.i./100 gal/ 0.75 acre)

Specific Use Restrictions:

Bearing - Apple Tree Trunk Application		
Yearly Maximum Number of Applications	Yearly Maximum Application Rate	Single Maximum Application Rate
One- If chlorpyrifos is applied as a post-bloom application to the apple tree trunk, no other chlorpyrifos treatment may be made to apples in the same year.	2.0 quarts /acre/year (2.0 lb a.i./ac/ year)	2.0 quarts /acre/year (2.0 lb a.i./ac/ year)

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Nonbearing - Apple Tree Trunk Application		
Yearly Maximum Number of Applications	Yearly Maximum Application Rate	Single Maximum Application Rate
One- Applied as either a pre-bloom or a post-bloom application to the apple tree trunk	2.0 quarts /acre/year (2.0 lb a.i./ac/ year)	2.0 quarts /acre/year (2.0 lb a.i./ac/ year)

- **Preharvest Interval for bearing apple trees:** Do not apply within 28 days before harvest.
- **Preharvest Interval for nonbearing apple trees:** Do not apply within 1 year of harvest for food or feed.
- Nonbearing apple –
 - Do not make more than one application of a chlorpyrifos containing product to the apple tree trunk per year. Apply as either a pre-bloom (see dormant/delayed dormant spray) or post bloom application.
- Bearing apple
 - Do not make more than 1 application (total) of a chlorpyrifos containing product per acre per year to apples.
- 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.
- For each application, follow all applicable chlorpyrifos Endangered Species Protection Requirements.
- Do not apply within 25 feet of aquatic habitats (such as, but not limited to, lakes, reservoirs, rivers, permanent streams, wetlands or natural ponds, estuaries, and commercial fish farm ponds).
- Do not apply directly to, or allow the product to enter sewers or storm drains, or to any area like a drain or gutter where drainage to sewers, storm drains, water bodies, or aquatic habitat can occur.
- Do not apply directly to impervious horizontal surfaces such as sidewalks, driveways, and patios except as a spot or crack-and-crevice treatment.
- Do not apply to vertical surfaces directly above pervious or impervious surfaces that drain into ditches, storm drains, gutters, or surface waters.
- Do not apply or irrigate to the point of runoff.

Asparagus
For use only in Michigan

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 ground broadcast foliar spray. Use sufficient volume of finished spray to ensure thorough coverage of crop foliage. **Note:** Warhawk® may be applied with ground equipment for control of armyworms and grasshoppers.

Asparagus Target Pests	Single Application pint/acre (lb a.i./acre)
armyworms (1) asparagus aphids (1) asparagus beetles (1) cutworms (2) grasshoppers (1) symphylans (3)	2.0 pints/acre (1.0 lb a.i./ac)

Numbers in parentheses (-) refer to Pest-Specific Use Directions.

Pest-Specific Use Directions:

1. For **armyworms**, **asparagus beetles**, **asparagus aphids**, and **grasshoppers**, apply during the fern stage when field counts or crop injury indicates that damaging pest populations are developing or present.
2. For **cutworms**, it is preferable to apply when the soil is moist and worms are active on or near the soil

surface.

3. For **symphylans**, apply at least 2 weeks before harvest for optimum control.

Specific Use Restrictions:

- **Preharvest Interval: DO NOT** apply within 1 day of harvest.
 - **DO NOT** make more than 1 application per year. Application may be made in either the preharvest growth stage; or in the postharvest fern stage.
 - Maximum single application rate is 2 pints/acre (1.0 pound active ingredient chlorpyrifos per acre.)
 - Maximum application Rate per year is 2 pints/acre/year (1.0 pound active ingredient chlorpyrifos per acre per year.)
 - For each application, follow all applicable chlorpyrifos Endangered Species Protection Requirements.
-

Christmas Trees (Plantations) (Not for Use in Mississippi)

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.

Unless otherwise indicated, apply as a foliar spray using power-operated ground equipment. Thorough coverage of foliage is essential. Use a minimum 10.0 gallons per acre of finished spray with ground equipment. Use higher volume of finished spray, 20.0 gallons per acre or more, when foliage is dense and/or pest density is high and/or under high temperature and wind conditions.

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Christmas Tree Target Pests	Warhawk® Application Rates Quart/acre (lb a.i./ acre)
adelgids (cooley) (eastern spruce gall) aphids Douglas fir needle midge European pine sawfly European pine shoot moth grasshoppers gypsy moth mites (1) (European red spider) (two spotted spider) pales weevil (adult) pine needle midge pine spittlebug plant bugs scale (pine needle) (pine tortoise) (spruce bud) (black pine) (striped pine) (2) spittlebugs spruce budworm spruce needleminer	1.0 quart/acre (1.0 lb a.i./acre)
pales weevil (3)	3.0 quarts/100 gallons (3.0 lb a.i./100 gallons)

Numbers in parentheses (-) refer to Pest-Specific Use Directions.

Pest-Specific Use Directions:

1. When large numbers of **spider mite** eggs are present at the first application, a second application after 7 to 10 days may be required to control newly hatched nymphs and maintain effective control. **Not for control of mites in Washington [and Oregon]**.
2. For **scale control** apply when scale crawlers are active.
3. Apply as a cut stump drench.

For suppression of foraging ants* and mounds: Apply as a spot spray using ground application equipment that will apply the spray uniformly. For spot treatments, a cumulative area of no more than one tenth (0.1) of each acre may be treated. Since worker ants cease most of their foraging activity at temperatures above 90 °F, best results will be achieved if applied at a time of day when temperatures are below 90 °F.

Use a minimum 1.0 gallons per acre of finished spray per 0.1 acre with ground equipment. Use higher volume of finished spray, 2.0 gallons or more per 0.1 acre, when pest density is high and/or under high temperature and wind conditions. For best results, remove weed growth or other obstructions that might prevent the spray from reaching the soil surface.

Target Pest	Amount of Warhawk pints/acre (lb a.i./acre)
Ants(1)(2)	0.2 pints/0.1 acre (0.1 lb a.i./0.1acre)

Numbers in parentheses (-) refer to Specific Use Directions for Ants

Specific Use Directions and Restrictions for Ant applications:

1. *Not for use to control fire, carpenter, harvester and pharaoh ants.
2. **This product may be applied only as a spot treatment for ants. Spot applications are limited**

to treatment of no more than 0.1 of each acre.

Specific Use Restrictions:

- Do not make more than 3 applications of Warhawk® or other product containing chlorpyrifos per season.
- Do not make a second application of Warhawk® or other product containing chlorpyrifos within 7 days of the first application.
- Do not allow meat or dairy animals to graze in treated areas.
- **Phytotoxicity:** Do not apply under conditions of extreme heat or drought stress. Environmental factors and varietal differences significantly influence potential phytotoxic expression. **Testing has shown that Warhawk® may be used at the specified rates on the following conifer species without serious phytotoxicity: balsam fir, concolor fir, Douglas fir, eastern white pine, Fraser fir, grand fir, noble fir, Scotch pine, white spruce.** Before treating large numbers of trees in other conifer species not listed here, it is recommended that a small block of plants be treated and observed 7 to 10 days for symptoms of phytotoxicity. **Note:** The user assumes responsibility for determining if it is safe to treat other conifer species with Warhawk® under commercial growing conditions.
- For each application, follow all applicable chlorpyrifos Endangered Species Protection Requirements.
- Do not apply within 25 feet of aquatic habitats (such as, but not limited to, lakes, reservoirs, rivers, permanent streams, wetlands or natural ponds, estuaries, and commercial fish farm ponds).
- Do not apply directly to, or allow the product to enter sewers or storm drains, or to any area like a drain or gutter where drainage to sewers, storm drains, water bodies, or aquatic habitat can occur.
- Do not apply directly to impervious horizontal surfaces such as sidewalks, driveways, and patios except as a spot or crack-and-crevice treatment.
- Do not apply to vertical surfaces directly above pervious or impervious surfaces that drain into ditches, storm drains, gutters, or surface waters.
- Do not apply or irrigate to the point of runoff.

[Note to Reviewer: If needed, parenthesis may be added round a state's abbreviation. For example, (AL)]

Citrus Fruits

(Bearing Citrus Trees including: Calamondin, chironja, citrus citron, citrus hybrids, grapefruit, kumquat, lemon, lime, mandarin (tangerine), pummelo, satsuma mandarin, sour orange, sweet orange, tangelo, tangor)

For use only in [Alabama][AL][,] [Florida][FL][,] [Georgia][GA][,] [North Carolina][NC][,] [South Carolina][SC][,] [and]
[Texas][TX]

[For other applications to citrus, reference: bearing Citrus orchard floors, nonbearing citrus trees and nonbearing citrus orchard floors.]

Worker Restricted Entry Interval: Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 5 days unless PPE required for early entry is worn.

Apply as a concentrate or dilute spray using conventional, power-operated spray equipment. Use a higher rate in rate range when there is increased pest pressure. Use sufficient water to ensure thorough and complete coverage of the foliage and fruit. For dilute sprays (greater than 200 gallons per acre), use a spray concentration of at least 0.5 pints of Warhawk® per 100 gallons of finished spray. Complete coverage is not necessary for outside canopy sprays targeting certain pests such as lepidoptera insects and katydids. Treat when pests become a problem or in accordance with the local spray schedule as recommended by your State Agricultural Experiment Station, certified Pest Control Advisor, or Extension Service Specialist.

To avoid excessive ridging do not apply Warhawk® to citrus from December up to the initiation of bloom.

Use of Spray Oils: To improve control of aphids, mealybugs, scale insects, and thrips, a petroleum spray oil recommended for use on citrus trees may be added to spray mixtures at up to 1.8 gallons per 100 gallons of spray.

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Citrus (Bearing) - Target Pests	Application Rates
Aphids (including brown citrus aphid) Glassy-winged sharpshooter Grasshoppers (1) Katydid Lepidopterous larvae (such as: avocado leafroller, cutworms, fruit tree leafroller, orange dogs, orange tortrix, western tussock moth) Mealybugs Scale insects (such as: black scale, brown soft scale, chaff scale, California red scale, Florida red scale, long scale, purple scale and snow scale) Thrips	<p style="text-align: center;"><u>TX</u> 2.0 to 7.0 Pints/Acre (1.0 - 3.5 lb a.i./acre)</p> <p style="text-align: center;"><u>AL, FL, GA, NC, SC</u> 2.0 to 6.0 pints/acre (1.0 - 3.0 lb a.i./acre)</p>
citrus rust mites (2) (Florida only)	<p style="text-align: center;"><u>FL</u> 4.0 to 6.0 pints/acre (2.0 - 3.0 lb a.i./acre)</p>
citrus psylla (3) (Florida only)	<p style="text-align: center;"><u>FL</u> 5.0 pints/acre (2.5 lb a.i./acre)</p>
thrips suppression and mealybugs	<p style="text-align: center;"><u>TX</u> 6.0 to 7.0 Pints/Acre (3.0 -3.5 lb a.i./acre)</p> <p style="text-align: center;"><u>AL, FL, GA, NC, SC</u> 2.0 to 6.0 pints/acre (1.0 to 3.0 lb a.i./acre)</p>
California red scale	<p style="text-align: center;"><u>TX</u> 7.0 Pints/Acre (3.5 lb a.i./acre)</p> <p style="text-align: center;"><u>AL, FL, GA, NC, SC</u> 6.0 pints/acre (3.0 lb a.i./acre)</p>

Numbers in parentheses (-) refer to Pest-Specific Use Directions.

