

GROUP	1B	INSECTICIDE
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# LORSBAN® 75WG

## Insecticide

For control of listed insects infesting certain field, fruit, nut, and vegetable crops.

**ACTIVE INGREDIENT:**

Chlorpyrifos: *O,O-diethyl O-(3,5,6-trichloro-2 pyridinyl) phosphorothioate* ..... 75.0%

**OTHER INGREDIENTS**..... 25.0%

**TOTAL** ...100.0%

### 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.)

#### PRECAUTIONARY STATEMENTS

#### HAZARDS TO HUMANS AND DOMESTIC ANIMALS

#### WARNING

May Be Fatal If Swallowed · May Be Fatal If Inhaled

Do not breathe dust. Wear a mask or pesticide respirator jointly approved by the Mine Safety and Health Administration and the National Institute for Occupational Safety and Health. Wash thoroughly with soap and water after handling and before eating, drinking, or using tobacco. Remove contaminated clothing and wash clothing before reuse.

#### FIRST AID

#### Organophosphate

**If swallowed:** Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by the poison control center or doctor. Do not give anything by mouth to an unconscious person.

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

**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.

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

**FOR MEDICAL EMERGENCIES INVOLVING THIS PRODUCT CALL TOLL FREE: 1-888-478-0798**

**THE CONTENTS OF THIS PACKAGE ARE NOT FOR INDIVIDUAL RESALE. THIS PRODUCT IS NOT FOR RESIDENTIAL USE.**  
**Agricultural Chemical: Do not ship or store with food, feeds, drugs or clothing.**

Refer to inside of label booklet for additional precautionary information including Directions for Use.

**Notice:** Read the entire label. Use only according to label directions. Before using this product, read Warranty Disclaimer, Inherent Risk of Use, and Limitation of Remedies at end of label booklet. If terms are unacceptable, return at once unopened.

### NET CONTENTS



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Produced For:  
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## PERSONAL PROTECTIVE EQUIPMENT (PPE)

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

**Mixers and loaders** must wear:

- Long-sleeved shirt and long pants
- Socks and shoes
- Chemical-resistant gloves
- Chemical-resistant apron

**Applicators** using aerial application equipment must wear:

- Long-sleeved shirt and long pants
- Shoes and socks

See Engineering Controls for additional requirements.

All **other handlers** must wear:

- Coveralls over long-sleeved shirt and long pants
- Chemical-resistant gloves
- Chemical-resistant apron when mixing or loading
- Chemical-resistant footwear plus socks
- Chemical-resistant headgear for overhead exposures
- A NIOSH-approved dust mist filtering respirator with MSHA/NIOSH approval number TC-21C or a NIOSH-approved respirator with any N, P, R or 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

Water soluble packets, when used correctly, qualify as a closed mixing/loading system under the Worker Protection Standard (WPS) for Agricultural Pesticides [40 CFR 170.240(d)(4)]. Mixers and loaders using water soluble packets must wear the PPE required above for mixer/loaders, and have immediately available for use in emergency (such as a broken package, spill or equipment breakdown) additional PPE. These PPE include coveralls and chemical-resistant footwear and a NIOSH-approved dust mist filtering respirator with MSHA/NIOSH approval number prefix TC-21C or a NIOSH-approved respirator with any N, P or HE filter.

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 applicators use closed cab motorized ground equipment in a manner that meets the requirements listed in the WPS for agricultural pesticides [40 CFR 170.240(d)(4-6)], then 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, 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 cleaning equipment or disposing of equipment washwaters. This product is highly toxic to bees exposed to direct treatment or residues on blooming crops or weeds. Do not apply this product or allow it to drift to blooming crops or weeds if bees are visiting the treatment area.

## DIRECTIONS FOR USE

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

Read all Directions for Use carefully before applying.

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

## AGRICULTURAL USE REQUIREMENTS

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

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

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

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

- Coveralls over short-sleeved shirt and short pants
- Chemical-resistant gloves made of any waterproof material
- Chemical-resistant footwear plus socks
- Chemical-resistant headgear for overhead exposures

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

## PRODUCT INFORMATION

Lorsban® 75WG insecticide is a water dispersible granule for use in listed crops. Target pests and application rates are provided in the accompanying tables.

### USE PRECAUTIONS AND RESTRICTIONS

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 Lorsban 75WG.

Do not aerially apply this product in Mississippi.

**Handling Precautions for Water Soluble Packets:** Do not remove water soluble packet from the overpack except for immediate use. Do not allow water soluble packets to come into contact with water prior to use. Do not handle water soluble packets with wet hands or wet gloves. Do not open water soluble packets. Do not remove packets from overwrap except to add the intact packet directly into the spray tank. Do not split packets. Partial use of packets is not allowed. Carefully reseal package containing unopened water soluble packets and protect package from moisture.

**Application with Liquid Fertilizer:** Lorsban 75WG may be applied in tank mix combination **only** with 28-0-0 liquid fertilizer. Lorsban 75WG is **not compatible** with other forms of liquid fertilizer. See Mixing with Liquid Fertilizer section of this label.

It is always recommended that a small jar compatibility test using proper proportions of chemicals and water be run to check for physical compatibility prior to tank mixing.

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Some reduction in insect control may occur under unusually cool conditions.

### INSECTICIDE RESISTANCE MANAGEMENT (IRM)

Lorsban 75WG 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 Lorsban 75WG or other Group 1B insecticides.

To delay development of insecticide resistance:

- Avoid consecutive use of insecticides with the same mode of action (same insecticide group) on the same 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 insecticide resistance management and/or IPM recommendations for the specific site and resistant pest problems.
- For further information or to report suspected resistance, you may contact Gowan Company by calling 800-883-1844

### 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 a decision to apply this product.

Observe the following precautions when spraying Lorsban 75WG adjacent to permanent bodies of water such as rivers, natural ponds, lakes, streams, reservoirs, marshes, estuaries, and commercial fish ponds.

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)
ground boom	25 feet
chemigation	25 feet
orchard airblast	50 feet
aerial (fixed wing or helicopter)	150 feet

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

Application Rate (lb ai/A)	Nozzle Droplet Type	Required Setback (Buffer Zones) (feet)		
		Aerial	Airblast	Ground
>0.5 – 1	coarse or very coarse	10	10	10
>0.5 – 1	medium	25	10	10
>1 – 2	coarse or very coarse	50	10	10
>1 – 2	medium	80	10	10
>2 – 3	coarse or very coarse	80 <sup>1</sup>	10	10
>2 – 3	medium	100 <sup>1</sup>	10	10
>3 – 4	medium or coarse	NA <sup>2</sup>	25	10
>4	medium or coarse	NA	50	10

<sup>1</sup>Aerial application of greater than 2 lb ai/A is only permitted for Asian Citrus Psylla control, up to 2.3 lb ai/A.

<sup>2</sup>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.

Follow these spray drift **best management practices** to avoid off-target drift movement from applications.

#### Aerial Application

- The boom width must not exceed 75% of the wingspan or 90% of the rotor blade.
- Nozzles must always point backward, parallel with the air stream, and never be pointed downward more than 45 degrees.
- Nozzles must produce a medium or coarser droplet size (255-340 microns volume median diameter) per ASABE Standard 572.1 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.
- Do not make applications 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.
- 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.
- 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 should 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 supercede 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 specified 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 best 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:** Do not make applications 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 should compensate for this displacement by adjusting the path of the aircraft upwind. Increase swath adjustment distance with increasing drift potential (higher wind, smaller drops, etc.).

**Wind:** Drift potential is lowest between wind speeds of 2-10 mph. However, many factors, including droplet size and equipment type, determine drift potential at any given speed. Do not apply below 1.5 mph due to variable wind direction and high inversion potential. **Note:** Local terrain can influence wind patterns. Every applicator should 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:** Do not make applications 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:** Apply the pesticide only 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.

- Choose only nozzles and pressures that produce a medium or coarse droplet size (255-400 microns volume median diameter), per ASABE Standard 572.1. See manufacturer's catalog or USDA/NAAA Applicator's Guide for spray size quality ratings.
- Apply with nozzle height no more than 4 feet above the ground or crop canopy.
- 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.

- Direct nozzles so spray is not projected above the canopies.
- 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.
- Outward pointing nozzles must be shut off when turning corners at row ends.

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

- 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. Adjust airblast equipment 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.

Take the following steps 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.

## APPLICATION DIRECTIONS

### Broadcast Foliar Application

Apply with conventional power-operated spray equipment using nozzles and spray pressures specified for insecticides. Apply Lorsban 75WG in a spray volume of not less than 2 gallons per acre for aerial application equipment (fixed wing or helicopter) or not less than 10 gallons per acre for ground equipment, unless otherwise specified. Increase spray volume to ensure adequate coverage with increased density and height of crop canopy.

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

### Broadcast Soil Application

Apply with conventional power-operated spray equipment that will apply the product uniformly to the soil surface. Use nozzles that produce medium or coarse droplets (255-400 microns). Unless otherwise indicated, a spray volume of 10 gpa or more is needed. For band application, use proportionally less spray volume.

### Aerial Application

Use a minimum spray volume of 2 gallons per acre.

Mark of swath by mechanical flagging, permanent markers or GPS equipment.

### Chemigation Application

Apply Lorsban 75WG through properly equipped chemigation systems for insect control in alfalfa, almond (orchard floors only), citrus (orchard floors only), corn (field and sweet), cotton, cranberry, peppermint, sorghum, soybeans, spearmint, sugarbeets, tree nut orchard floors (pecan and walnut only), and wheat or other crops as specified in Gowan supplemental labeling. Do not apply this product by chemigation unless specified in crop-specific directions in this label or Gowan Company 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.

**Directions for Sprinkler Irrigation:** 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.

**Chemigation Equipment Preparation:** The following use directions must be followed when Lorsban 75WG is applied through sprinkler irrigation 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 system with soap or a cleaning agent and water. Determine the amount of Lorsban 75WG needed to cover the desired acreage. Mix according to instructions in the Mixing Directions section and bring mixture to desired volume. Maintain continuous agitation during mixing and throughout the application period.

Do not add crop oil when Lorsban 75WG is applied by chemigation. 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 Use Precautions section. The mixture containing Lorsban 75WG 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.