Pest-Specific Use Directions:

1. **Lubber grasshoppers:** Effective control requires direct contact with spray when grasshoppers are small (less than 1 inch in length).
2. For control of **citrus rust mites**, use a spray concentration of at least 1.0 pint per 100 gallons.
3. For control of **citrus psylla**, add citrus oil at 2% v/v in a tank mix with Warhawk®.

Specific Use Restrictions:

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State	Yearly Maximum Number of Applications	Single Maximum Application Rate	Yearly Maximum Application Rate
TX	A total of 1 chlorpyrifos application to bearing citrus per year— Either Soil or Foliar	7.0 Pints/acre (3.5 lb a.i./acre)	7.0 Pints/acre/year (3.5 lb a.i./acre/year)
AL, FL, GA, NC, SC	A total of 1 chlorpyrifos application to bearing citrus per year— Either Soil or Foliar	6.0 pints/acre (3.0 lb a.i./acre)	6.0 pints/acre/year (3.0 lb a.i./acre/year)

- **Preharvest Interval:** In Texas, do not treat within 21 days of harvest for applications of up to 7.0 pints of Warhawk per acre.
- **DO NOT** apply more than 7.0 pints of Warhawk (3.5 pounds active ingredient chlorpyrifos) per acre per year in Texas.
- **DO NOT** apply more than 6.0 pints of Warhawk® (3.0 pounds active ingredient chlorpyrifos) per acre per year in AL, FL, GA, NC, and SC.
- **DO NOT** make more than 1 application of Warhawk® or other products containing chlorpyrifos per year.
- **DO NOT** allow meat or dairy animals to graze in treated areas.
- Observe local recommendations for tank mix combinations especially with regard to use of Warhawk® with spray oil. Consult with a county farm advisor, county agency, extension service personnel, agricultural commissioner, pest control advisor, or local Loveland Products, Inc. representative for local recommendations.
- Do not apply when trees are stressed by drought or high temperatures.
- **Warhawk® is highly toxic to bees exposed to direct treatment. Warhawk should not be applied when bees are actively visiting the area.** Follow state or local **Managed Pollinator Protection Plans**. If not available, refer to the pollinator best management practices on this label.
- Warhawk® should not be used in combination with spray oil when temperatures are expected to exceed 95°F the day of application or for several consecutive days thereafter.
- Do not apply within 25 feet of aquatic habitats (such as, but not limited to, lakes, reservoirs, rivers, permanent streams, wetlands or natural ponds, estuaries, and commercial fish farm ponds).
- Do not apply directly to, or allow the product to enter sewers or storm drains, or to any area like a drain or gutter where drainage to sewers, storm drains, water bodies, or aquatic habitat can occur.
- Do not apply directly to impervious horizontal surfaces such as sidewalks, driveways, and patios except as a spot or crack-and-crevice treatment.
- Do not apply to vertical surfaces directly above pervious or impervious surfaces that drain into ditches, storm drains, gutters, or surface waters.
- Do not apply or irrigate to the point of runoff.

Citrus, Nonbearing (Not for Use in Mississippi)
(Nonbearing Citrus Trees including: Calamondin, chironja, citrus citron, citrus hybrids, grapefruit, kumquat, lemon, lime, mandarin (tangerine), pummelo, satsuma mandarin, sour orange, sweet orange, tangelo, tangor)

[For other applications to citrus reference: bearing Citrus orchard floors, bearing citrus trees and nonbearing citrus orchard floors.]

Worker Restricted Entry Interval: Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 5 days unless PPE required for early entry is worn.

Apply as a concentrate or dilute spray using conventional, power-operated spray equipment. Use a higher rate in rate range when there is increased pest pressure. Use sufficient water to ensure thorough and complete coverage of the foliage. For dilute sprays (greater than 200 gallons per acre), use a spray concentration of at least 0.5 pints of Warhawk® per 100 gallons of finished spray. Complete coverage is not necessary for outside canopy sprays targeting certain pests such as lepidoptera insects and katydids. Treat when pests

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become a problem or in accordance with the local spray schedule as recommended by your State Agricultural Experiment Station, certified Pest Control Advisor, or Extension Service Specialist.

To avoid excessive ridging do not apply Warhawk® to citrus from December up to the initiation of bloom.

Use of Spray Oils: To improve control of aphids, mealybugs, scale insects, and thrips, a petroleum spray oil recommended for use on citrus trees may be added to spray mixtures at up to 1.8 gallons per 100 gallons of spray.

Citrus (Nonbearing) - Target Pests	Application Rates
Aphids (including brown citrus aphid) Glassy-winged sharpshooter Grasshoppers (1) Katydid Lepidopterous larvae (such as: avocado leafroller, cutworms, fruit tree leafroller, orange dogs, orange tortrix, western tussock moth) Mealybugs Scale insects (such as: black scale, brown soft scale, chaff scale, California red scale, Florida red scale, long scale, purple scale and snow scale) Thrips	2.0 to 7.0 Pints/Acre (1.0 - 3.5 lb a.i./acre)
citrus rust mites (2) (Florida only)	4.0 to 7.0 pints/acre (2.0 - 3.5 lb a.i./acre)
citrus psylla (3) (Florida only)	5.0 pints/acre (2.5 lb a.i./acre)
thrips suppression and mealybugs	6.0 to 8.0 Pints/Acre (3.0 - 4.0 lb a.i./acre)
California red scale	8.0 Pints/Acre (4.0 lb a.i./acre)

Numbers in parentheses (-) refer to Pest-Specific Use Directions.

Pest-Specific Use Directions:

- Lubber grasshoppers:** Effective control requires direct contact with spray when grasshoppers are small (less than 1 inch in length).
- For control of **citrus rust mites**, use a spray concentration of at least 1.0 pint per 100 gallons.
- For control of **citrus psylla**, add citrus oil at 2% v/v in a tank mix with Warhawk®.

Specific Use Restrictions:

Yearly Maximum Number of Foliar Applications, all Chlorpyrifos Products (Nonbearing Citrus)	Single Maximum Application Rate	Yearly Maximum Application Rate
Two (2), (Applications to nonbearing citrus orchard floors are counted separately)	8.0 Pints/acre (4.0 lb a.i./acre)	15.0 Pints/acre/year (7.5 lb a.i./acre/year)

- **Preharvest Interval:** Do not apply within 365 days of fruit harvest for food or feed.
- Do not apply more than 15.0 pints of Warhawk® (7.5 pounds active ingredient chlorpyrifos) per acre per year.
- **DO NOT** make more than 2 applications of Warhawk® or other products containing chlorpyrifos per year (does not include citrus orchard floors).
- **Retreatment Interval (RTI)** - Do not make second foliar application of Warhawk® (or other product containing chlorpyrifos) within 30 days of the first foliar application.

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- Do not allow meat or dairy animals to graze in treated areas for one year after application.
- Observe local recommendations for tank mix combinations especially with regard to use of Warhawk® with spray oil. Consult with a county farm advisor, county agency, extension service personnel, agricultural commissioner, pest control advisor, or local Loveland Products, Inc. representative for local recommendations.
- Do not apply when trees are stressed by drought or high temperatures.
- **Warhawk® is highly toxic to bees exposed to direct treatment. Warhawk should not be applied when bees are actively visiting the area.** Follow state or local **Managed Pollinator Protection Plans**. If not available, refer to the pollinator best management practices on this label.
- For each application, follow all applicable chlorpyrifos Endangered Species Protection Requirements.
- Warhawk® should not be used in combination with spray oil when temperatures are expected to exceed 95°F the day of application or for several consecutive days thereafter.
- Do not apply within 25 feet of aquatic habitats (such as, but not limited to, lakes, reservoirs, rivers, permanent streams, wetlands or natural ponds, estuaries, and commercial fish farm ponds).
- Do not apply directly to, or allow the product to enter sewers or storm drains, or to any area like a drain or gutter where drainage to sewers, storm drains, water bodies, or aquatic habitat can occur.
- Do not apply directly to impervious horizontal surfaces such as sidewalks, driveways, and patios except as a spot or crack-and-crevice treatment.
- Do not apply to vertical surfaces directly above pervious or impervious surfaces that drain into ditches, storm drains, gutters, or surface waters.
- Do not apply or irrigate to the point of runoff.

[Note to Reviewer: If needed, parenthesis may be added round a state's abbreviation. For example, (AL).]

Citrus Orchard Floors (Bearing Trees)

For use only in [Alabama][AL][,] [Florida][FL][,] [Georgia][GA][,] [North Carolina][NC][,] [South Carolina][SC][,] [and]
[Texas][TX]

Worker Restricted Entry Interval: Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 5 days unless PPE required for early entry is worn.

For spot treatment application to the orchard floor to control foraging ants* and suppress mounds. Spot treatments are limited areas that do not exceed one-tenth (0.1) of an acre. Do not apply spray to contact foliage or fruit. Apply in a total spray volume of 2.5 gallons or more per 0.1 acre using equipment that will apply the spray uniformly to the soil surface. For best results, remove weed growth or other obstructions that might prevent the spray from reaching the soil surface. Foliar applications of Warhawk® or other products containing chlorpyrifos may not be made in addition to a bearing citrus orchard floor treatment. (see Specific Use Restrictions).

Note: Do not apply in tank mixture with Evik® herbicide.

Citrus Orchard Floor (Bearing) Target Pests	Application Rates Applied only as a Spot Treatment; (Cumulative area of no more than one tenth (0.1) of each acre may be treated)
ant species* (1)(2)	0.15 to 0.2 pints/ tenth (0.1) of an acre [▲] (0.075 - 0.1 lb a.i./tenth of an acre)

*Excludes fire, harvester, carpenter, and pharaoh ants.

▲ Rate is Equivalent to 2.4 - 3.2 fl oz/ tenth of an acre

Numbers in parentheses (-) refer to Pest-Specific Use Directions.

1. Treatment of orchard floors for ants is limited to spot treatments. (For spot treatments, a cumulative area of no more than one tenth (0.1) of each acre may be treated.)
2. Apply in 2.5 (or more gallons) per tenth of an acre to ensure soil surface is uniformly covered.

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Specific Use Restrictions:

State	Yearly Maximum # of Applications	Single Maximum Application Rate for soil application Applied as a spot treatment to no more than a tenth of each acre treated	Yearly Maximum Application Rate for soil application Applied as a spot treatment to no more than a tenth of each acre treated per year
AL, FL, GA, NC, SC, TX	A total of 1 chlorpyrifos application to bearing citrus per year— Either a soil or a foliar application	0.2 pints/acre (0.1 lb a.i./0.1 acre)	0.2 pints/acre/year (0.1 lb a.i./0.1 acre/year)
		Rate is equivalent to 3.2 fl oz per tenth (0.1) of an acre	

- **DO NOT** apply last treatment within 28 days of harvest.
- **DO NOT** allow meat or dairy animals to graze in treated areas.
- **DO NOT** apply to more than one tenth (0.1) of any acre. And, **DO NOT** apply more than 0.2 pints (0.1 pound active ingredient chlorpyrifos) per acre.
- For each application, follow all applicable chlorpyrifos Endangered Species Protection Requirements.

**Citrus Orchard Floors (Nonbearing Trees)
(Not for Use in Mississippi).**

Worker Restricted Entry Interval: Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 5 days unless PPE required for early entry is worn.

For spot treatment applications to the nonbearing orchard floor to suppress mounds and foraging ants*. Spot treatment are limited areas that do not exceed one tenth (0.1) of an acre. Apply in a total spray volume of 2.5 or more gallons per 0.1 acre using equipment that will apply the spray uniformly to the soil surface. For best results, remove weed growth or other obstructions that might prevent the spray from reaching the soil surface.

Do not apply spray to contact foliage. Foliar applications of Warhawk® or other products containing chlorpyrifos may be made in addition to the orchard floor treatments of nonbearing trees but must comply with the 10- day re-treatment interval required after a soil application (see Specific Use Restrictions).

Note: Do not apply in tank mixture with Evik® herbicide.

Citrus Orchard Floor (NonBearing) Target Pests	Application Rates Applied only as a Spot Treatment; (Cumulative area of no more than one tenth (0.1) of each acre may be treated)
ant species* (1)(2)	0.15 to 0.2 pints/ tenth (0.1) of an acre [▲] (0.075 - 0.1 lb a.i./tenth of an acre)

*Excludes fire, harvester, carpenter, and pharaoh ants.

▲ Rate is Equivalent to 2.4 - 3.2 fl oz/ tenth of an acre

Numbers in parentheses (-) refer to Pest-Specific Use Directions.

1. Treatment of orchard floors for ants is limited to spot treatments. (For spot treatments, a cumulative area of no more than one tenth (0.1) of each acre may be treated.)
2. Apply in 2.5 (or more gallons) per tenth of an acre to ensure soil surface is uniformly covered.

Specific Use Restrictions:

- **DO NOT** apply within 365 days of fruit harvest for food or feed.
- **DO NOT** make more than 3 applications of Warhawk® or other products containing chlorpyrifos per year to the nonbearing citrus orchard floor (does not include foliar applications to nonbearing citrus trees).
- **DO NOT** apply more than 0.6 pints (0.3 pounds active ingredient chlorpyrifos) per acre per year to nonbearing

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citrus orchard floors.

- **DO NOT** make a second application of Warhawk® or other product containing chlorpyrifos within 10 days of a nonbearing citrus orchard floor application.
- **DO NOT** allow meat or dairy animals to graze in treated areas for one year after treatment.
- **DO NOT** apply to orchard floors for ants or other miscellaneous insects except as a spot treatment. (For spot treatments, a cumulative area of no more than one tenth (0.1) of each acre may be treated.) The maximum rate per spot application is 0.2 pints (0.1 pound active ingredient chlorpyrifos) per tenth of an acre treated.
- For each application, follow all applicable chlorpyrifos Endangered Species Protection Requirements.
- Do not apply within 25 feet of aquatic habitats (such as, but not limited to, lakes, reservoirs, rivers, permanent streams, wetlands or natural ponds, estuaries, and commercial fish farm ponds).
- Do not apply directly to, or allow the product to enter sewers or storm drains, or to any area like a drain or gutter where drainage to sewers, storm drains, water bodies, or aquatic habitat can occur.
- Do not apply directly to impervious horizontal surfaces such as sidewalks, driveways, and patios except as a spot or crack-and-crevice treatment.
- Do not apply to vertical surfaces directly above pervious or impervious surfaces that drain into ditches, storm drains, gutters, or surface waters.
- Do not apply or irrigate to the point of runoff.

Conservation Tillage
(Not for aerial application in Mississippi)

Apply to fallow fields using conservation tillage when the next crop to be planted will not be distributed for food or feed for at least 1 year (365 days) after the last application of this product.

Apply as a broadcast spray to surface trash and exposed soil using power-operated ground spray equipment. Use a total spray volume of 20.0 gallons per acre or more. Use a higher rate in the rate range to extend residual control.

Tank Mixing: Warhawk® 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 Warhawk®.

Conservation Tillage Target Pests	Warhawk® (Pts/A)
armyworms cutworms	1.0 to 2.0 pints/acre (0.5 – 1.0 lb a.i./acre)

Specific Use Restrictions:

- No portion of a chlorpyrifos treated area may be used for growing food or feed for 1 year (365 days) after the last application of this product. (Note: Prohibition includes a restriction on grazing animals in the field as well as use restriction on any portion of the crop (e.g. grain, ears, silage, forage, fodder, hay, meal, roots, oil, etc.) for feed for at least 1 year.)
- Do not make more than 3 applications of Warhawk® or other products containing chlorpyrifos per season, including the maximum allowed of 2 granular applications, at the 1.0 pound active ingredient chlorpyrifos rate.
- Do not apply more than 6.0 pints of Warhawk® (3.0 pounds active ingredient chlorpyrifos) per acre per season.
- Maximum single application rate is 2.0 pints of Warhawk® (1.0 pound active ingredient chlorpyrifos) per acre.
- Do not make a second application of Warhawk® or other product containing chlorpyrifos within 10 days of the first application.
- Do not apply in tank mixes with Steadfast® or Lightning® herbicides.
- If more than 1.0 pound active ingredient granular chlorpyrifos per acre is applied (for a maximum of 1.3 pounds active ingredient per acre of fallow land), only 1 additional application of a liquid product containing chlorpyrifos at 1.0 pound active ingredient per acre is allowed, for a total of 2.3 pounds active ingredient chlorpyrifos per fallow acre per year.

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- For each application, follow all applicable chlorpyrifos Endangered Species Protection Requirements.
 - Do not aerially apply this product in Mississippi.
-
- Do not apply within 25 feet of aquatic habitats (such as, but not limited to, lakes, reservoirs, rivers, permanent streams, wetlands or natural ponds, estuaries, and commercial fish farm ponds).
 - Do not apply directly to, or allow the product to enter sewers or storm drains, or to any area like a drain or gutter where drainage to sewers, storm drains, water bodies, or aquatic habitat can occur.
 - Do not apply directly to impervious horizontal surfaces such as sidewalks, driveways, and patios except as a spot or crack-and-crevice treatment.
 - Do not apply to vertical surfaces directly above pervious or impervious surfaces that drain into ditches, storm drains, gutters, or surface waters.
 - Do not apply or irrigate to the point of runoff.
-

Cotton

For use only in Alabama (AL), Florida (FL), Georgia (GA), North Carolina (NC), South Carolina (SC), and Virginia (VA).

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 ground spray equipment. 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 10.0 gallons per acre for ground spray 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: Warhawk® may be applied through sprinkler irrigation systems at specified broadcast application rates to control listed foliar pests. See Chemigation (Sprinkler Irrigation) section for application instructions.

Proper application methods are necessary to ensure thorough spray coverage and correct rate, and minimize off-target drift. Follow Application Guidelines for ground application and Spray Drift Management recommendations in General Information section of this label.

Cotton Target Pests	Single Application Rates pint/acre (lb a.i./acre)
cotton fleahopper (1) plant bugs (1) (<i>Lygus</i> , <i>Mirids</i>)	0.375 to 1.0 pints/acre (0.1875 – 0.5 lb a.i./acre)
grasshoppers thrips	0.5 to 1.0 pints/acre (0.25 – 0.5 lb a.i./acre)
cotton aphid fall armyworm yellow-striped armyworm	0.5 to 1.0 pints/acre (0.25 – 0.5 lb a.i./acre)
spider mites (2)	1.0 pints/acre (0.5 lb a.i./acre)
beet armyworm cotton bollworm (3) cutworms pink bollworm saltmarsh caterpillar tobacco budworm (3)	1.0 pints/acre (0.5 lb a.i./acre)

Numbers in parentheses (-) refer to Pest-Specific Use Directions.

Pest-Specific Use Directions:

The 0.375 pint per acre rate will not provide a high degree of control; but, compared to the 1.0 pint per acre rate, will minimize the damage from **plant bugs** and **cotton fleahoppers** and allow increased survival and

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build-up of **beneficial insects** to aid in the control of **bollworms** infesting cotton.

1. **Spider mites:** When large numbers of eggs are present, scout the treated area in 3 to 5 days. If newly hatched nymphs are present, make a follow-up application of a non-chlorpyrifos product that is effective against mites.
2. **Bollworms and budworms:** For best results, it is suggested that fields be scouted twice per week and applications made when worms are 1/4 inch or less in length.

Specific Use Restrictions:

State	Yearly Maximum Number of Applications	Yearly Maximum Application Rate	Single Maximum Application Rate
AL, FL, GA, NC, SC, VA	1	1.0 pints/acre/year (0.5 lb a.i./ac/year)	1.0 pints/acre (0.5 lb a.i./ac)

- **Preharvest Interval:** Do not apply within 14 days before harvest.
- Do not feed trash or treated forage/stalks to meat or dairy animals.
- Do not apply more than 1.0 pints of Warhawk® (0.5 pounds active ingredient chlorpyrifos) per acre per year.
- Do not make more than 1 application of Warhawk® or other products containing chlorpyrifos per year.
- Maximum single application rate is 1.0 pints (0.5 pound active ingredient chlorpyrifos) per acre per year.
- For each application, follow all applicable chlorpyrifos Endangered Species Protection Requirements.

Soybean

For use only in Alabama (AL), Colorado (CO), Florida (FL), Georgia (GA), Iowa (IA), Illinois (IL), Indiana (IN), Kansas (KS), Kentucky (KY), Minnesota (MN), Missouri (MO), Montana (MT), North Carolina (NC), North Dakota (ND), Nebraska (NE), New Mexico (NM), Ohio (OH), Oklahoma (OK), Pennsylvania (PA), South Carolina (SC), South Dakota (SD), Tennessee (TN), Texas (TX), Virginia (VA), Wisconsin (WI), West Virginia (WV) and Wyoming (WY).

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

Apply as a broadcast treatment to soil surface in a minimum spray volume of 10.0 gallons per acre using suitable ground spray equipment or as a band application. Use a higher rate in the rate range when there is increased pest pressure. For band application, equivalent rates of insecticide spray required per 100 feet of row for various row spacing are given in the accompanying table. For at-plant treatments, apply in a 4- to 6-inch band centered over the row. Position the spray nozzle in front of the planter shoe or press wheel or after the press wheel followed by a drag chain for light incorporation. **Do not apply as an in-furrow treatment.** For a postemergence rescue treatment, apply as a directed spray in a 9- to 12-inch band at the base of the plant. For plants less than 6 inches tall, apply over-the-top in a 6- to 12-inch band.

If soil application of Warhawk or any product containing chlorpyrifos is made to soybeans, a foliar application of any chlorpyrifos containing product is prohibited.