**Chemigation Equipment Calibration:** In order to calibrate the irrigation system and injector to apply the mixture containing Lorsban 75WG, determine the following: 1) Calculate the number of acres irrigated by the system; 2) Calculate the amount of product required and premix; 3) Determine the irrigation rate and determine the number of minutes for the system to cover the intended treatment area; 4) Calculate the total gallons of insecticide mixture needed to cover the desired acreage. Divide the total gallons of insecticide mixture needed by the number of minutes (minus time to flush out) to cover the treatment area. This value equals the gallons per minute output that the injector or eductor

must deliver. Convert the gallons per minute to milliliters or ounces per minute if needed. 5) Calibrate the injector pump with the system in operation at the desired irrigation rate. It is suggested that the timed output of the injector pump be checked at least twice before operation, and the system monitored during operation.

**Chemigation Equipment Requirements:**

- The system must contain an air gap, an approved backflow prevention device, a functional check valve, vacuum relief valve (including inspection port), and low-pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from back flow. Refer to the American Society of Agricultural Engineer's Engineering Practice 409 for more information or state specific regulations.
- The pesticide injection pipeline must also contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.
- The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.
- The irrigation line or water pump must include a functional pressure switch that will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.
- Systems must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.
- To ensure uniform mixing of the insecticide into the water line, inject the mixture through a nozzle placed in the fertilizer injection port or just ahead of an elbow or tee in the irrigation line so that the turbulence will assist in mixing. The injection point must be located after all back-flow prevention devices on the water line.
- The tank holding the insecticide mixture must be free of rust, fertilizer, sediment, and foreign material, and equipped with an in-line strainer situated between the tank and the injector pump.

**Chemigation Precautions:**

- Crop injury, lack of effectiveness, or illegal pesticide residues in the crop can result from non-uniform distribution of treated water.
- If you have questions about calibration, contact state extension service specialists, equipment manufacturers, or other experts.
- A person knowledgeable of the chemigation system and responsible for its operation, or under the supervision of the responsible person, shall operate the system and make necessary adjustments should the need arise and continuously monitor the injection.

**Chemigation Restrictions:**

- Do not connect an irrigation system (including greenhouse systems) used for pesticide application to a public water system.
- The pesticide injection pipeline must contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.
- The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops, or in cases where there is no water pump, when the water pressure decreases to the point where pesticide distribution is adversely affected.
- Systems must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.
- Do not apply when wind speed favors drift beyond the area intended for treatment. End guns must be turned off during the application if they irrigate non-target areas.
- Do not allow irrigation water to collect or run off and pose a hazard to livestock, wells, or adjoining crops.
- Do not enter treated area during the reentry interval specified in the Agricultural Use Requirements section of this label unless required PPE is worn.
- Do not apply through sprinkler systems that deliver a low coefficient of uniformity such as certain water drive units.

**MIXING DIRECTIONS**  
**Acres per Packet for Various Application Rates of Lorsban 75WG.**

Lorsban 75WG Application Rate (lb/acre)	Acres Treated per Water Soluble Packet (1.33 lb/Package)
0.25	5.32
0.33	4.00
0.50	2.66
0.67	2.00
0.75	1.77
1.00	1.33
1.25	1.06
1.33	1.00
1.50	0.87
1.67	0.80
1.75	0.75
2.00	0.67

Lorsban 75WG Application Rate (lb/acre)	Acres Treated per Water Soluble Packet (1.33 lb/Package)
2.25	0.60
2.33	0.57
2.50	0.53
2.67	0.50
2.75	0.48
3.00	0.44
4.00	0.33
5.00	0.27
6.00	0.22
7.00	0.19
8.00	0.17

**To calculate the number of water soluble packets for the spray mix:**

1. Determine the number of acres to be treated.
2. Locate application rate in the crop-specific rate table.
3. Divide the total number of acres to be treated by the acres treated per water soluble packet corresponding to the desired rate. (See table above for broadcast application rates and corresponding acres per packet.)

**Note:** If the resulting number of packets is not a whole packet, round up or down to the nearest whole number of packets. Ensure that the resulting number of acres/packet falls within the specified rate range for the application.

### Lorsban 75WG - Alone

Lorsban 75WG is a water dispersible granule formulation and may be mixed with water or 28-0-0 liquid fertilizer. Thorough mixing is required. To prepare the spray mixture:

1. Fill the tank with 1/2 of the total amount of water or liquid fertilizer required for the load. (For use with liquid fertilizer, follow Liquid Fertilizer Mixing Instructions below.)
2. Start agitation. **Maintain agitation throughout mixing and application.**
3. Add the required number of water soluble packets (product in transparent film) directly into the spray tank. **(See special pre-mixing instructions below for Mixing of Lorsban 75WG in liquid fertilizer solutions).** Water soluble packets will float on the surface until the water soluble film dissolves and releases the product. Minimize the handling of packets with hands. **Important: Do not open water soluble packets.**
4. Continue agitation and complete filling the tank.
5. Before spraying, make sure packets have completely disintegrated and product is thoroughly and uniformly mixed. Depending on the water temperature and the degree of agitation, the packet and product should be completely dispersed within 10 minutes from the time they were added to the water.

To ensure a uniform spray mixture, continuous agitation is required during mixing and spraying. Apply the same day as mixing, especially at high concentrations (low carrier rates). If product is allowed to settle, thoroughly agitate to resuspend the mixture before spraying.

### Lorsban 75WG - Tank Mix

Vigorous, continuous agitation during mixing, filling and throughout application is required for all tank mixes. Sparger pipe agitators generally provide the most effective agitation in spray tanks. To prevent foaming in the spray tank, avoid stirring or splashing air into the spray mixture. Apply within the same day of mixing. If spraying and agitation must be stopped before the spray tank is empty, the materials may settle to the bottom. If product is allowed to settle, thoroughly agitate to resuspend the mixture before spraying, especially if held overnight. Settled materials may be more difficult to resuspend than when originally mixed.

Lorsban 75WG is compatible with commonly recommended insecticides, miticides, and fungicides. Lorsban 75WG is not compatible with alkaline materials, such as Bordeaux mixture and lime or with mixtures containing boron. Do not apply with micronutrient solutions containing boron. Thoroughly clean spray equipment used to apply any spray mixture containing boron before applying this product.

### Mixing Order:

1. Fill the spray tank to 1/4 to 1/3 of the total spray volume required with water or liquid fertilizer solution.
2. Start agitation. Maintain agitation throughout mixing and application.
3. Add different formulation types in the following order, allowing time for complete mixing and dispersion after addition of each product: Lorsban 75WG, other dry flowables, wettable powders, aqueous suspensions, flowables and liquids. If mixing with liquid fertilizer, pre-mix or slurry first (see liquid fertilizer mixing instructions below).
4. Maintain agitation and fill spray tank to 3/4 of total spray volume.
5. Add emulsifiable concentrates and any solutions and finish filling the spray tank. Allow extra mixing and dispersion time for dry flowable products.

**Tank Mix Compatibility Test:** Test compatibility of the intended tank mixture before adding Lorsban 75WG to the spray or mix tank. Add proportional amounts of each tank mix ingredient to a clear glass pint or quart jar with a lid, cap it, invert the jar several times, and let set 15 minutes. If the mixture balls-up, forms flakes, sludges, jels, oily films or layers, or other precipitates that do not readily redisperse, it is an incompatible mixture that must not be used.

### Tank Mixing Precautions:

- Read carefully and follow all applicable use directions, precautions, and limitations on the respective product labels.
- Do not exceed specified application rates. Do not tank mix with another pesticide product that contains the same active ingredient as this product unless the label of either tank mix partner specifies the maximum dosages that may be used.

**Mixing Instructions for Liquid Fertilizer:** Lorsban 75WG may be mixed only with 28-0-0 liquid fertilizer. Lorsban 75WG is not compatible with other forms of liquid fertilizer. Prepare a slurry mixture of Lorsban 75WG prior to adding to liquid fertilizer (see premixing/slurry instructions below). Continuous agitation is required. If needed, use a compatibility agent to ensure that Lorsban 75WG mixes properly. The use of an appropriate compatibility agent is especially important when tank mixing Lorsban 75WG and other dry flowables, wettable powders, flowables, liquids, aqueous suspensions, or solutions with emulsifiable concentrates in liquid fertilizer. If the emulsifiable concentrate formulation rises to the surface of the fertilizer as an oil ("oils out"), the oil may combine with the wettable powder, flowable, or suspension to form oily curds (viscous phase) which are difficult to disperse. A jar test, utilizing relative proportions of the tank mix ingredients, is recommended prior to mixing with liquid fertilizer.

**Pre-mixing (Slurry) Prior to Tank Mixing or Mixing with Liquid Fertilizer:** Pre-mixing with water is **required** when Lorsban 75WG is applied with liquid fertilizer as carrier. For best results, use a minimum of 5 gallons of water per 1.3 pounds of Lorsban 75WG. Stir gently to disperse granules and create a uniform mixture. Continue stirring until a uniform mixture is obtained and then add to the liquid fertilizer through a screen of 20-35 mesh. This procedure is needed to assure good initial dispersion of these products in liquid fertilizer or water.

## USES

### ALFALFA

(Not for use in Mississippi)

<b>Worker Restricted Entry Interval:</b> 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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Apply as a broadcast foliar spray using aircraft or ground spray equipment. Use a higher rate in the rate range for increased pest pressure. Use a minimum spray volume of 2 gallons per acre (gpa) for aerial application (fixed wing or helicopter) or 10 gpa for ground equipment. Use a spray volume of 5 gpa or more by air or up to 20 gpa 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:** Lorsban 75WG may be applied through sprinkler irrigation systems to control listed foliar pests. Use specified broadcast application rates. See Chemigation Application section.





**Specific Use Restrictions:**

- **Preharvest Interval:** Do not apply within 28 days before harvest.
- Do not make more than one application of Lorsban 75WG per year as either a prebloom or post-bloom trunk application.
- This product may not be used if a prebloom application of any other product containing chlorpyrifos has been made during the year.
- Do not allow meat or dairy animals to graze in treated orchards.
- Treat only the lower 4 feet of the apple tree trunk.
- Do not apply when wind speed is greater than 10 mph.