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Soybean Target Pests	At-plant Treatment (Broadcast, T-Band or Band) pint/acre (lb a.i./acre)	Postemergence Rescue Treatment (Band only) pint/acre (lb a.i./acre)
Cutworms	<u>AL, IA, FL, GA, NC, SC, VA, WI</u> 1.0 to 2.0 pints/acre (0.5 – 1.0 lb a.i./acre)	<u>AL, IA, FL, GA, NC, SC, VA, WI</u> 1.0 to 2.0 pints/acre (0.5 – 1.0 lb a.i./acre)
Lesser cornstalk borer	<u>CO, IL, IN, KS, KY, MN, MO, MT, ND, NE, NM, OH, OK, PA, SD, TN, TX, WV and WY</u> 1.0 to 1.5 pints/acre (0.5 – 0.75 lb a.i./acre)	<u>CO, IL, IN, KS, KY, MN, MO, MT, ND, NE, NM, OH, OK, PA, SD, TN, TX, WV and WY</u> 1.0 to 1.5 pints/acre (0.5 – 0.75 lb a.i./acre)

**Fl Oz of Spray Required/100 Ft of Row for
Various Row Spacings and Spray Volumes**

Volume of Spray/A	36"	32"	28"	24"
10.0 gals	8.8	7.9	6.9	5.9
15.0 gals	13.2	11.8	10.3	8.8
20.0 gals	17.6	15.7	13.7	11.8

Foliar Application

Apply when field counts indicate damaging pest populations are developing or present. Warhawk® may be tank mixed with glyphosate products when application is to be made to glyphosate-tolerance soybeans. Use a higher rate in the rate range when there is increased pest pressure.

Foliar Application by Ground:

AL, CO, FL, GA, IA, IL, IN, KS, KY, MN, MO, MT, NC, ND, NE, NM, OH, OK, PA, SC, SD, TN, TX, VA, WI, WV, WY
Apply as a postemergence broadcast spray using sufficient spray volume to ensure thorough coverage of treated plants, but no less than 15.0 gallons per acre for ground spray equipment.

Foliar Application by Air:

Only in CO, IA, IL, KS, MO, MN, MT, ND, NE, NM, OK, SD, TX, WI, WY
Apply as a postemergence broadcast spray using sufficient spray volume to ensure thorough coverage of treated plants, but no less than 2.0 to 5.0 gallons per acre for aircraft equipment.

Foliar Application by Chemigation:

AL, CO, FL, GA, IA, IL, IN, KS, KY, MN, MO, MT, NC, ND, NE, NM, OH, OK, PA, SC, SD, TN, TX, VA, WI, WV, WY
Warhawk® may be applied through sprinkler irrigation systems at specified broadcast application rates to control listed foliar pests. See Chemigation (Sprinkler Irrigation) section for application instructions.

Soybean Target Pests	Rate- pint/acre (lb a.i./acre)
grasshoppers green cloverworm spider mites (1) velvetbean caterpillar	0.5 to 1.0 pints/acre (0.25 – 0.5 lb a.i./acre)

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Soybean Target Pests	Rate- pint/acre (lb a.i./acre)
armyworms bean leaf beetle corn earworm cutworm Mexican beanbeetle painted lady butterfly potato leafhopper saltmarsh caterpillar and other "woolly bears" soybean aphid	<u>AL, IA, FL, GA, NC, SC, VA, WI</u> 1.0 to 2.0 pints/acre (0.5 – 1.0 lb a.i./acre) <u>CO, IL, IN, KS, KY, MN, MO, MT, ND, NE, NM, OH, OK, PA, SD, TN, TX, WV and WY</u> 1.0 to 1.5 pints/acre (0.5 – 0.75 lb a.i./acre)
European corn borer southern green stink bug	<u>AL, IA, FL, GA, NC, SC, VA, WI</u> 2.0 pints/acre (1.0 lb a.i./acre) <u>CO, IL, IN, KS, KY, MN, MO, MT, ND, NE, NM, OH, OK, PA, SD, TN, TX, WV and WY</u> 1.5 pints/acre (0.75 lb a.i./acre)

Numbers in parentheses (-) refer to Pest-Specific Use Directions.

Pest-Specific Use Directions:

1. **Spider mites:** When large numbers of eggs are present, scout the treated area in 3 to 5 days. If newly hatched nymphs are present, make a follow-up application of a non-chlorpyrifos product that is effective against mites.

Specific Use Restrictions:

State	Yearly Maximum Number of Applications	Yearly Maximum Application Rate	Single Maximum Application Rate
AL, IA, FL, GA, NC, SC, VA, WI	A total of 1 application to soybeans – Soil or Foliar	2.0 pints/acre/year (1.0 lb a.i./ac/year)	2.0 pints/acre (1.0 lb a.i./acre)
CO, IL, IN, KS, KY, MN, MO, MT, ND, NE, NM, OH, OK, PA, SD, TN, TX, WV and WY	A total of 1 application to soybeans – Soil or Foliar	1.5 pints/acre/year (0.75 lb a.i./ac/year)	1.5 pints/acre (0.75 lb a.i./acre)

- **Preharvest Interval:** Do not apply treatment within 28 days of harvest.
- **DO NOT** apply more than 2.0 pints (1.0-pound active ingredient chlorpyrifos) per acre per year in AL, IA, FL, GA, NC, SC, VA, WI
- **DO NOT** apply more than 1.5 pints (0.75 pound active ingredient chlorpyrifos) per acre per year in CO, IL, IN, KS, KY, MN, MO, MT, ND, NE, NM, OH, OK, PA, SD, TN, TX, WV and WY
- **DO NOT** make more than 1 application per year of Warhawk® or other products containing chlorpyrifos to soybeans.
- **DO NOT** make a foliar application of Warhawk to soybeans if the soil was treated with any product containing chlorpyrifos.
- **DO NOT** make a soil application of Warhawk if a foliar treatment was made with any products containing chlorpyrifos.
- **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.
- For each application, follow all applicable chlorpyrifos Endangered Species Protection Requirements.

[Note to LPI Regulatory: Confirm inclusion or exclusion of strawberry on FPL prior to printing graphic labels.]

[Note to Label Creators: Check with LPI regulatory prior to inclusion of strawberry on Final Printed Label]

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Strawberry
For use only in Oregon.

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.

Preplant Incorporation Treatment

Apply Warhawk® in sufficient water to ensure uniform soil coverage and incorporate into the soil in the spring for protection of strawberries during the following year.

Target Pests	Warhawk® (Qts/A)
garden symphylans	2.0 quarts/acre
grub	(2.0 lb a.i./acre)

Foliar Application

Apply as a broadcast foliar spray when buds first appear. Use a minimum spray volume of 40.0 gallons per acre.

Target Pests	Warhawk® (Qts/A)
strawberry bud weevil	1.0 quart/acre
	(1.0 lb a.i./acre)

Postharvest Application

Apply as a directed spray to crown of strawberry plants immediately after harvest or after plants are topped. Use a minimum spray volume of 100 gallons per acre.

Target Pests	Warhawk® (Qts/A)
strawberry crown moth	1.0 quart/acre
	(1.0 lb a.i./acre)

Specific Use Restrictions:

- **Only for pre-bloom or Postharvest application** - do not apply after berries start to form or when berries are present.
- **Preharvest Interval:** Do not apply within 21 days of harvest.
- **DO NOT** make more than 1 application per year of Warhawk® or other products containing chlorpyrifos.
- **Postharvest Application:** Do not sprinkle irrigate for 1 week following application.
- Maximum single application rate is 2.0 quarts (2.0 pounds active ingredient chlorpyrifos) per acre for preplant incorporation or 1.0 quart (1.0 pound active ingredient chlorpyrifos) per acre for foliar or postharvest application.
- Warhawk® should not be tank mixed with pesticides, surfactants, or fertilizer formulations unless prior use has shown the combination non-injurious under your current conditions of use.
- Phytotoxicity may occur when Warhawk® is applied to strawberries under conditions of high temperature and drought stress.
- For each application, follow all applicable chlorpyrifos Endangered Species Protection Requirements.

Sugar Beet

For use only in Iowa (IA), Idaho (ID), Illinois (IL), Michigan (MI), Minnesota (MN), North Dakota (ND), Washington (WA),
Wisconsin (WI) [Oregon (OR)],

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.

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Soil Treatment (At Planting or Preplant Incorporated)

To reduce feeding damage from early season insects such as cutworms, apply at planting or as a preplant treatment and incorporate to a depth of 1 to 2 inches. Do not apply as an in-furrow treatment. Apply 1.0 pint (0.5 lb a.i./acre) of Warhawk® per planted acre to a 10-inch wide band centered over the row for furrows 30 inches apart. (For rows 30 inches apart, this is equivalent to 9.2 fluid ounces of Warhawk® per 10,000 feet of row). For other row widths, adjust the spray volume per planted acre in proportion to the length of row actually treated.

If a soil treatment is made preplant or at planting, a postemergence treatment of a product containing chlorpyrifos cannot be made.

Postemergence Treatment

Apply specified rate as a broadcast or banded foliar spray. Treat when field counts indicate that damaging insect populations are developing or present.

Broadcast Application by Air:

Aerial application is permitted only in IA, ID, IL, MN, ND, [OR], WA and WI.

Apply the specified dosage in water using 2.0 to 5.0 gallons per acre of finished spray when using aerial spray equipment.

Broadcast Application by Ground:

Apply the specified dosage in water using 10.0 to 30.0 gallons per acre when using ground spray equipment.

Broadcast Application by Chemigation:

Warhawk® may be applied through sprinkler irrigation systems at specified broadcast application rates to control listed foliar pests. See Chemigation section for application instructions.

Banded Foliar Spray: Apply the specified rate within the band using a minimum of 7.0 gallons of spray volume in a 5- to 7-inch wide band centered over the row. Do not reduce the rate for band applications. Concentrate the full labeled dosage rate (see band rates in table below) in the treated zone. For best results, band-applied treatments should be lightly incorporated, either mechanically or with irrigation.

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Sugar Beet Target Pests	Broadcast Rate- Single Application pint/acre (lb a.i./acre)	Band Rate- Single Application pint/acre (lb a.i./acre)
Grasshoppers (1)	0.5 to 1.0 pint/acre (0.25 – 0.5 lb a.i./acre)	—
leafminers spider mites	1.0 pint/acre (0.5 lb a.i./acre)	0.66 pint/acre (0.33 lb a.i./acre)
tarnished plant bug (<i>Lygus</i>)	1.0 pint/acre (0.5 lb a.i./acre)	—
aphids fall armyworm webworms yellow-striped armyworm	1.0 to 2.0 pint/acre (0.5 – 1.0 lb a.i./acre)	0.66 to 1.33 pint/acre (0.33 – 0.67 lb a.i./acre)
beet armyworm	1.5 to 2.0 pint/acre (0.75 – 1.0 lb a.i./acre)	1.0 to 1.33 pint/acre (0.5 – 0.67 lb a.i./acre)
Cutworms flea beetle adults	2.0 pint/acre (1.0 lb a.i./acre)	1.33 pint/acre (0.67 lb a.i./acre)
Sugar beet root maggot adults (2), (5)	0.5 to 1.0 pint/acre (0.25 – 0.5 lb a.i./acre)	—
Sugar beet root maggot larvae (3), (5)	—	1.33 to 2.0 pint/acre (0.67 – 1.0 lb a.i./acre)
Sugar beet root maggot larvae (4), (5)	2.0 pint/acre (1.0 lb a.i./acre)	1.33 to 2.0 pint/acre (0.67 – 1.0 lb a.i./acre)

Numbers in parentheses (-) refer to “Pest-Specific Use Directions”.