**ASPARAGUS**

(For use only in Arizona, California, Idaho, Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, Oregon, South Dakota, Washington, and Wisconsin)

**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 volume to ensure thorough coverage of crop foliage. **Note:** Lorsban 75WG may be applied aerially or with ground equipment for control of armyworms and grasshoppers.

Target Pests	Lorsban 75WG (lb/acre)
Armyworms (1) asparagus aphids (1) asparagus beetles (1) cutworms (2) grasshoppers (1) symphylans (3)	1.33

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

**Pest-Specific Use Directions:**

1. **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. **Cutworms:** For best results, apply when the soil is moist and worms are active on or near the soil surface.
3. **Symphylans:** Apply at least two weeks before harvest for optimum control.

**Specific Use Restrictions:**

- **Preharvest Interval:** Do not apply within 1 day before harvest.
- Do not make more than 1 preharvest application per season.
- Do not make more than 2 postharvest applications during the fern stage.
- Maximum single application rate preharvest or postharvest is 1 lb ai chlorpyrifos (1.33 lb of Lorsban 75 WG) per acre.
- Do not apply more than a total of 3 lb ai chlorpyrifos (4 lb of Lorsban 75WG) per acre per year.
- Do not make a second application of Lorsban 75WG or other product containing chlorpyrifos within 10 days of the first application.

**BRASSICA (COLE) LEAFY VEGETABLES (Crop Group 5)<sup>1</sup> AND RADISH, RUTABAGA, AND TURNIP**

**Worker Restricted Entry Interval:** Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 24 hours (3 days for cauliflower) unless PPE required for early entry is worn.

<sup>1</sup>Brassica (cole) leafy vegetables(crop group 5) including broccoli, broccoli raab, Brussels sprout, cabbage, cauliflower, cavalo broccolo, Chinese broccoli (gai lon), Chinese cabbage (bok choy), Chinese cabbage (napa), Chinese mustard cabbage (gai choy), collards, kale, kohlrabi, mizuna, mustard greens, mustard spinach, rape greens

**Specific Use Restriction:** If a preplant incorporation application for direct seeded or transplanted crops is made, **do not** apply this product as an at-plant or post plant soil application. If an at-plant or post plant soil application is made, **do not** apply this product as a preplant incorporation application for direct seeded or transplanted crops.

**Preplant Incorporation Application for Direct Seeded or Transplanted Crops**

Apply Lorsban 75WG as a broadcast spray to the soil surface using power-operated ground spray equipment. Use a total spray volume of 10 gpa or more. On the day of treatment, incorporate Lorsban 75WG into the top 2 to 4 inches of soil using a disc, field cultivator, or equivalent equipment.

<b>Crop</b>	<b>Target Pests</b>	<b>Lorsban 75WG (lb/acre)</b>
cauliflower	billbugs cutworms grubs root maggot symphylans wireworms	2.66
broccoli		3
broccoli raab		
Brussels sprout		
cabbage		
cavalo broccolo		
Chinese broccoli (gai lon)		
Chinese cabbage (bok choy)		
Chinese cabbage (napa)		
Chinese mustard cabbage (gai choy)		
collards		
kale		
kohlrabi		
mizuna		
mustard greens		
mustard spinach		
rape greens		
turnip		
radish		3.66
rutabaga		3

**Specific Use Precautions:**

Insecticides, including Lorsban 75WG, may contribute to the stress of plants under certain environmental conditions. This stress may reduce plant stand or interfere with normal plant development. Herbicides used preplant incorporated may interact with insecticides and enhance this stress.

**At Plant or Post Plant Soil Application**

Apply as indicated in Pest-Specific Use Directions. Use a higher rate in the rate range when there is increased pest pressure.

<b>Crop</b>	<b>Target Pests</b>	<b>Lorsban 75WG (oz/1000 ft of row)</b>
cauliflower	root maggot (1)	1.1 - 1.6
broccoli	root maggot (1)	1.1 - 1.8
broccoli raab		
Brussels sprout		
cabbage		
cavalo broccolo		
Chinese broccoli (gai lon)		
Chinese cabbage (bok choy)		
Chinese cabbage (napa)		
Chinese mustard cabbage (gai choy)		
collards		
kale		
kohlrabi		
mizuna		
mustard greens		
mustard spinach		
rape greens		
turnip		
broccoli cabbage	root aphid (2)	0.8 (1.6 for double row plantings)
radish	root maggot (3)	0.67
rutabaga	root maggot (1)	1.1 - 2.15

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

### Pest-Specific Use Directions :

- 1. Root maggot:**
  - **Direct seeded crops [broccoli, broccoli raab, Brussels sprout, cabbage, cauliflower, cavalo broccolo, Chinese broccoli (gai lon), Chinese cabbage (bok choy), Chinese cabbage (napa), Chinese mustard cabbage (gai choy), collards, kale, kohlrabi, mizuna, mustard greens, mustard spinach, rape greens, rutabaga, turnip]:** Apply the specified dosage in a water-based spray as a 4-inch wide band over the row at planting time. Place band behind the planter shoe and in front of the press wheel to achieve shallow incorporation. Use a minimum of 40 gpa of total spray volume.
  - **Transplanted crops [broccoli, broccoli raab, Brussels sprout, cabbage, cauliflower, cavalo broccolo, Chinese broccoli (gai lon), Chinese cabbage (bok choy), Chinese cabbage (napa), Chinese mustard cabbage (gai choy), collards, kale, kohlrabi, mizuna, mustard greens, mustard spinach, rape greens, turnip]:** Apply Lorsban 75WG as a water-based spray directed to the base of the plants immediately after setting. Use a minimum of 40 gpa of total spray. Do not add any additional adjuvants, surfactants or spreader stickers. Do not apply as a foliage application.
- 2. Root aphid (broccoli, cabbage):** Apply Lorsban 75WG in water or with liquid fertilizer (28-0-0 only) injected as a sidedress on each side of the row after plants are established. See Mixing Directions section for Mixing Instructions for Liquid Fertilizer. Avoid mechanical damage to crop roots. Use a minimum of 15 gpa of total spray volume.
- 3. Root maggot (radish):** Apply the specified dosage as a water-based drench in the seed furrows with the seed at planting time. Use a minimum of 40 gpa of total drench.

### Specific Use Restrictions for Preplant Incorporation and At-Plant or Post Plant Soil Applications:

- **Soil applications (all labeled crops):**
  - **Preharvest Interval:** Do not apply within 30 days before harvest.
  - Do not foliarly apply any chlorpyrifos product labeled for foliar application (e.g., Lorsban 50W) within 10 days of a soil application of Lorsban 75WG.
  - Do not aerially apply this product in Mississippi.
- **Cauliflower:** Do not apply more than 1.33 lb of Lorsban 75WG to cauliflower planted in 40-inch rows. Use proportional amounts for other row spacings, but do not to exceed 2.67 lb per acre of Lorsban 75WG. The maximum single application rate for cauliflower is 1.2 oz ai chlorpyrifos per 1000 ft of row.
- **Broccoli, broccoli raab, Brussels sprout, cabbage, cavalo broccolo, Chinese broccoli (gai lon), Chinese cabbage (bok choy), Chinese cabbage (napa), Chinese Mustard cabbage (gai choy), collards, kale, kohlrabi, mizuna, mustard greens, mustard spinach, rape greens, turnip:** Do not apply more than 1.73 lb of Lorsban 75WG per acre when planted in 40-inch rows. Do not apply more than 3 lb of Lorsban 75WG per acre to these crops when in 20-inch rows (or two rows per bed). Use proportional amounts for other row spacings, but do not exceed 3 lb of Lorsban 75WG per acre.
- **Radish:** Do not apply more than 3.67 lb of Lorsban 75WG per acre. The maximum single application rate for radish is 0.5 oz ai chlorpyrifos per 1000 ft of row.
- **Rutabaga:** Do not apply more than 3 lb of Lorsban 75WG per acre. The maximum single application rate for rutabaga is 1.6 oz ai chlorpyrifos per 1000 ft of row. Do not use rutabaga tops for food or feed purposes.

### Foliar Application [Brassica (Cole) Leafy Vegetables Only]

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

To avoid phytotoxicity, do not treat plants under stress from extreme heat and/or lack of moisture. For best results, tank mix only if previous experience indicates that the combination will not result in phytotoxicity under the current conditions of use and the other pesticides and spray adjuvants are registered for this use. Read and carefully follow all applicable directions, restrictions, and precautions on other product labels used in combination with Lorsban 75WG. Tank mixing with Thiodan 3EC, Thiodan 50WP, or cottonseed oil is not recommended.

Target Pests	Lorsban 75WG (lb/acre)
armyworms (including beet armyworm) cabbage aphid cutworms diamondback moth (1) imported cabbage worm striped flea beetle (adult)	0.67 – 1.33

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

### Pest-Specific Use Directions:

- 1. Diamondback moth:** Significant organophosphate insecticide resistance has been reported for diamondback moth populations in Texas. Lorsban 75WG will not control organophosphate-resistant populations of diamondback moth. Consult your local extension service for resistance management information.

### Specific Use Restrictions:

- **Preharvest Interval:** Do not apply within 21 days before harvest.
- Do not make more than three applications of products containing chlorpyrifos per crop.
- Do not make a second application of Lorsban 75WG or other product containing chlorpyrifos within 10 days of the first application.
- Do not aerially apply this product in Mississippi.

**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 at the dosages indicated to control pests listed in the following table in plantations. Thorough coverage of foliage is essential. Use a minimum 10 gpa of finished spray with ground equipment. Use higher volume of finished spray, 20 gpa or more, when foliage is dense and/or pest density is high and/or under high temperature and wind conditions.

Target Pests		Lorsban 75WG
adelgids (cooley) (eastern spruce gall)	pales weevil (adult) pine needle midge pine spittlebug plant bugs scale (2)	1.33 lb/acre
ants (4) aphids Douglas fir needle midge European pine sawfly European pine shoot moth grasshoppers gypsy moth mites (1) (European red spider) (two spotted spider)	(black pine) (pine needle) (pine tortoise) (spruce bud) (striped pine) spittlebugs spruce budworm spruce needleminer	
pales weevil (3)		4.0 lb/100 gal

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

**Pest-Specific Use Directions:**

- Spider mites:** When large numbers of eggs are present at the time of 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.**
- Scale control:** Apply when scale crawlers are active.
- Pales weevil:** Apply as a cut stump drench. Do not exceed 1 lb ai chlorpyrifos (1.33 lb of Lorsban 75WG) per acre per application.
- Excludes ants of significant public health importance such as fire ants, harvester ants, carpenter ants, and pharaoh ants.

**Specific Use Precautions:**

**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 Lorsban 75WG may be used at 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 other conifer species, treat a small block of plants and observe them 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 Lorsban 75WG under commercial growing conditions.

**Specific Use Restrictions:**

- Do not make more than 3 applications of Lorsban 75WG or other product containing chlorpyrifos per season.
- Do not make a second application of Lorsban 75WG or other product containing chlorpyrifos within 7 days of the first application.
- Do not allow meat or dairy animals to graze in treated areas.

**CITRUS FRUITS (CROP GROUP 10)<sup>1</sup>**  
**(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.

<sup>1</sup> Citrus fruits (crop group 10) including calamondin, chironja, citrus citron, citrus hybrids, clementine, grapefruit, kumquat, lemon, lime, mandarin (tangerine), Mediterranean mandarin, pummelo, satsuma mandarin, sour orange, sweet orange, tangelo, tangor

Apply as a concentrate or dilute spray using conventional, power-operated spray equipment. Use a higher rate in the 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 gpa), use a spray concentration of at least 0.33 lb of Lorsban 75WG 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 specified by your State Agricultural Experiment Station, certified Pest Control Advisor, or Extension Service Specialist. To avoid excessive ridging, do not apply Lorsban 75WG to citrus from December 1 up to the initiation of bloom (5% visible bloom).

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

Target Pests		Lorsban 75WG (lb/acre)
aphids (including brown citrus aphid), grasshoppers (1) katydids Lepidopterous larvae, such as: avocado leafroller cutworms fruittree leafroller orange dogs orange tortrix western tussock moth mealybugs (see below for California and Arizona)	scale insects, such as: black scale brown soft scale California red scale (see below for California and Arizona) chaff scale Florida red scale long scale purple scale snow scale thrips (see below for California and Arizona)	1.33 - 4.67
citrus rust mites (2) (Florida only)		2.67 - 4.67
citrus psylla (3) (Florida only)		3.33
thrips suppression and mealybugs (California and Arizona, see restrictions)		4.0 - 8.0
California red scale (California and Arizona, see restrictions)		5.33 - 8.0

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).
- Citrus rust mites:** For control, use a spray concentration of at least 0.67 lb of Lorsban 75WG per 100 gallons.
- Citrus psylla:** For control, add citrus oil at 2% v/v in a tank mix with Lorsban 75WG.

#### Specific Use Precautions:

- Observe local recommendations for tank mix combinations especially with regard to use of Lorsban 75WG with spray oil. Do not use penetrating surfactants in tank mixes with Lorsban 75WG. Consult with a county farm advisor, county agency, extension service personnel, agricultural commissioner, pest control advisor, or local Gowan Company representative for local recommendations.
- Do not apply when trees are stressed by drought or high temperatures.
- Lorsban 75WG is highly toxic to bees exposed to direct treatment and must not be applied when bees are actively visiting the area. During the citrus bloom period in California, apply from 1 hour after sunset until 2 hours before sunrise.
- Do not use Lorsban 75WG in combination with spray oil when temperatures are expected to exceed 95°F on the day of application or for several consecutive days thereafter.

#### Specific Use Restrictions:

- Preharvest Interval:** Do not apply within 21 days before harvest after applications of up to 4.67 lb of Lorsban 75WG or within 35 days after application of rates above 4.67 lb per acre.
- Do not make more than 2 applications of Lorsban 75WG or other products containing chlorpyrifos per year (does not include citrus orchard floors).
- Maximum single application rate is 3.75 lb ai chlorpyrifos (5 lb of Lorsban 75 WG) per acre.
- Do not apply more than a total of 7.5 lb ai chlorpyrifos (10 lb of Lorsban 75WG) per acre per year.
- Do not make a second foliar application of Lorsban 75WG or other product containing chlorpyrifos within 30 days of the first application.
- The use of application rates greater than 4 lb ai chlorpyrifos (5.33 lb of Lorsban 75 WG) per acre are allowed only in the following counties in California: Fresno, Tulare, Kern, Kings, and Madera.
- Do not allow meat or dairy animals to graze in treated areas.

### CITRUS (CROP GROUP 10)<sup>1</sup> ORCHARD FLOORS (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.

<sup>1</sup>Citrus fruits (crop group 10) including calamondin, chironja, citrus citron, citrus hybrids, clementine, grapefruit, kumquat, lemon, lime, mandarin (tangerine), Mediterranean mandarin, pummelo, satsuma mandarin, sour orange, sweet orange, tangelo, tangor

Apply as a ground broadcast spray directed to the orchard floor to control foraging ants (excluding fire, harvester, carpenter and pharaoh ants). Do not allow spray to contact foliage or fruit. Apply in a total spray volume of 25 gpa or more using equipment that will apply the spray uniformly to the soil surface. Use a higher rate in the rate range for increased pest pressure. For best results, remove weed growth or other obstructions that might prevent the spray from reaching the soil surface. Foliar applications of Lorsban 75WG or other products containing chlorpyrifos may be made in addition to the orchard floor treatments but must comply with the 10-day re-treatment interval (see Specific Use Restrictions).

**Chemigation:** Lorsban 75WG may be applied to citrus orchard floors through sprinkler irrigation systems only if the system uniformly covers the soil surface at the base of the tree. Apply at specified broadcast application rates to control listed pests. See Chemigation Application section.

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

Target Pests	Lorsban 75WG (lb/acre)
Ants (1)	1 - 1.33

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

**Pest-Specific Use Directions:**

1. Excludes ants of significant public health importance such as fire ants, harvester ants, carpenter ants, and pharaoh ants.

**Application with Dry Bulk Fertilizer:** Most dry fertilizers can be used for impregnation with Lorsban 75WG. Apply Lorsban 75WG at the equivalent broadcast rate using a minimum of 200 lb per acre of dry bulk fertilizer.

**Impregnation of Dry Bulk Fertilizer:** Use a closed rotary drum mixer suitable for blending of dry bulk fertilizer equipped with an internal spray nozzle. Add the dry fertilizer to the mixer followed by the appropriate amount of Lorsban 75WG. Open the water soluble packets and empty Lorsban 75WG directly into fertilizer mixture. After mixing the dry ingredients to ensure uniformity, add water through the spray nozzle in an amount sufficient to just dampen the mixture (4 to 8 pints of water per ton of fertilizer). Position the spray nozzle within the mixer to provide uniform coverage of the tumbling mixture of fertilizer and Lorsban 75WG. Addition of water will cause Lorsban 75WG to uniformly adhere to the dry bulk fertilizer. Apply bulk fertilizers impregnated with Lorsban 75WG immediately, **do not store it**. Foliar applications of Lorsban 75WG may be made in addition to orchard floor treatments.

Compliance with any and all federal and state laws and regulations relating to the Lorsban 75WG and fertilizer mixture is the responsibility of the person offering such mixture for sale or distribution.

**Specific Use Restrictions:**

- **Preharvest Interval:** Do not apply within 28 days before harvest.
- Do not make more than 3 applications of Lorsban 75WG or other product containing chlorpyrifos per year (does not include foliar applications to citrus trees).
- Maximum single application rate is 1 lb ai chlorpyrifos (1.33 lb of Lorsban 75WG) per acre.
- Do not apply more than a total of 3 lb ai chlorpyrifos (4 lb of Lorsban 75WG) per acre per year.
- Do not make a second application of Lorsban 75WG or other product containing chlorpyrifos within 10 days of the first application.
- Do not allow meat or dairy animals to graze in treated areas.

**CORN (FIELD, SWEET, SEED)**

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

**Conservation Tillage: Preplant, At-Plant, or Preemergence Applications**

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

**Tank Mixing:** Lorsban 75WG may also be applied in tank mixtures with paraquat or glyphosate and/or 28-0-0 liquid fertilizer only (Lorsban 75WG is not compatible with other 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 Lorsban 75WG.

Target Pests	Lorsban 75WG (lb/acre)
armyworms	0.67 - 1.33
cutworms	

**Postemergence Application**

Apply as a postemergence broadcast spray using sufficient spray volume to ensure thorough coverage of treated plants, but no less than 15 gpa for ground spray equipment or 2 to 5 gpa for aircraft equipment. Control may be reduced at low spray volumes under high temperature and wind conditions. Lorsban 75WG may be tank mixed with glyphosate products, such as Duramax® herbicide or Durango® DMA® herbicide when application is to be made to glyphosate-tolerant corn.

**Chemigation:** Lorsban 75WG may be broadcast applied postemergence through sprinkler irrigation systems at specified application rates to control listed foliar pests. For best results, tank mix Lorsban 75WG with 2 pints of non-emulsifiable oil. See Chemigation Application section.