Pest-Specific Use Directions:

1. **Grasshoppers:** The low rate will control small nymphs (1st through 3rd instar).
2. **Sugarbeet root maggot adults:** Apply one time during the period from 7 days before until 3 days after peak adult emergence in order to target adults present at time of application based on local field trap monitoring.
3. **Sugarbeet root maggot larvae:** Use as **primary treatment** to control root maggot larvae. Base application timing on local field trap monitoring. Apply one time during the period from 7 days before until 3 days after peak adult emergence.
4. **Sugarbeet root maggot larvae:** Use as **supplemental postemergence treatment** following an at-plant insecticide application for control of root maggot larvae. Base application timing on local field trap monitoring. Apply one time during the period from 7 days before until 3 days after peak adult emergence.
5. To prevent potential development of insecticide resistance in **sugar beet root maggot**, producers are encouraged to take the following step: if an organophosphate insecticide (not containing chlorpyrifos) was applied at planting, make no more than 1 postemergence application of Warhawk® when adults are active.

Specific Use Restrictions:

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State	Single Maximum Application Rate	Yearly Maximum Number of Applications	Yearly Maximum Application Rate
IA, IL	3.0 pints/acre (1.5 lb a.i./acre)	A total of 1 application to sugar beets per year – Soil or Postemergence	3.0 pints/acre/year (1.5 lb a.i./acre/year)
ID, MI, MN, ND, [OR], WA, WI	2.5 pints/acre (1.25 lb a.i./acre)	A total of 1 application to sugar beets per year – Soil or Postemergence	2.5 pints/acre/year (1.25 lb a.i./acre/year)

- **Preharvest Interval:** Do not apply within 30 days of harvest of beet roots and tops.
- **DO NOT** apply more than 3.0 pints of Warhawk® (1.5 pounds active ingredient chlorpyrifos) per acre per year in IA and IL.
- **DO NOT** apply more than 2.5 pints of Warhawk® (1.25 pounds active ingredient chlorpyrifos) per acre per year in ID, MI, MN, ND, [OR], WA and WI.
- Do not make more than 1 application of Warhawk® or other products containing chlorpyrifos per year.
- Do not allow meat or dairy animals to graze in treated areas or harvest treated beet tops as feed for meat or dairy animals within 30 days of last treatment.
- To avoid unacceptable crop injury, do not tank mix Warhawk® with Satori® or Headline®. Satori or Headline should not be tank mixed with any EC formulation or any tank mix containing an oil adjuvant.
- For each application, follow all applicable chlorpyrifos Endangered Species Protection Requirements.

Tobacco

Not for use in California, Hawaii, Maryland, New York, or Oregon.

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 preplant broadcast spray to reduce the feeding damage caused by listed pests. Apply 24 to 48 hours before bedding and transplanting using a spray volume of 10.0 gallons per acre or more. Incorporate immediately after application to a depth of 2 to 4 inches using suitable incorporation equipment.

Before broadcast application of Warhawk® onto existing beds, knock down beds to final shape for transplanting. Use of PTO-driven implements that will incorporate Warhawk® to a depth of 4 inches is recommended.

Target Pests	Warhawk® (Pts/A)
cutworms flea beetles mole crickets root maggots wireworms	2.0 pints/acre (1.0 lb a.i./acre)

Apply the specified rate(s) to the soil surface in a spray volume of 10.0 gallons per acre or more 24 to 48 hours before bedding and transplanting. Immediately following application, incorporate into the soil to a depth of at least 4 inches using suitable equipment. Where the nematode species *Meloidogyne arenaria* or *M. javanica* are present or high populations of *M. incognita*, apply Telone® II soil fumigant at the specified label rate.

Specific Use Restrictions:

- Do not make more than 1 application of Warhawk® or other product containing chlorpyrifos per season.
- Maximum single application rate is 1.0 pound active ingredient chlorpyrifos per acre.
- Do not apply this product by air in Mississippi.
- For each application, follow all applicable chlorpyrifos Endangered Species Protection Requirements.
- Do not apply within 25 feet of aquatic habitats (such as, but not limited to, lakes, reservoirs, rivers, permanent streams, wetlands or natural ponds, estuaries, and commercial fish farm ponds).

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- Do not apply directly to, or allow the product to enter sewers or storm drains, or to any area like a drain or gutter where drainage to sewers, storm drains, water bodies, or aquatic habitat can occur.
 - Do not apply directly to impervious horizontal surfaces such as sidewalks, driveways, and patios except as a spot or crack-and-crevice treatment.
 - Do not apply to vertical surfaces directly above pervious or impervious surfaces that drain into ditches, storm drains, gutters, or surface waters.
 - Do not apply or irrigate to the point of runoff.
-

Tree Fruit and Orchard Floor Applications on this label –

- Bearing Trees: For allowable applications to Bearing Trees and bearing orchards, see specific use directions for appropriate crop:
 - Citrus Trees;
 - Citrus Orchard Floors (Spot Treatment for Ants);
 - Tree Fruits Dormant/Delayed Sprays (apple, tart cherry, peach);
 - Tree Fruits Trunk Spray (tart cherry, peach);
 - Apple Tree Trunk Spray.
 - Nonbearing trees: For allowable applications to Nonbearing Trees and nonbearing orchards (including tree nurseries), see specific use directions for appropriate crop:
 - Nonbearing Citrus Trees;
 - Nonbearing Citrus Orchard Floors (Spot Treatment for Ants);
 - Preplant Dip for transplant and root stock (Peach and Nectarine)
 - Nonbearing: Apple, Cherry (Sweet, Tart), Nectarine, Peach, Pear, Plum, Prune, Almond and Walnut Dormant/ Delayed Dormant Sprays
 - Nonbearing: Cherry (Sweet, Tart), Nectarine, Peach and Almond Trunk Spray
 - Nonbearing: Almond, Filbert, Pecan and Walnut Foliar Sprays
 - Nonbearing: Almond, Pecan and Walnut - Orchard Floor Spot Treatments for Ants
-

Tree Fruits[†] (Bearing)-Dormant/Delayed Dormant Sprays
([†] Bearing Apple, Bearing Tart Cherry and Bearing Peach)

Bearing Apple Trees –For use in Alabama (AL), Delaware (DE), Georgia (GA), Idaho (ID), Indiana (IN), Kentucky (KY), [Maryland (MD)], Michigan (MI), New Jersey (NJ), [New York (NY)], Ohio (OH), Pennsylvania (PA), Tennessee (TN), Virginia (VA), Vermont (VT), Washington (WA), West Virginia (WV), Washington D.C.

Bearing Tart Cherry Trees– For use in Michigan

Bearing Peach Trees– For use in Alabama (AL), Delaware (DE), Florida (FL), Georgia (GA), [Maryland (MD)], Michigan (MI), North Carolina (NC) New Jersey (NJ), [New York (NY)], Ohio (OH), Pennsylvania (PA), South Carolina (SC), Texas (TX), Virginia (VA), Vermont (VT), West Virginia (WV), Washington D.C.(DC)

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

Apply as a dormant or delayed dormant spray. While Warhawk® may be used without oil, oil is recommended to control additional pests such as European red mite. 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 Warhawk® per acre.

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

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Bearing Crops	Target Pests	Rate - Single Application Pint/acre (lb a.i./acre)
Apple	climbing cutworms <i>Lygus</i> obliquebanded leafroller pandemis leafroller rosy apple aphid San Jose scale	0.5 to 4.0 Pints/acre (0.25 – 2.0 lb a.i./acre)
Cherry (Tart), Peach	American plum borer Brown almond mite Climbing cutworms European red mite Greater peach tree borer Lesser peach tree borer Mealy plum aphid Peach twig borer Pear psylla adults San Jose scale	Tart Cherry 0.5 to 4.0 Pints/acre (0.25 – 2.0 lb a.i./acre) Peach 0.5 to 4.0 Pints/acre (0.25 – 2.0 lb a.i./acre) <i>Maximum dormant/dormant delayed spray 2.0 lbs a.i./acre/year</i>

Specific Use Restrictions:

- **DO NOT** use more than 4.0 pints of Warhawk® (2.0 pounds active ingredient chlorpyrifos) per acre per year as a dormant/delayed dormant application.
- **DO NOT** make more than one chlorpyrifos application per year to peaches. If a dormant/dormant delayed application is made, an additional trunk application is not allowed.
- **DO NOT** make more than one chlorpyrifos application per year to tart cherry. If a dormant/dormant delayed application is made, an additional trunk application is not allowed.
- **DO NOT** make more than one chlorpyrifos application per year to apples. If a dormant/dormant delayed application is made, an additional trunk application is not allowed.
- For postbloom apple tree trunk application in AL, DC, DE, GA, IN, KY, [MD], MI, NJ, [NY], OH, PA, TN, VA, VT, WV, see separate Apple Tree Trunk application directions. (Post-bloom application apple trunk application is not allowed if a dormant/dormant delayed application is made.)
- Do not allow meat or dairy animals to graze in treated orchards.
- Cold or dry conditions may cause Warhawk® 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 Warhawk®.
- For each application, follow all applicable chlorpyrifos Endangered Species Protection Requirements.

Tree Fruits[‡] (Nonbearing) and Tree Nuts[§] (Nonbearing) Dormant/Delayed Dormant Sprays

[‡] Nonbearing: Apple, Cherry (Sweet, Tart), Nectarine, Peach, Pear, Plum and Prune

**[§] Nonbearing: Almond, and Walnut
(Not for Use in Mississippi)**

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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.

Apply as a dormant or delayed dormant spray to nonbearing trees. While Warhawk® may be used without oil, oil is recommended to control additional pests such as European red mite. 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 Warhawk® per acre.

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

Nonbearing Crops	Target Pests	Rate - Single Application Pint/acre (lb a.i./acre)
Apple	climbing cutworms <i>Lygus</i> obliquebanded leafroller pandemis leafroller rosy apple aphid San Jose scale	0.5 to 4.0 Pints/acre (0.25 – 2.0 lb a.i./acre)
Almond, Cherry, Nectarine, Peach, Pear, Plum, Prune	American plum borer Brown almond mite Climbing cutworms European red mite Greater peach tree borer Lesser peach tree borer Mealy plum aphid Peach twig borer Pear psylla adults San Jose scale	0.5 to 4.0 Pints/acre (0.25 – 2.0 lb a.i./acre)

Specific Use Restrictions:

- **DO NOT** use more than 4.0 pints of Warhawk® (2.0 pounds active ingredient chlorpyrifos) per acre per year as a dormant/delayed dormant application.
- For apple tree trunk application in AL, DC, DE, GA, IN, KY, [MD], MI, NJ, [NY], OH, PA, TN, VA, VT, WV, see separate nonbearing Apple Tree Trunk application directions. If apple tree trunk application is made in these states, an additional Dormant/Delayed Dormant Spray is prohibited.
- Do not make a soil or foliar application of Warhawk® or products containing chlorpyrifos within 10 days of a dormant/delayed dormant application of chlorpyrifos to the nonbearing orchard.
- Make only 1 application of chlorpyrifos during the dormant season.
- Do not allow meat or dairy animals to graze in treated orchards for at least 1 year (365 days) after last treatment with chlorpyrifos.
- Cold or dry conditions may cause Warhawk® 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 Warhawk®.
- Avoid contact with foliage in sweet cherries as premature leaf drop may result.
- For each application, follow all applicable chlorpyrifos Endangered Species Protection Requirements.
- Do not apply within 25 feet of aquatic habitats (such as, but not limited to, lakes, reservoirs, rivers, permanent streams, wetlands or natural ponds, estuaries, and commercial fish farm ponds).
- Do not apply directly to, or allow the product to enter sewers or storm drains, or to any area like a

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- drain or gutter where drainage to sewers, storm drains, water bodies, or aquatic habitat can occur.
- Do not apply directly to impervious horizontal surfaces such as sidewalks, driveways, and patios except as a spot or crack-and-crevice treatment.
 - Do not apply to vertical surfaces directly above pervious or impervious surfaces that drain into ditches, storm drains, gutters, or surface waters.
 - Do not apply or irrigate to the point of runoff.