Target Pests	Lorsban 75WG (lb/acre)
grasshoppers	0.33 - 0.67
aphids	0.67 - 1.33
armyworms	
chinch bugs (1)	
corn rootworm adults (2)	
cutworms (3)	
European corn borer (5)	
flea beetle adults (1)	
southern corn leaf beetle	
webworms (4)	
western bean cutworm	
corn earworm	1 - 1.33
southwestern corn borer (6)	
billbugs (1)	1.33
common stalk borer (9)	
corn rootworm larvae (7), (8)	
lesser cornstalk borer	

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

**Pest-Specific Use Directions:**

1. **Billbug, chinch bug, or flea beetle:** For best control, ground apply in a minimum spray volume of 20 to 40 gpa at 40 psi. If corn is less than 6 inches tall, apply in a 9- to 12-inch wide band over the row. For corn more than 6 inches tall, apply using drop nozzles directed to the base of the plant. Do not reduce the application rate for banded or directed applications. Concentrate the full-labeled dosage rate in the treated zone. When chinch bugs continue to immigrate to corn over a prolonged period or under extreme pest pressure, a second application may be needed.
2. The specified dosage will control silk clipping by **corn rootworm adults**.
3. **Cutworms:** It is preferable to apply Lorsban 75WG when soil is moist and worms are active on or near the soil surface. If ground is dry, cloddy, or crusted at time of treatment, worms may be protected from the spray and effectiveness will be reduced. Shallow incorporation using a rotary hoe or other suitable equipment immediately before or soon after treatment may improve control. A second application may be required if damage or density levels exceed economic thresholds established for your area.
4. **Webworm:** For control, shallow incorporation using a rotary hoe or other suitable equipment immediately before or soon after treatment is necessary.
5. **European corn borer:** For control, use 1 to 1.33 lb per acre when application is made with power-operated ground or aerial equipment, or 0.67 to 1.33 lb per acre when application is made through a sprinkler irrigation system. University research indicates that achieving greater than 50% control of first-generation European corn borer with a single liquid insecticide treatment is highly dependent upon timing, insecticide placement, and weather conditions.
6. **Southwestern corn borer:** A second application may be applied 21 days later if needed due to reinfestation.
7. **Corn rootworm larvae: For postemergence control,** apply at cultivation. Direct the spray to both sides of the row at the base of the plants just ahead of the cultivator shovels. Cover the insecticide with soil around the brace roots. A cultivation application of Lorsban 75WG may be made in addition to an at-planting application of Lorsban 15G.
8. Lorsban 75WG may also be applied through sprinkler irrigation systems at the rate of 1.33 lb per acre to control **corn rootworm larvae**. Time application to coincide with the appearance of the second instar larvae. Apply with enough water to wet the root zone to the depth control needed. If soils are wet, allow enough soil drying to occur such that an application using a minimum amount of water will not produce surface runoff. See Chemigation Application section.
9. Do not use Lorsban 75WG in combination with a burndown herbicide for control of common stalk borer. For **common stalk borer** control, treat approximately 11 days after application of glyphosate or after burndown with paraquat herbicide is complete (3 to 5 days).

**Specific Use Restrictions:**

- **Preharvest Interval:** Do not apply within 21 days before harvest of grain, ears, forage or fodder.
- Do not make more than 3 applications of Lorsban 75WG or any product containing chlorpyrifos per season, including the maximum allowed of 2 granular applications, at the 1 lb ai chlorpyrifos rate.
- Maximum single application rate is 1 lb ai chlorpyrifos (1.33 lb of Lorsban 75WG) per acre.
- Do not apply more than a total of 3 lb ai chlorpyrifos (4 lb of Lorsban 75WG) per acre per season.
- Do not make a second application of Lorsban 75WG or other product containing chlorpyrifos within 10 days of the first application.
- If more than 1 lb ai granular chlorpyrifos per acre is applied at-plant (for a maximum of 1.3 lb ai chlorpyrifos per acre per season), only 1 additional application of a liquid product containing chlorpyrifos at 1 lb ai per acre is allowed per season, for a total of 2.3 lb ai chlorpyrifos per acre per season.
- Do not apply in tank mixes with Steadfast or Lightning herbicides.
- Do not aerially apply this product in Mississippi.

**COTTON**  
**(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.

Apply as a broadcast foliar spray using aircraft or ground spray equipment (see separate rate table for Arizona and California). Use a higher rate in the rate range when there is increased pest pressure. Use sufficient spray volume to ensure thorough coverage of treated plants, but no less than 10 gpa for ground spray equipment or 2 gpa for aircraft equipment. Increase spray volume when foliage is dense and/or pest population is high and/or under high temperature and wind conditions. Treat when field counts indicate damaging insect populations are developing or present.

**Chemigation:** Lorsban 75WG may be applied through sprinkler irrigation systems at specified broadcast application rates to control listed foliar pests. See Chemigation Application section.

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



**All States Except Arizona and California**

<b>Target Pests</b>	<b>Lorsban 75WG (lb/acre)</b>
cotton fleahopper (1) plant bugs (1) ( <i>Lygus</i> , <i>Mirids</i> )	0.25 - 0.67
grasshoppers thrips	0.33 - 0.67
cotton aphid fall armyworm yellowstriped armyworm	0.33 - 1.33
spider mites (2)	0.67
beet armyworm cotton bollworm (3) cutworms pink bollworm saltmarsh caterpillar tobacco budworm (3)	1.0 - 1.33

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

**Pest-Specific Use Directions:**

- The 0.25 lb per acre rate will not provide a high degree of control but, compared to the 0.67 lb per acre rate, will minimize the damage from **plant bugs** and **cotton fleahoppers** and allow increased survival and build-up of **beneficial insects** to aid in the control of **bollworms** infesting cotton.
- 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.
- Bollworms and budworms:** For best results, scout fields twice per week and apply when worms are 1/4-inch or less in length.

**Arizona and California**

<b>Target Pests</b>	<b>Lorsban 75WG (lb/acre)</b>
armyworms cotton aphid cotton fleahopper <i>Lygus</i> saltmarsh caterpillar silverleaf whitefly (1) thrips	0.67 - 1.33
boll weevil cotton bollworm (2) cotton leaf perforator (suppression) cutworms pink bollworm spider mites (suppression) tobacco budworm (2)	1.33

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

**Pest-Specific Use Directions:**

- Silverleaf whitefly:** Apply in tank mix combination with the specified rate of a pyrethroid insecticide labeled for control or suppression.
- Bollworms and budworms:** For best results, scout fields twice per week and apply when worms are 1/4 inch or less in length.

**Specific Use Restrictions:**

- Preharvest Interval:** Do not apply within 14 days before harvest.
- Do not make more than 3 applications of Lorsban 75WG or other products containing chlorpyrifos per crop season.
- Maximum single application rate is 1 lb ai chlorpyrifos (1.33 lb of Lorsban 75WG) per acre.
- Do not apply more than a total of 3 lb ai chlorpyrifos (4 lb of Lorsban 75WG) per acre per season.
- Do not make a second application of Lorsban 75WG or other product containing chlorpyrifos within 10 days of the first application.
- Do not allow meat or dairy animals to graze in treated areas.
- Do not feed gin trash or treated forage to meat or dairy animals.

**CRANBERRY**

**(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.

Apply as a broadcast foliar spray. Use sufficient spray volume to ensure thorough coverage, but no less than 15 gpa. Except for control of cranberry weevil, treat when field counts indicate damaging insect populations are developing or present.

**Chemigation:** Lorsban 75WG may be applied through sprinkler irrigation systems to control listed pests. Apply at specified broadcast application rates. See Chemigation Application section.

Target Pests	Lorsban 75WG (lb/acre)
brown spanworm cranberry fruitworm cranberry weevil (1) cutworms, fireworms Sparganothis fruitworms	2.0

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

**Pest-Specific Use Directions:**

1. **Cranberry weevil:** For control, apply once at flower bud development (late May, early June) and, if cranberry weevils are present, once after 100% bloom (early to mid July).

**Specific Use Precautions:**

Apply only after the winter flood water has been removed. To avoid pesticide contamination of flood waters, do not apply when bogs are flooded.

**Specific Use Restrictions**

- **Preharvest Interval:** Do not apply within 60 days before harvest.
- Do not make more than 2 applications of Lorsban 75WG or other products containing chlorpyrifos per season.
- Maximum single application rate is 1.5 lb ai chlorpyrifos (2 lb of Lorsban 75WG) per acre.
- Do not apply more than a total of 3 lb ai chlorpyrifos (4 lb of Lorsban 75WG) per acre per year.
- Do not make a second application of Lorsban 75WG or other product containing chlorpyrifos within 10 days of the first application.

**FIG  
(California Only)**

**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.

Apply Lorsban 75WG as a dormant application in late winter prior to beetle emergence and prior to leaf formation. Use a spray volume of 10 gpa or more and apply as a broadcast spray to the soil surface using power-operated ground spray equipment. On the day of treatment, incorporate Lorsban 75WG into the top 3 inches of soil using suitable equipment.

Target Pests	Lorsban 75WG (lb/acre)
dried fruit beetle	2.67

**Specific Use Restrictions:**

- **Preharvest Interval:** Do not apply within 217 days (7 months) before harvest.
- Do not make more than ~~only~~ 1 application Lorsban 75WG or other products containing chlorpyrifos per year.
- Maximum single application rate is 2 lb ai chlorpyrifos (2.67 lb of Lorsban 75WG) per acre.
- Do not apply more than a total of 2 lb ai chlorpyrifos (2.67 lb of Lorsban 75WG) per acre per year.

**GRAPE  
(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.

**Soil Surface Application**

**(For use in areas east of the Continental Divide only)**

Apply Lorsban 75WG just before the pest emerges from the soil. Apply 1.5 quarts of the diluted spray mixture to the soil surface in an 11-square foot area (3.75 ft circle) around the base of each vine.

Target Pests	Lorsban 75WG (lb/100 gal)
grape root borer	3.0

**Specific Use Restrictions for Soil Surface Application:**

- Do not allow spray to contact fruit or foliage.
- Maximum single application rate for soil surface application is 2.25 lb ai chlorpyrifos (3 lb of Lorsban 75WG) per 100 gallons.
- Do not apply more than a total of 2.25 lb ai chlorpyrifos (3 lb of Lorsban 75WG) per 100 gallons per year.

**Prebloom Application**

**(For use in areas east of the Continental Divide only)**

Apply as a spray drench ground application using a minimum spray volume of 25 gpa.

Target Pest	Lorsban 75WG (lb/acre)
climbing cutworm <sup>1</sup> grape mealybugs <sup>2</sup>	1.33

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

**Pest-Specific Use Directions:**

1. **Cutworm:** For control, apply 1.33 lb of Lorsban 75WG per acre as a broadcast spray in a minimum spray volume of at least 50 gpa using power-operated ground spray equipment. Treat when cutworms first become active and when field counts indicate damaging insect

populations are developing or present. Do not apply after bloom stage of growth. Consult your state agricultural experiment station or extension service specialist concerning cutworm control practices in your area.

2. **Grape mealybug:** For control, apply 1.33 lb of Lorsban 75WG per acre in a minimum spray volume of at least 50 gpa using power-operated ground spray equipment only prior to late budbreak. Applications after budbreak may result in transient leaf yellowing (Concords).

#### **Specific Use Restrictions for Prebloom Application:**

- Do not use in conjunction with soil surface application for grape borer control.
- Maximum single application rate for prebloom application to minimize phytotoxicity is 1 lb ai chlorpyrifos (1.33 lb of Lorsban 75WG) per acre
- Do not apply more than a total of 1 lb ai chlorpyrifos (1.33 lb of Lorsban 75WG) per acre per year.

#### **Specific Use Restrictions for Soil Surface Application and Prebloom Application:**

- **Preharvest Interval:** Do not apply within 35 days before harvest.
- Do not make more than one application of Lorsban 75WG or other product containing chlorpyrifos per season.
- Based upon available residue data, the use of Lorsban 75WG in grapes is restricted to areas east of Continental Divide only. Do not use in the state of Mississippi.

### **LEGUME VEGETABLES (Succulent or Dried) (Except Soybean) (Crop Group 6)<sup>1</sup> (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.

<sup>1</sup>Legume vegetables (succulent or dried) (except soybean) (crop group 6) including adzuki bean, asparagus bean, bean, blackeyed pea, broad bean (dry and succulent), catjang, chickpea, Chinese longbean, cowpea, crowder pea, dwarf pea, edible pod pea, English pea, fava bean, field bean, field pea, garbanzo bean, garden pea, grain lupin, green pea, guar, hyacinth bean, jackbean, kidney bean, lablab bean, lentil, lima bean (dry and green), moth bean, mung bean, navy bean, pea, pigeon pea, pinto bean, rice bean, runner bean, snap bean, snow pea, southern pea, sugar snap pea, sweet lupin, sword bean, tepary bean, urd bean, wax bean, white lupin, white sweet lupin, yardlong bean

#### **Preplant Broadcast Application**

Apply Lorsban 75WG at a rate of 1.33 lb per acre to control seed maggots. Make a preplant broadcast application in a minimum of 10 gpa of spray to the soil surface using suitable ground equipment. To improve the activity against seed maggots, incorporate Lorsban 75WG into the top 1 to 3 inches of soil using suitable tillage equipment.

#### **At Plant T-Band Application**

Apply the spray in a 3- to 5-inch wide band over the row behind the planter shoe and in front of the press wheel to achieve shallow incorporation. Mix the specified dosage in a minimum of 10 gpa of spray and apply to the soil surface using suitable ground spray equipment. To improve the activity of Lorsban 75WG against seed maggots, incorporate Lorsban 75WG into the top 1/2 to 1-inch of soil using tines or chains or other suitable equipment.

**Specific Use Precautions:** Insecticides, including Lorsban 75WG, may contribute to the stress of the bean plants under certain environmental conditions. This stress may reduce plant stand or interfere with normal plant development. Herbicides used preplant incorporated may interact with insecticides and enhance this stress.

#### **Specific Use Restrictions:**

- Do not make more than one application of Lorsban 75WG per year.
- Maximum single application rate is 1 lb ai chlorpyrifos (1.33 lb of Lorsban 75WG) per acre.
- Do not apply more than 1 lb ai chlorpyrifos (1.33 lb of Lorsban 75WG) per acre per year.
- Do not apply Lorsban 75WG at-plant if the field was treated with a preplant incorporated treatment of Lorsban 75WG.

### **ONION (DRY BULB)**

**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.

#### **At-Plant Soil Drench Application**

For direct seeded onions to control onion maggot, apply 1.33 lb of Lorsban 75WG per acre in a water-based spray as a 2- to 4-inch wide band over the row at planting time in a minimum of 40 gpa. Shallow incorporation is necessary. Place behind the planter shoe and in front of the presswheel. Phytotoxicity may occur if Lorsban 75WG is sprayed directly onto onion seeds. Do not mix Lorsban 75WG with other pesticide products. **Note:** The user should exercise reasonable judgment and caution with this product. Until familiar with results under user planting and growing conditions, limit application of this product to a small area to determine plant tolerance and extent of injury if such occurs prior to initiating large scale applications.

#### **Specific Use Restrictions:**

- Do not make more than one application per year.
- Maximum single application rate is 1 lb ai chlorpyrifos (1.33 lb of Lorsban 75WG) per crop season.
- Do not apply more than a total of 1 lb ai chlorpyrifos (1.33 lb of Lorsban 75WG) per acre per year.
- Do not aerially apply this product in Mississippi.

#### **Postplant Soil Drench Application**

Apply as an early season directed spray to the base of onion seedlings or transplants during peak egg laying. Use a minimum of 100 gpa for thorough wetting.

Target Pest	Lorsban 75WG (lb/acre)
onion maggot	1.33
seedcorn maggot	

**Specific Use Restrictions:**

- **Preharvest Interval:** Do not apply within 60 days before harvest.
- Do not make more than two applications (at-plant plus postplant) per year.
- Maximum single application rate is 1 lb ai chlorpyrifos (1.33 lb of Lorsban 75WG) per acre.
- Do not apply more than a total of 2 lb ai chlorpyrifos (2.67 lb of Lorsban 75WG) per acre per year.
- Do not aerially apply this product in Mississippi.

**PEANUT**

**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 the soil surface as a preplant broadcast spray followed by immediate soil incorporation to a depth of 3 to 4 inches using a disc, field cultivator, or equivalent equipment. Use a minimum of 10 gpa total spray.

Target Pests	Lorsban 75WG (lb/acre)
wireworms (suppression)	2.67

**Specific Use Restrictions:**

- **Preharvest Interval:** Do not apply within 21 days before harvest.
- Do not make more than 1 preplant application of Lorsban 75WG per season.
- Maximum single application rate is 2 lb ai chlorpyrifos (2.67 lb of Lorsban 75WG) per acre.
- The combined total of preplant and postplant applications of Lorsban 75WG, Lorsban 15G or other products containing chlorpyrifos, must not exceed 4 lb ai chlorpyrifos (5.34 lb of Lorsban 75WG) per acre per season.
- Do not feed treated peanut forage or hay to meat or dairy animals.
- Do not aerially apply this product in Mississippi.

**PEAR**

(For use only in California, Oregon and Washington)

**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.

**Postharvest Application**

Mix the specified dosage in 100 to 400 gpa of spray and apply using an airblast speed sprayer or other suitable ground equipment.

Target Pest	Lorsban 75WG (lb/acre)
codling moth	2.67

**Specific Use Restrictions:**

- Do not make more than one postharvest application (prior to dormancy) per year.
- Maximum single application rate is 2 lb ai chlorpyrifos (2.67 lb of Lorsban 75WG) per acre.
- Do not apply more than a total of 2 lb ai chlorpyrifos (2.67 lb of Lorsban 75WG) per acre per year.
- Do not harvest or use treated fruit for food or feed.
- Do not allow meat or dairy animals to graze in treated orchards.
- If unauthorized entry into a treated orchard cannot be prevented, then the orchard must be posted with appropriate signs according to the Worker Protection Standard while treated, unharvested fruit remains on the tree.

**PEPPERMINT AND SPEARMINT**

(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.

Apply as a broadcast foliar spray using a total spray volume of 10 gpa or more using ground equipment.

**Chemigation:** Lorsban 75WG may be applied through sprinkler irrigation systems at specified broadcast application rates to control listed foliar pests. See Chemigation Application section.

Target Pests	Lorsban 75WG (lb/acre)
cutworm (1)	1.33 - 2.67
garden symphylans (2)	2.67
mint root borer (3)	

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

**Pest-Specific Use Directions:**

1. **Cutworms:** Apply during May and June when field counts indicate damaging insect populations are developing or present. When larvae are less than 3/4 inch in length, use the 1.33 lb rate; otherwise, use a higher rate in the rate range.
2. **Garden symphylans:** Apply preplant to the soil surface. On the same day of treatment, incorporate the insecticide into the top 2 to 4 inches of soil using a disc, field cultivator, or equivalent equipment.
3. **Mint borer:** Apply postharvest when field counts indicate damaging insect populations are developing or present. If ground applied, follow with approximately 1 acre inch of sprinkler irrigation immediately after application to incorporate the insecticide into the soil or apply by chemigation.

**Specific Use Restrictions:**

- **Preharvest Interval:** Do not apply within 90 days before harvest.
- Do not make more than 1 application of Lorsban 75WG or other product containing chlorpyrifos during the growing season.
- Do not make more than one preplant incorporated application in the spring.
- Do not make more than 1 postharvest application of Lorsban 75WG or other product containing chlorpyrifos per season.
- Maximum single application rate is 2 lb ai chlorpyrifos (2.67 lb of Lorsban 75WG) per acre.
- Do not apply more than a total of 2 lb ai chlorpyrifos (2.67 lb of Lorsban 75WG) per acre per year.
- Do not use in conjunction with a broadcast foliar application of Lorsban 75WG for cutworm control.

**SORGHUM - GRAIN SORGHUM (MILO)**

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

Apply as a postemergence broadcast spray using sufficient spray volume to ensure thorough coverage of treated plants, but no less than 15 gpa for ground spray equipment or 2 to 5 gpa for aircraft equipment. Control may be reduced at low spray volumes under high temperature and wind conditions.

**Chemigation:** Lorsban 75WG may be applied through sprinkler irrigation systems at specified broadcast application rates to control listed foliar pests. See Chemigation Application section.

Target Pests	Lorsban 75WG (lb/acre)
sorghum midge (1)	0.33
grasshoppers yellow sugar cane aphid and other aphids	0.33 - 0.67
greenbug (2)	0.33 - 1.33
webworms	0.67
armyworms chinch bugs (3) cutworms lesser cornstalk borer (3)	0.67 - 1.33
European and southwestern corn borer	1 - 1.33
corn earworm	1.33

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

**Pest-Specific Use Directions:**

1. **Sorghum midge:** Apply when 30% to 50% of the seed heads are in bloom.
2. **Greenbug:** Use a higher rate in the rate range when pest populations are high.
3. **Chinch bugs and lesser cornstalk borer:** Apply as a directed spray toward the base of the plant using power-operated ground spray equipment with sufficient water to ensure coverage of an 8- to 12-inch band centered in the row. For plants less than 6 inches high, apply an 8- to 12-inch band centered over the row. Do not reduce the dosage for banded or directed applications. Concentrate the full labeled dosage rate in the treated zone.