Tree Fruits ¹(Bearing)-Trunk Spray

¹Bearing: Tart Cherry, peach

(For treatment to bearing apple tree trunks, see “Apple Tree Trunks” section.)

Bearing Tart Cherry Trees– For use in Michigan

Bearing Peach Trees– For use in Alabama (AL), Delaware (DE), Florida (FL), Georgia (GA), [Maryland (MD)], Michigan (MI), North Carolina (NC) New Jersey (NJ), [New York (NY)], Ohio (OH), Pennsylvania (PA), South Carolina (SC), Texas (TX), Virginia (VA), Vermont (VT), West Virginia (WV), Washington D.C.(DC)

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

Apply Warhawk® to tree trunks and lower branches using a coarse, low-pressure spray to control pests listed in the following table. Use a higher rate in the rate range when there is increased pest pressure. Consult your state agricultural experiment station or extension service specialist for proper application timing for your area.

Crop	Target Pests	Warhawk Quart/100 gallons (Chlorpyrifos lb a.i./100 gal)
Bearing Tart Cherry	American plum borer, greater peach tree borer, lesser peach tree borer	1.5 to 2.0 quarts/100 gal (1.5 – 2.0 lb a.i./100 gal)
Bearing Peach	peach tree borers (1)	3.0 quart/100 gallons (3.0 lb a.i./100 gal)

Numbers in parentheses (-) refer to Pest-Specific Use Directions.

Pest-Specific Use Directions:

1. 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:

- **Preharvest Interval:** Do not apply within 14 days of harvest of peaches or within 21 days before harvest of tart cherries.
- **DO NOT** make more than one chlorpyrifos application per year to tart cherry. If a trunk application is made, an additional dormant/dormant delayed application is prohibited.
- **DO NOT** make more than one chlorpyrifos application per year to peach. If a trunk application is made, an additional dormant/dormant delayed application is prohibited.

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- **DO NOT** allow meat or dairy animals to graze in treated orchards.
- For each application, follow all applicable chlorpyrifos Endangered Species Protection Requirements.

Tree Fruits[#] Preplant Dip (Not for Use in Mississippi)
[#]Nonbearing Nectarine, Nonbearing Peach

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

Consult your state agricultural experiment station or extension service specialist for proper application timing for your area.

Target Pests	Warhawk Quart/100 gallons (Chlorpyrifos lb a.i./100 gal)
peach tree borers (1)	3.0 quart/100 gallons (3.0 lb a.i./100 gal)

Numbers in parentheses (-) refer to Pest-Specific Use Directions.

Pest-Specific Use Directions:

1. **Preplant Dip Application (Nonbearing Peaches and nonbearing Nectarines Only).** For preplant control of **peachtree borer**, use Warhawk® at the equivalent application rate of 3.0 quarts per 100 gals of water. Dip trees several inches above the grafting bud scar and plant immediately or allow them to dry before returning to storage. Do not allow peach trees to remain in contact with the dip solution.

Specific Use Restrictions:

- **Preharvest Interval:-DO NOT** apply within 365 days of harvest for food or feed use.
- For each application, follow all applicable chlorpyrifos Endangered Species Protection Requirements.
- Do not allow meat or dairy animals to graze in treated orchards
- Do not apply within 25 feet of aquatic habitats (such as, but not limited to, lakes, reservoirs, rivers, permanent streams, wetlands or natural ponds, estuaries, and commercial fish farm ponds).
- Do not apply directly to, or allow the product to enter sewers or storm drains, or to any area like a drain or gutter where drainage to sewers, storm drains, water bodies, or aquatic habitat can occur.
- Do not apply directly to impervious horizontal surfaces such as sidewalks, driveways, and patios except as a spot or crack-and-crevice treatment.
- Do not apply to vertical surfaces directly above pervious or impervious surfaces that drain into ditches, storm drains, gutters, or surface waters.
- Do not apply or irrigate to the point of runoff.

Tree Fruits[¶] (Nonbearing) and Almonds (Nonbearing)
Trunk Spray
(Not for Use in Mississippi)

[¶]Nonbearing: Cherry (sweet and tart), nectarine, peach and almond
(For treatment to nonbearing apple tree trunks, see "Apple Tree Trunks" section.)

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.

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Apply Warhawk® to nonbearing tree trunks and lower branches using a coarse, low-pressure spray to control pests listed in the following table. 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 if needed, two weeks after the second application. Avoid spray contact with foliage in sweet cherries as premature leaf drop may result. Consult your state agricultural experiment station or extension service specialist for proper application timing for your area.

Target Pests	Warhawk Quart/100 gallons (Chlorpyrifos lb a.i./100 gal)
American plum borer, greater peach tree borer, lesser peach tree borer	1.5 to 3.0 quarts/100 gal (1.5 – 3.0 lb a.i./100 gal)
peach tree borers (1)	3.0 quart/100 gallons (3.0 lb a.i./100 gal)

Numbers in parentheses (-) refer to Pest-Specific Use Directions.

Pest-Specific Use Directions:

- For control of **peach tree borer** in established, nonbearing 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. 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:

- **Preharvest Interval: DO NOT** apply within 365 days of harvest for food or feed.
- Do not make more than 1 chlorpyrifos application per year in nonbearing peaches and nonbearing nectarines and no more than 3 chlorpyrifos applications per year in nonbearing cherries.
- For each application, follow all applicable chlorpyrifos Endangered Species Protection Requirements.
- Do not allow meat or dairy animals to graze in treated orchards for at least 1 year (365 days) after last treatment with chlorpyrifos.
- Do not apply within 25 feet of aquatic habitats (such as, but not limited to, lakes, reservoirs, rivers, permanent streams, wetlands or natural ponds, estuaries, and commercial fish farm ponds).
- Do not apply directly to, or allow the product to enter sewers or storm drains, or to any area like a drain or gutter where drainage to sewers, storm drains, water bodies, or aquatic habitat can occur.
- Do not apply directly to impervious horizontal surfaces such as sidewalks, driveways, and patios except as a spot or crack-and-crevice treatment.
- Do not apply to vertical surfaces directly above pervious or impervious surfaces that drain into ditches, storm drains, gutters, or surface waters.
- Do not apply or irrigate to the point of runoff.

Tree Nuts[^] (Foliar Sprays)

[^] Nonbearing: Almond, filbert, pecan, walnut

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 Warhawk® 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

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applied to tree nut crops, mix the required dosage in sufficient water to allow water in but do not irrigate to the point of runoff. For concentrate sprays, apply an equivalent amount of Warhawk® 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. **Note:** Do not aerially apply in Mississippi. Consult your State agricultural experiment station, certified pest control advisor, or extension service specialist for specific use information in your area.

Nonbearing Tree Crops	Target Pests	Warhawk® (Pts/A) (lb a.i./acre)
Almond	leaffooted plant bug, navel orangeworm, peach twig borer, San Jose scale	4.0 Pints/acre (2.0 lb a.i./acre)
Filbert	eye-spotted bud moth, filbert aphid, filbert leafroller, filbert worm obliquebanded leafroller, omnivorous leaf tier, winter moth	3.0 to 4.0 pints/acre (1.5 – 2.0 lb a.i./acre)
Pecan	black margined aphid (1) spittlebugs (2) yellow pecan aphid (1)	1.0 to 4.0 pints/acre (0.5 – 2.0 lb a.i./acre)
	fall webworm pecan nut casebearer	1.5 to 4.0 pint/acre (0.75 – 2.0 lb a.i./ acre)
	black pecan aphid hickory shuckworm (3) pecan leaf scorch mite (suppression) (5) <i>Phylloxera</i> spp.(4)	1.0 to 4.0 pint/acre (0.5 – 2.0 lb a.i./ acre)
Walnut	codling moth walnut husk fly walnut scale	4.0 pint/acre (2.0 lb a.i./ acre)

Numbers in parentheses (-) refer to Pest-Specific Use Directions.

Pest-Specific Use Directions:

- For control of **yellow pecan aphid** and **black margined aphid**, apply in tank mix combination with the specified rate of a pyrethroid insecticide labeled for control or suppression of these aphids.
- For control of **spittlebug**, use a dosage of 2.0 to 4.0 pints per acre for concentrate sprays.
- For best results against **hickory shuckworm**, make 2 applications, 10 to 14 days apart.
- For best control of ***Phylloxera* spp.**, make 2 applications at a 10-day interval using a minimum of 1.0 pint of Warhawk® per acre starting at bud swell.
- For suppression of **pecan leaf scorch mite**, use a preventative program.

Specific Use Restrictions:

- **Preharvest Interval:** **DO NOT** apply within 365 days of harvest for food or feed.
- Do not apply more than 8.0 pints of Warhawk® (4.0 pounds active ingredient chlorpyrifos) per acre per season as a foliar spray.
- Do not make more than 3 total applications per season of Warhawk® or other products containing chlorpyrifos to nonbearing almonds, nonbearing filberts and nonbearing pecans and no more than 2 applications per season on nonbearing walnuts.
- Do not make a second application of Warhawk® or other product containing chlorpyrifos within 10 days of the first application.
- Do not use on nonbearing almond, nonbearing filbert or nonbearing walnut in Mississippi.
- Do not allow meat or dairy animals to graze in treated orchards for at least 1 year (365 days) after last treatment with chlorpyrifos.

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- Warhawk® is highly toxic to bees exposed to direct treatment. **Warhawk® should not be applied when bees are actively foraging in the treated area.**
- For each application, follow all applicable chlorpyrifos Endangered Species Protection Requirements.
- To avoid contamination of irrigation tail waters, do not flood irrigate within 24 hours of application of Warhawk®
- Do not apply within 25 feet of aquatic habitats (such as, but not limited to, lakes, reservoirs, rivers, permanent streams, wetlands or natural ponds, estuaries, and commercial fish farm ponds).
- Do not apply directly to, or allow the product to enter sewers or storm drains, or to any area like a drain or gutter where drainage to sewers, storm drains, water bodies, or aquatic habitat can occur.
- Do not apply directly to impervious horizontal surfaces such as sidewalks, driveways, and patios except as a spot or crack-and-crevice treatment.
- Do not apply to vertical surfaces directly above pervious or impervious surfaces that drain into ditches, storm drains, gutters, or surface waters.
- Do not apply or irrigate to the point of runoff.

Nut[#] Trees – Orchard Floors of Nonbearing Trees
([#]Nonbearing: Almond, Pecan and Walnut)
Spot Treatment Application for Certain Ant* Species

* Except carpenter ants, fire ants, harvester ants and pharaoh ants.

(Not for Use in California, Hawaii, Maryland, Mississippi, New York, or Oregon)

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 suppression of foraging ants* and mounds: Apply as a spot spray directed to the orchard floor using ground application equipment that will apply the spray uniformly. For spot treatments, a cumulative area of no more than one tenth (0.1) of each acre may be treated. Do not allow spray to contact foliage. Treat when ant activity becomes evident in the orchard. Since worker ants cease most of their foraging activity at temperatures above 90 °F, best results will be achieved if applied at a time of day when temperatures are below 90 °F.