**Specific Use Precautions:**

- To minimize the potential for chemical injury, do not apply Lorsban 75WG to drought stressed grain sorghum within 3 days following irrigation or rain except where the product is applied in irrigation water.
- Be aware that sorghum lines used in seed production fields may be more susceptible to chemical injury. Susceptible inbred lines or hybrids are likely to be at greater risk of yield-reducing chemical injury when treated at the higher application rates. Do not apply more than 0.67 lb of Lorsban 75WG per acre to seed sorghum if the additional risk of crop injury is unacceptable.

**Specific Use Restrictions:**

- **Preharvest Interval:** Do not harvest for grain, forage, fodder, hay, or silage within 30 days after application of 0.67 lb of Lorsban 75WG per acre or within 60 days after application of rates above 0.67 lb per acre.
- Do not make more than 3 applications of Lorsban 75WG or other products containing chlorpyrifos per use season.
- Maximum single application rate is 1 lb ai chlorpyrifos (1.33 lb of Lorsban 75WG) per acre.
- Do not apply more than a total of 1.5 lb ai chlorpyrifos (2 lb of Lorsban 75WG) per acre per season.
- Do not make a second application of Lorsban 75WG or other product containing chlorpyrifos within 10 days of the first application.
- Do not treat sweet varieties of sorghum.
- Do not aerially apply this product in Mississippi.

## SOUR CHERRY AND TREE NUTS<sup>1</sup> (Foliar Sprays)

**Worker Restricted Entry Interval:** Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 4 days for sour cherry and 24 hours for tree nuts unless PPE required for early entry is worn.

<sup>1</sup>Almond, filbert, pecan, walnut

Apply Lorsban 75WG as a foliar spray at the dosages indicated to control pests listed in the following table. Mix the required dosage in sufficient water to ensure thorough and complete coverage of the foliage and crop and apply as a concentrate or dilute spray using conventional, power-operated spray equipment. For dilute sprays applied to tree nut crops, mix the required dosage in sufficient water to allow for spray to runoff. For concentrate sprays, apply an equivalent amount of Lorsban 75WG per acre. Treat when pests appear or in accordance with local conditions. Aerial application may result in less effective insect control because of reduced coverage. Consult your State agricultural experiment station, certified pest control advisor, or extension service specialist for specific use information in your area.

Crop	Target Pests	Lorsban 75WG (lb/acre)
almond	leaf footed plant bug	peach twig borer San Jose scale
	navel orangeworm	
filbert	eye-spotted bud moth	obliquebanded leafroller omnivorous leaftier winter moth
	filbert aphid	
	filbert leafroller	
	filbert worm	
pecan	blackmargined aphid (1) spittlebugs (2)	yellow pecan aphid (1) 0.67 - 2.67
	fall webworm	pecan nut casebearer 1 - 2.67
	black pecan aphid hickory shuckworm (3) <i>Phylloxera</i> spp.(4)	pecan leaf scorch mite (suppression) (5) 1.33 - 2.67
sour cherry	borers including American plum lesser peachtree Pacific flatheaded peach twig peachtree shothole climbing cutworm eyespotted bud moth green fruitworm	leafrollers including fruittree obliquebanded pandemis redbanded lesser appleworm mineola moth scales including European fruit lecanium San Jose stink bug tarnished plant bug 1.33 - 2
	black cherry aphid cherry fruit fly	plum curculio rose chafer 2
walnut	codling moth walnut husk fly	walnut scale 2.67

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

### Pest-Specific Use Directions:

- Yellow pecan aphid** and **blackmargined aphid**: For control, apply in tank mix combination with the specified rate of a pyrethroid insecticide labeled for control or suppression of these aphids.
- Spittlebug**: For control, use a dosage of 1.33 to 2.67 lb per acre for concentrate sprays.
- Hickory shuckworm**: For best results, make two applications, 10 to 14 days apart.
- Phylloxera* spp.**: For best control, make two applications at a 10-day interval using a minimum of 0.67 lb of Lorsban 75WG per acre starting at bud swell.
- Pecan leaf scorch mite**: For suppression, use a preventative program.

### Specific Use Precautions:

- Lorsban 75WG is highly toxic to bees exposed to direct treatment and should not be applied when bees are foraging in the treated area.
- To avoid contamination of irrigation tail waters, do not flood irrigate within 24 hours of application of Lorsban 75WG.

### Specific Use Restrictions:

- Preharvest Interval:** Do not apply within 14 days before harvest of almonds, filberts, sour cherry and walnuts, or within 28 days before harvest of pecans.
- Do not make more than three applications of Lorsban 75WG or other product containing chlorpyrifos per season to almonds, filberts and pecans, no more than eight applications per season on sour cherries, and no more than two applications per season on walnuts.
- Maximum single application rate is 4 lb ai chlorpyrifos (5.33 lb of Lorsban 75WG) per acre for almond, filbert and pecan, 1.5 lb ai chlorpyrifos (2 lb of Lorsban 75WG) per acre for sour cherry, and 6 lb ai chlorpyrifos (8 lb of Lorsban 75WG) per acre for walnut.
- Do not apply more than a total of 12 lb ai chlorpyrifos (16 lb of Lorsban 75WG) per acre per season as a foliar spray.
- Do not make a second application of Lorsban 75WG or other product containing chlorpyrifos within 10 days of the first application.
- Do not allow meat or dairy animals to graze in treated orchards.
- Do not use on almond, filbert or walnut in Mississippi.
- Do not aerially apply this product in Mississippi.

**SOYBEAN**  
(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.

**Soil Application**

Apply as a broadcast treatment to soil surface in a minimum spray volume of 10 gpa 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 listed row spacing are given in the table below. 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.

Target Pests	At-Plant Treatment (Broadcast, T-band or band) (lb/acre)	Postemergence Rescue Treatment (band only) (lb/acre)
cutworms	0.67 – 1.33	0.67 – 1.33
lesser cornstalk borer		

Fluid Ounces of Spray Required Per 100 Feet or Row for Listed Row Spacings and Spray Volumes						
Volume of Spray Per Acre	40"	38"	36"	30"	20"	15"
10 gallons	9.80	9.31	8.82	7.35	4.90	3.67
15 gallons	14.70	13.97	13.2	11.8	7.35	5.51
20 gallons	19.60	18.62	17.6	15.7	9.80	7.34

**Foliar Application**

Apply as a postemergence broadcast spray using sufficient spray volume to ensure thorough coverage of treated plants, but no less than 15 gpa for ground spray equipment or 2 to 5 gpa for aircraft equipment. Apply when field counts indicate damaging pest populations are developing or present. Lorsban 75WG may be tank mixed with glyphosate products such as Duramax or Durango DMA when application is to be made to glyphosate-tolerant soybeans. Use a higher rate in the rate range when there is increased pest pressure.

**Chemigation:** Lorsban 75WG may be applied through sprinkler irrigation systems at specified broadcast application rates to control listed foliar pests. See Chemigation Application section.

Target Pests	Lorsban 75WG (lb/acre)
grasshoppers green cloverworm spider mites (1) velvetbean caterpillar	0.33 - 0.67
armyworms bean leaf beetle corn earworm cutworms Mexican bean beetle potato leafhopper saltmarsh caterpillar and other woolly bears soybean aphid thistle caterpillar (painted lady butterfly)	0.67 - 1.33
European corn borer southern green stinkbug	1.33

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 Precaution:**

- On determinate soybeans, do not make more than 1 application after pod set.

**Specific Use Restrictions:**

- **Preharvest Interval:** Do not apply within 28 days before harvest.
- Do not make more than 3 applications of Lorsban 75WG or other product containing chlorpyrifos per year.
- Maximum single application rate is 1 lb ai chlorpyrifos (1.33 lb of Lorsban 75WG) per acre.
- Do not apply more than 3 lb ai chlorpyrifos (4 lb of Lorsban 75WG) per acre per season.
- Do not make a second application of Lorsban 75WG or other product containing chlorpyrifos within 14 days of the first application.
- Do not allow meat or dairy animals to graze in treated areas or otherwise feed treated soybean forage, hay, and straw to meat or dairy animals.

**STRAWBERRY**  
(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.

**Preplant Incorporation Application**

Apply Lorsban 75WG 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	Lorsban 75WG (lb/acre)
garden symphylans grubs	2.67

**Foliar Application**

Apply as a broadcast foliar spray when buds first appear and repeat application 10 to 14 days later. Use a minimum spray volume of 40 gpa .

Target Pests	Lorsban 75WG (lb/acre)
strawberry bud weevil	1.33

**Postharvest Application**

Apply as a directed spray to crown of strawberry plants immediately after harvest and after plants are topped. Repeat application, if required, 14 to 18 days later. Use a minimum spray volume of 100 gpa.

Target Pest	Lorsban 75WG (lb/acre)
strawberry crown moth	1.33

**Specific Use Precautions:**

- Do not tank mix Lorsban 75WG 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 Lorsban 75WG is applied to strawberries under conditions of high temperature and drought stress.

**Specific Use Restrictions:**

- **Preharvest Interval:** Do not apply within 21 days before harvest.
- **Preplant Application:** Do not make more than 1 application of Lorsban 75WG or other products containing chlorpyrifos per year.
- **Foliar and Postharvest Application:** Do not make more than 2 applications of Lorsban 75WG or other products containing chlorpyrifos per year.
- **Postharvest Application:** Do not sprinkle irrigate for one week following application.
- Maximum single application rate is 2 lb ai chlorpyrifos (2.67 lb of Lorsban 75WG) per acre for preplant incorporation and 1 lb ai chlorpyrifos (1.33 lb of Lorsban 75WG) per acre for foliar and postharvest application.
- Do not apply more than a total of 2 lb ai chlorpyrifos (2.67 lb of Lorsban 75WG) per acre per year for preplant incorporation, foliar and postharvest applications.
- Do not make a second application of Lorsban 75WG or other product containing chlorpyrifos within 10 days of the first foliar application or within 14 days of postharvest application.
- **For pre-bloom use only.** Do not apply after berries start to form or when berries are present.

**SUGARBEET**  
(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.

**Soil Application (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 1.33 lb of Lorsban 75WG per planted acre to a 5- to 7-inch wide band centered over the row for furrows 30 inches apart. For other row widths, adjust the spray volume per planted acre in proportion to the length of row actually treated.