Crops	Target Pests	Rate- Single Application pint/tenth of an acre (lb a.i./0.1 acre)
pecan	ant species* (1) (2)	0.4 pints/0.1 acre (0.2 lb a.i./0.1 acre)
almond walnut		0.4 to 0.8 pints/0.1 acre (0.2 – 0.4 lb a.i./0.1 acre)

Numbers in parentheses (-) refer to Pest-Specific Use Directions.

1. Treatment of orchard floors for ants is limited to spot treatments. (For spot treatments, a cumulative area of no more than one tenth (0.1) of each acre may be treated.)
2. Apply in no less than 2.5 gallons per tenth (0.1) of an acre.
3. *Except carpenter ants, fire ants, harvester ants and pharaoh ants.

Eliminate weed growth that would prevent treated areas from receiving uniform coverage of the orchard floor by mowing or herbicide treatment prior to spot spraying for ants. Foliar applications of Warhawk® to nonbearing Almond, Pecan and Walnut may be made in addition to the orchard floor treatment when treatment is made according to this label. Spot treatment will provide suppression of ants* but will not provide control.

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Specific Use Restrictions:

- **Preharvest Interval: DO NOT** apply within 365 days of harvest for food or feed.
 - **This product may only be applied only as a spot treatment when treating ants on nonbearing orchard floors.** The yearly maximum application area and rate per acre are:
 - Do not treat more than 0.1 of each acre.
 - Pecan - Do not apply more than 0.8 pints of Warhawk® (0.4 pounds active ingredient chlorpyrifos) per acre per year to the nonbearing orchard floor.
 - Almond/Walnut – Do not apply more than 1.6 pints of Warhawk (0.8 pounds of active ingredient chlorpyrifos) per acre per year to the nonbearing orchard floor.
 - Do not make more than 2 applications of Warhawk® or other products containing chlorpyrifos per year to the orchard floor.
 - Do not make a second application of Warhawk® or other product containing chlorpyrifos within 10 days of the first application.
 - Do not allow meat or dairy animals to graze in treated orchard.
 - For each application, follow all applicable chlorpyrifos Endangered Species Protection Requirements.
 - To avoid contamination of irrigation tail waters, do not flood irrigate within 24 hours of application of Warhawk®.
 - Do not apply within 25 feet of aquatic habitats (such as, but not limited to, lakes, reservoirs, rivers, permanent streams, wetlands or natural ponds, estuaries, and commercial fish farm ponds).
 - Do not apply directly to, or allow the product to enter sewers or storm drains, or to any area like a drain or gutter where drainage to sewers, storm drains, water bodies, or aquatic habitat can occur.
 - Do not apply directly to impervious horizontal surfaces such as sidewalks, driveways, and patios except as a spot or crack-and-crevice treatment.
 - Do not apply to vertical surfaces directly above pervious or impervious surfaces that drain into ditches, storm drains, gutters, or surface waters.
 - Do not apply or irrigate to the point of runoff.
-

Turfgrass

(Not for Use in California, Hawaii, Maryland, Mississippi, New York, or Oregon)

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 to turfgrass grown for sod. Dilute Warhawk® in water and apply using suitable application equipment. For best results, turf should be moist at time of treatment.

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Target Pests	Amount of Warhawk®	
	Fl Oz/1000 Sq Ft	pints/acre (lb a.i./acre)
armyworms (such as: beet, fall, yellowstriped) centipedes chiggers chinch bugs crickets cutworms deer ticks earwigs European crane fly larvae fiery skipper fleas gnats grasshoppers greenbug aphids green June beetle grubs leafhoppers Lucerne moth millipedes mites (such as: clover, Bermu- dagrass stunt, winter grain) mosquitoes pillbugs springtails sod webworms (lawn moths) (1) sowbugs ticks	0.75 0.75 Fl Oz/1000 sq ft (0.1875 lb a.i./1000 sq ft)	2.0 pints/acre (1.0 lb a.i./acre)
billbug adults (such as: bluegrass, Denver, hunting) (2)	0.75 to 1.5 Fl Oz/1000 sq ft (0.1875 – 0.375 lb a.i./1000 sq ft)	2.0 to 4.0 pints/acre (1.0 – 2.0 lb a.i./acre)
annual bluegrass weevil (<i>Hyperodes</i>) (3) black turfgrass ataenius adults (4) mole crickets (5)	1.5 Fl Oz/1000 sq ft (0.375 lb a.i./1000 sq ft)	4.0 pints/acre (2.0 lb a.i./acre)
white grubs (such as: black turf- grass ataenius, European chafer, Japanese beetle larvae, and northern and southern masked chafers) (6)	1.5 to 3.0 Fl Oz/1000 sq ft (0.375 – 0.75 lb a.i./1000 sq ft)	4.0 – 8.0 pints/acre (2.0- 4.0 lb a.i./acre)

Numbers in parentheses (-) refer to Specific Use Directions below.

Specific Use Directions:

1. For **sod webworms**, watering or mowing of the treated area should be delayed for 12 to 24 hours after treatment.
2. For **billbugs**, spray early in the season just prior to or coinciding with first appearance of adults as recommended by your local Agricultural Extension Service Specialist.
3. To control **annual bluegrass weevil**, spray suspected problem areas in mid-April and again in mid-May, or as recommended by your local Agricultural Extension Service Specialist.
4. For **black turfgrass ataenius** adults, spray early in the season as recommended by your local Agricultural Extension Service Specialist. A repeat application may be needed 1 to 2 weeks later.
5. To control **mole crickets** in turfgrass, apply Warhawk® through high-pressure injection or other

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suitable subsurface placement application equipment. Depending on the application equipment used, follow the manufacturer's recommendation for calibration and the volume of spray per acre needed to provide control or as recommended by your local Agricultural Extension Service Specialist. For best results, apply when young nymphs are active.

6. For **white grubs**, spray when grubs are young and actively feeding near the soil surface, usually during late July and August or as recommended by your local Agricultural Extension Service Specialist. For best results, soil should be moist prior to treatment. **For best results, immediately after spraying, irrigate the treated area with 1/2 to 1 inch of water to wash the insecticide into the thatch and underlying soil, but not to the point of runoff.**

For suppression of foraging ants* and mounds: Apply as a spot spray using ground application equipment that will apply the spray uniformly. For spot treatments, a cumulative area of no more than one tenth (0.1) of each acre may be treated. Since worker ants cease most of their foraging activity at temperatures above 90 °F, best results will be achieved if applied at a time of day when temperatures are below 90 °F.

Target Pest	Amount of Warhawk pints/acre (lb a.i./acre)
Ants(1)(2)	0.2 pints/0.1 acre (0.1 lb a.i./0.1acre)

Numbers in parentheses (-) refer to Specific Use Directions below.

1. Not for use to control fire, carpenter, harvester and pharaoh ants.
2. **This product may be applied only as a spot treatment for ants. Spot applications are limited to treatment of no more than 0.1 of each acre.**

Specific Use Restrictions:

- No portion of a crop treated with Warhawk® may be used or distributed for food or feed for 1 year (365 days) after the last application of any chlorpyrifos product. (Note: Prohibition includes a restriction on grazing animals as well as use restriction on any portion of the crop (e.g., forage, hay, meal, roots, etc.) for food/ feed for at least 1 year after application.)
- **This product may only be applied only as a spot treatment when treating ants. The yearly maximum application area and rate per acre are:**
 - Do not treat more than 0.1 of each acre.
- **DO NOT** apply within 25 feet of aquatic habitats (such as, but not limited to, lakes, reservoirs, rivers, permanent streams, wetlands or natural ponds, estuaries, and commercial fish farm ponds).
- **DO NOT** apply directly to, or allow the product to enter sewers or storm drains, or to any area like a drain or gutter where drainage to sewers, storm drains, water bodies, or aquatic habitat can occur.
- **DO NOT** apply directly to impervious horizontal surfaces such as sidewalks, driveways, and patios except as a spot or crack-and-crevice treatment.
- **DO NOT** apply to vertical surfaces directly above pervious or impervious surfaces that drain into ditches, storm drains, gutters, or surface waters.
- **DO NOT** apply or irrigate to the point of runoff.
- For each application, follow all applicable chlorpyrifos Endangered Species Protection Requirements.

Wheat
Spring and Winter

Spring Wheat - For use in Colorado (CO), Kansas (KS), Montana (MT), North Dakota (ND), Nebraska (NE), South Dakota (SD), Wyoming (WY).

Winter Wheat - For use in Colorado (CO), Kansas (KS), Minnesota (MN), Montana (MT), North Dakota (ND),

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Nebraska (NE), Oklahoma (OK), South Dakota (SD), Texas (TX), Wyoming (WY).

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

Foliar Application:

Except where noted, apply using aerial (fixed wing or helicopter) or power-operated ground spray equipment. (Aerial Application is not permitted on Winter Wheat in Minnesota.) Mix the required dosage with water and apply in a minimum of 2.0 to 5.0 gallons per acre finished spray volume for aerial equipment or 15.0 gallons per acre for ground spray equipment. Apply when field counts indicate damaging pest populations are developing or present.

Chemigation: Warhawk® may be applied through sprinkler irrigation systems at specified broadcast application rates to control listed foliar pests. See Chemigation (Sprinkler Irrigation) section for application instructions.

Spring Wheat Target Pests	Rate- Single Application pint/acre (lb a.i./acre)
aphids (such as Russian wheat aphid, greenbug, English grain aphid)(1) brown wheat mite grasshoppers	0.5 to 1.5 pints/acre (0.25 – 0.75 lb a.i./acre)
army cutworms (2) armyworms (3) cereal leaf beetle (4) cutworms (suppression) (2) wheat midge (5)	1.0 to 1.5 pints/acre (0.5 – 0.75 lb a.i./acre)

Winter Wheat Target Pests	Rate- Single Application pint/acre (lb a.i./acre)
aphids (such as Russian wheat aphid, greenbug, English grain aphid)(1) brown wheat mite grasshoppers	<u>MN, OK, TX</u> 0.5 to 1.5 pints/acre (0.25 – 0.75 lb a.i./acre) <u>CO, KS, MT, ND, NE, SD, WY</u> 0.5 to 1.0 pints/acre (0.25 – 0.5 lb a.i./acre)
army cutworms (2) armyworms (3) cereal leaf beetle (4) cutworms (suppression) (2) wheat midge (5)	<u>MN, OK, TX</u> 1.0 to 1.5 pints/acre (0.5 – 0.75 lb a.i./acre) <u>CO, KS, MT, ND, NE, SD, WY</u> 1.0 pints/acre (0.5 lb a.i./acre)

Numbers in parentheses (-) refer to Pest-Specific Use Directions.

Pest-Specific Use Directions:

1. Consult university extension bulletins for local treatment recommendations.
2. Control may be reduced under high temperature conditions (greater than 80 °F), under dry soil conditions, or if larvae are more than 1/2 inch long.

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3. Suppression should be expected under conditions of heavy pest populations or large worms.
4. Target application when eggs are near hatching and larvae are emerging as monitored by plant inspection.
5. For control of **wheat midge**, treatment is recommended 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.

Specific Use Restrictions:

- **Preharvest Interval:** Do not apply within 14 days of harvest for forage and hay and within 28 days of harvest for grain and straw.
- **DO NOT** make more than 1 application of Warhawk® or any product containing chlorpyrifos per year.
- Spring Wheat – Maximum single application rate is 1.5 pints (0.75 pound active ingredient chlorpyrifos) per acre.
- Winter Wheat –
 - CO, KS, MT, ND, NE, SD, WY - Maximum single application rate is 1 pint (0.5 pound active ingredient chlorpyrifos) per acre.
 - MN, OK, TX - Maximum single application rate is 1.5 pints (0.75 pound active ingredient chlorpyrifos) per acre.
- Do not allow meat or dairy animals to graze or otherwise feed on treated forage within 14 days of application.
- Do not feed straw from treated wheat within 28 days of application.
- Do not allow meat or dairy animals to graze in treated areas.
- Do not feed trash or treated forage/stalks to meat or dairy animals.
- For each application, follow all applicable chlorpyrifos Endangered Species Protection Requirements.

STORAGE AND DISPOSAL

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

PESTICIDE STORAGE: Store in original container in secured dry storage area. Prevent cross-contamination with other pesticides and fertilizers. Do not store above 100 °F for extended periods of time. Storage below 20 °F may result in formation of crystals. If product crystallizes, store at 50 ° to 70 °F and agitate to redissolve crystals. If container is damaged or spill occurs, use product immediately or dispose of product and damaged container as indicated below.

PESTICIDE DISPOSAL: Open dumping is prohibited. Pesticide wastes are toxic. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal law. If these wastes cannot be disposed of by the use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste Representative at the nearest EPA Regional Office for guidance.

CONTAINER HANDLING: Nonrefillable container. Do not reuse this container to hold materials other than pesticides or dilute pesticides (rinsate). After emptying and cleaning, it may be allowable to temporarily hold rinsate or other pesticide-related materials in the container. Contact your state regulatory agency to determine allowable practices in your state. Once cleaned, some agricultural plastic pesticide containers can be taken to a container collection site or picked up for recycling. To find the nearest site, contact your chemical dealer or manufacturer, or contact The Agricultural Container Recycling Council (ACRC) at www.acrecycle.org. If not recycled, then puncture and dispose of in a sanitary landfill, or incineration, or by other procedures allowed by state and local authorities. Triple rinse or pressure rinse container (or equivalent) promptly after emptying.

For packages up to 5 gallons: Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. **Pressure rinse as follows:** Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 PSI for at least 30 seconds. Drain for 10 seconds after the flow begins to drip.

For packages greater than 5 gallons and less than 56 gallons: Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 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. Empty the rinsate into

application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. **Pressure rinse as follows:** Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 PSI for at least 30 seconds. Drain for 10 seconds after the flow begins to drip. Then recycle if available. If not recycled, then puncture and dispose of in a sanitary landfill, or incineration, or by other procedures allowed by state and local authorities.

For packages greater than 56 gallons: 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 percent 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 recycle if available. If not recycled, then puncture and dispose of in a sanitary landfill, or incineration, or by other procedures allowed by state and local authorities.

For refillable containers: 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 percent 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 puncture and dispose of in a sanitary landfill, or by incineration, or by other procedures allowed by state and local authorities.

For help with any spill, leak, fire or exposure involving this material, call day or night CHEMTREC - 1-800-424-9300.

CONDITIONS OF SALE AND LIMITATION OF WARRANTY AND LIABILITY

BEFORE BUYING OR USING THIS PRODUCT, read the entire Directions for Use and the following Conditions of Sale and Limitation of Warranty and Liability. By buying or using this product, the buyer or user accepts the following Conditions of Sale and Limitation of Warranty and Liability, which no employee or agent of LOVELAND PRODUCTS, INC. or the seller is authorized to vary in any way.

Follow the Directions for Use of this product carefully. It is impossible to eliminate all risks inherently associated with the use of this product. Crop or other plant injury, ineffectiveness, or other unintended consequences may result from such risks as weather or crop conditions, mixture with other chemicals not specifically identified in this product's label, or use of this product contrary to the label instructions, all of which are beyond the control of LOVELAND PRODUCTS, INC. and the seller. The buyer or user of this product assumes all such inherent risks.

Subject to the foregoing inherent risks, LOVELAND PRODUCTS, INC. warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated in the Directions for Use when the product is used in strict accordance with such Directions for Use under normal conditions of use. EXCEPT AS WARRANTED IN THIS LABEL AND TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, THIS PRODUCT IS SOLD "AS IS," AND LOVELAND PRODUCTS, INC. MAKES NO OTHER WARRANTY, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR ELIGIBILITY OF THIS PRODUCT FOR ANY PARTICULAR TRADE USAGE.

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Appendix I – Listing of Crops.
Tree Crops organized by Tree Type.
Nontree Crops Organized Alphabetically.

Crop	Bearing or Nonbearing Trees	Type of Treatment	States
Fruit trees			
Apple	Bearing	Dormant/delayed Dormant Spray (Airblast (ground))	For use in AL, DC, DE, GA, ID, IN, KY, [MD], MI, NJ, [NY], OH, PA, TN, VA, VT, WA, WV
		Trunk spray (Ground) (Only East of Rockies)	For use in AL, DC, DE, GA, IN, KY, [MD], MI, NJ, [NY], OH, PA, TN, VA, VT, WV
	Nonbearing	Dormant/delayed Dormant Spray	Not for use in MS, CA, HI, MD, NY, OR
		Trunk spray	Only for use East of the Rockies (except Mississippi [, Maryland] [and] [or] [New York])
Citrus	Bearing	Foliage (Aerial, airblast, ground)	For use in AL, FL, GA, NC, SC, TX
		Orchard floor for ants (ground, limited to spot treatment; ≤ 0.1 of each acre for ants)	For use in AL, FL, GA, NC, SC, TX
	Nonbearing	Foliage	Not for use in MS, CA, HI, MD, NY, OR
		Orchard floor for ants (ground, limited to spot treatment; ≤ 0.1 of each acre for ants)	Not for use in MS, CA, HI, MD, NY, OR
Cherry (Tart)	Bearing	Dormant/Delayed dormant	For use only in MI
		Trunk spray	For use only in MI
Cherry (Sweet, Tart)	Nonbearing	Dormant/delayed dormant	Not for use in MS, CA, HI, MD, NY, OR
		Trunk spray	Not for use in MS, CA, HI, MD, NY, OR
Nectarine	Nonbearing	Dormant/delayed dormant	Not for use in MS, CA, HI, MD, NY, OR
		Preplant dip	Not for use in MS, CA, HI, MD, NY, OR
		Trunk Spray	Not for use in MS, CA, HI, MD, NY, OR
Peach	Bearing	Dormant/delayed dormant	For use in AL, DC, DE, FL, GA, [MD], MI, NC, NJ, [NY], OH, PA, SC, TX, VA, VT, WV
		Trunk spray	For use in AL, DC, DE, FL, GA, [MD], MI, NC, NJ, [NY], OH, PA, SC, TX, VA, VT, WV
	Nonbearing	Dormant/delayed dormant	Not for use in MS, CA, HI, MD, NY, OR
		Trunk spray	Not for use in MS, CA, HI, MD, NY, OR
		Preplant dip	Not for use in MS, CA, HI, MD, NY, OR
Pear	Nonbearing	Dormant/Delayed Dormant	Not for use in MS, CA, HI, MD, NY, OR
Plum	Nonbearing	Dormant/Delayed Dormant	Not for use in MS, CA, HI, MD, NY, OR
Prune	Nonbearing	Dormant/Delayed Dormant	Not for use in CA, HI, MD, MS, OR, NY
Nut Trees (Nonbearing Only)			
Almond	Nonbearing	Foliar	Not for use in CA, HI, MD, MS, OR, NY
		Orchard floor for ants (ground, limited to spot treatment; ≤ 0.1 of each acre for ants)	Not for use in CA, HI, MD, MS, OR, NY
		Trunk Spray	Not for use in CA, HI, MD, MS, OR, NY
Filbert	Nonbearing	Foliar	Not for use in CA, HI, MD, MS, OR, NY
Pecan	Nonbearing	Foliar	MS allowed: Not for use in CA, HI, MD, OR, NY
		Orchard floor for ants (ground, limited to spot treatment; ≤ 0.1 of each acre for ants)	Not for use in CA, HI, MD, MS, OR, NY
Walnut	Nonbearing	Foliar	Not for use in CA, HI, MD, MS, OR, NY
		Orchard floor for ants (ground, limited to spot treatment; ≤ 0.1 of each acre for ants)	Not for use in CA, HI, MD, MS, OR, NY
Other Trees			
Christmas Trees	N/A	Foliar (ground) (limited to spot treatment; ≤ 0.1 of each acre for ants. Other uses remain broadcast treatment)	Not for use in CA, HI, MD, MS, OR, NY Not for control of mites in WA
Non Tree crops			
Alfalfa	N/A	Foliar (Ground, Chemigation)	For use in AZ, CO, IA, ID, IL, KS, MI, MN, MO, MT, ND, NE, NM, NV, OK, [OR], SD, TX, UT, WA, WI, WY

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Crop	Bearing or Nonbearing Trees	Type of Treatment	States
		Aerial Application allowed	Aerial application allowed only in CO, ID, KS, MO, MT, ND, NE, OK, SD, UT, WA, WY
Asparagus	N/A	Foliar (Ground)	Use only in MI
Conservation Tillage	N/A	Soil (Ground)	DO not aerially apply in Mississippi. Do not apply in CA, HI, MD, NY, OR
Cotton	N/A	Foliar (Ground, Chemigation)	For use only in AL, FL, GA, NC, SC, VA
Soybean	N/A	Soil (Ground), Foliar (ground, chemigation)	For use in AL, CO, FL, GA, IA, IL, IN, KS, KY, MN, MO, MT, NC, ND, NE, NM, OH, OK, PA, SC, SD, TN, TX, VA, WI, WV, WY
		Aerial application allowed	Aerial Application is permitted only in CO, IA, IL, KS, MO, MN, MT, ND, NE, NM, OK, SD, TX, WI, WY
Sugar beet	N/A	Foliar (ground, Chemigation)	For use in IA, ID, IL, MI, MN, ND, [OR], WA and WI.
		Foliar (Aerial)	Aerial application is permitted only in IA, ID, IL, MN, ND, WA and WI.
Strawberry	N/A	Soil (ground, preplant), Foliar (ground), Post harvest (ground)	[OR] <i>[note to graphic design: Check with Regulatory Manger prior to listing strawberries anywhere on the label.]</i>
Tobacco	N/A	Soil (Ground, preplant) (Do not apply by air in MS)	Not for use in CA, HI, MD, NY, or OR.
Turfgrass, for sod	N/A	Foliar (Ground) (For ants, limited to spot treatment; ≤ 0.1 of each acre. Other uses remain broadcast treatment.)	Not for use in CA, HI, MD, MS, NY, or OR.
Wheat, Spring	N/A	Foliar (Aerial, Ground, Chemigation)	For use in CO, KS, MT, ND, NE, SD, WY
Wheat Winter	N/A	Foliar (Ground, Chemigation), (Aerial for all states, except MN)	For use in CO, KS, MN, MT, ND, NE, OK, SD, TX, WY