**Postemergence Application**

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:** Apply the specified dosage in water using a minimum of 10 gpa of finished spray when using ground spray equipment or 2 to 5 gpa when using aerial spray equipment. **Chemigation:** Lorsban 75WG may be applied through sprinkler irrigation systems at specified broadcast application rates to control listed foliar pests. See Chemigation Application section.

**Banded Foliar Spray:** Apply the specified dosage within the band using a minimum of 6 1/2 gpa 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, lightly incorporate band-applied treatments, either mechanically or with irrigation.



Target Pests	Lorsban 75WG	
	Broadcast (lb/acre)	Band (lb/acre)
grasshoppers (1)	0.33 - 0.67	--
leafminers	0.67	0.45
spider mites		
tarnished plant bug (Lygus)	0.67	--
aphids	0.67 - 1.33	0.45 - 0.89
fall armyworm		
webworms		
yellowstriped armyworm		
beet armyworm	1 - 1.33	0.67 - 0.89
cutworms	1.33	0.89
flea beetle adults		
sugarbeet root maggot adults (2) (5)	0.33 - 0.67	--
sugarbeet root maggot larvae (3) (5)	--	0.89 - 1.33
sugarbeet root maggot larvae (4) (5)	1.33	0.45 - 0.89

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

#### Pest-Specific Use Directions:

- Grasshoppers:** The low rate will control small nymphs (1st through 3rd instar).
- Sugarbeet root maggot adults:** Apply anytime 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.
- Sugarbeet root maggot larvae:** Use as **primary treatment** to control root maggot larvae. Base application timing upon local field trap monitoring. Apply anytime from 7 days before until 3 days after peak adult emergence.
- Sugarbeet root maggot larvae:** Use as a **supplemental postemergence treatment** following an at-plant insecticide application for control of root maggot larvae. Base application timing on local field trap monitoring. Apply anytime from 7 days before until 3 days after peak adult emergence.
- Sugarbeet root maggot:** To prevent the potential development of insecticide resistance, producers are encouraged to take the following steps: (1) avoid making more than 2 applications of Lorsban 75WG per season when adults are active; (2) if an organophosphate insecticide was applied at planting, make no more than 1 postemergence application of Lorsban 75WG when adults are active.

#### Specific Use Restrictions:

- **Preharvest Interval:** Do not apply within 30 days before harvest of beet roots and tops.
- Do not make more than 3 applications of Lorsban 75WG or other products containing chlorpyrifos per season.
- Maximum single application rate is 1 lb ai chlorpyrifos (1.33 lb of Lorsban 75WG) per acre.
- Do not apply more than 3 lb ai chlorpyrifos (4 lb of Lorsban 75WG) per acre per season.
- Do not make a second application of Lorsban 75WG or any product containing chlorpyrifos within 10 days of the first application.
- 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 Lorsban 75WG with Quadris or Headline with any EC formulation or any tank mix containing an oil adjuvant.

### SUNFLOWER (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.

#### Preplant Incorporation Application

Broadcast apply to soil surface in a minimum spray volume of 10 gpa using suitable ground spray equipment. On the same day of treatment, incorporate the insecticide into the top 2 to 4 inches of soil using a disc, field cultivator, or equivalent equipment. Use a higher rate in the rate range when there is increased pest pressure.

Target Pests	Lorsban 75WG (lb/acre)
cutworms	1.33 - 2.67

#### Postemergence Broadcast Application

Apply as a postemergence broadcast spray using sufficient spray volume to ensure thorough coverage of treated plants, but no less than 15 gpa for ground spray equipment or 2 to 5 gpa for aircraft equipment. Use a higher rate in the rate range when there is increased pest pressure.

Target Pests	Lorsban 75WG (lb/acre)
grasshoppers	0.67
banded sunflower moth	0.67 - 1
sunflower beetle larvae and adults (1)	
stem weevil (2)	
sunflower moth (3)	
seed weevil (4)	
woolly bears	
cutworms	1.33
tarnished plant bug (Lygus) (5)	0.67 - 1.33

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

**Pest-Specific Use Directions:**

1. **Sunflower beetle:** For control of larvae or adults, treat when field counts indicate 10 larvae or 1 to 2 adults per seedling.
2. **Stem weevil:** Optimal treatment time is within 5 to 7 days after adult weevils begin to appear.
3. **Sunflower moth:** To control, make first application during early 1% to 5% bloom stage.
4. **Seed weevil:** To control, apply when field counts indicate 10 to 12 adults per plant for oil crop varieties and 1 to 3 adults per plant on confectionery crop varieties.
5. **Tarnished plant bug (*Lygus*):** Use a higher rate in the rate range where populations are heavy. Apply at the onset of pollen spread or approximately 10% bloom (R-5 growth stage). For best protection, make a second application 10 days later. Use sufficient water to ensure thorough coverage of treated plants.

**Specific Use Restrictions:**

- **Preharvest Interval:** Do not apply within 42 days before harvest.
- Do not make more than a total of 3 applications of Lorsban 75WG or other products containing chlorpyrifos per season.
- Maximum single application rate is 2 lb ai chlorpyrifos (2.67 lb of Lorsban 75WG) per acre for preplant incorporation and 1.5 lb ai chlorpyrifos (2 lb of Lorsban 75WG) per acre for postemergence broadcast application.
- Do not apply more than 3 lb ai chlorpyrifos (4 lb of Lorsban 75WG) per acre per season.
- Do not make a second application of Lorsban 75WG or other product containing chlorpyrifos within 10 days of the first application.
- Do not allow meat or dairy animals to graze in treated areas.

**SWEET POTATO**

**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 the soil surface as a preplant broadcast spray to reduce the feeding damage caused by listed pests. Use a spray volume of 10 gpa or more. Incorporate immediately after application to a depth of 4 to 6 inches using a rotary hoe, disc cultivator, or other suitable incorporation equipment. Plant sweet potatoes in the usual manner no more than 14 days after treatment. Delaying planting more than 14 days after application will reduce the time interval of protection against feeding damage.

Target Pests	Lorsban 75WG (lb/acre)
<i>Conoderus</i> wireworm	2.67
<i>Systema</i> flea beetle	
sweet potato flea beetle	

**Specific Use Precaution:**

- Lorsban 75WG will not control false wireworms, white fringe beetle or other grubs that attack sweet potatoes.

**Specific Use Restrictions:**

- **Preharvest Interval:** Do not apply within 125 days before of harvest.
- Do not make more than 1 application of Lorsban 75WG or other products containing chlorpyrifos per season.
- Maximum single application rate is 2 lb ai chlorpyrifos (2.67 lb of Lorsban 75WG) per acre.
- Do not apply more than a total of 2 lb ai chlorpyrifos (2.67 lb of Lorsban 75WG) per acre per year.
- Do not aerially apply this product in Mississippi.

**TOBACCO**

**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 gpa or more. Incorporate immediately after application to a depth of 2 to 4 inches using suitable incorporation equipment.

Before broadcast application of Lorsban 75WG onto existing beds, knock down beds to final shape for transplanting. Use of PTO-driven implements that will incorporate Lorsban 75WG to a depth of 4 inches.

Target Pests	Lorsban 75WG (lb/acre)
cutworms	2.67
flea beetle	
mole crickets	
root maggots	
wireworms	

To control the above listed pests and suppress populations of rootknot nematodes in all tobacco growing regions, use Lorsban 75WG in a tank mix with Nematicur 3 at the rate of 2.67 lb of Lorsban 75WG plus 4 quarts of Nematicur 3 per acre. Read and carefully follow all applicable directions, restrictions, and precautions on labeling for Nematicur 3 used in combination with Lorsban 75WG. Apply the specified rate(s) to the soil surface in a spray volume of 10 gpa 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 there are high populations of *M. incognita*, apply Telone® II soil fumigant at the specified label rate.

**Specific Use Restriction:**

- Do not make more than 1 application of Lorsban 75WG or other product containing chlorpyrifos per season.
- Maximum single application rate is 1 lb ai chlorpyrifos (1.33 lb of Lorsban 75WG) per acre.
- Do not apply more than a total of 1 lb ai chlorpyrifos (1.33 lb of Lorsban 75WG) per acre per year.
- Do not aerially apply this product in Mississippi.

**TREE FRUITS,<sup>1</sup> ALMOND, AND WALNUT (DORMANT/DELAYED DORMANT SPRAYS)**  
**(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 4 days for tree fruits and 24 hours for almonds and walnut unless PPE required for early entry is worn.

<sup>1</sup>Apple, cherry, nectarine, peach, pear, plum, prune

Apply as a dormant or delayed dormant spray. While Lorsban 75WG may be used without oil, for best results, use oil 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 gpa), use sufficient spray volume to completely wet tree foliage, but not to point of runoff. For concentrate sprays (less than 200 gpa), uniformly apply an equivalent amount of Lorsban 75WG per acre.

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

**Use Precautions for Tree Fruits, Almond and Walnut:**

- Cold or dry conditions may cause Lorsban 75WG 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 Lorsban 75WG.

**Use Restrictions for Tree Fruits, Almond and Walnut:**

- Do not make more than 1 application of Lorsban 75WG or other product containing chlorpyrifos during the dormant season.
- For apple, do not make more than one application of Lorsban 75WG to the apple tree trunk per year as either a prebloom or post-bloom application.
- Maximum single application rate is 2 lb ai chlorpyrifos (2.67 lb of Lorsban 75WG) per acre.
- Do not use more than a total of 2 lb ai chlorpyrifos (2.67 lb of Lorsban 75WG) per acre per season as a dormant/delayed-dormant application.
- Do not allow meat or dairy animals to graze in treated orchards.

**Almond, Cherry, Nectarine, Peach, Pear, Plum, Prune, Walnut**

Target Pests	Lorsban 75WG (lb/acre)
American plum borer	2 – 2.67
brown almond mite	
climbing cutworms	
European red mite	
greater peach tree borer	
mealy plum aphid	
peach twig borer	
pear psylla adults	
San Jose scale	

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

**Specific Use Precautions for Almond, Cherry, Nectarine, Peach, Pear, Plum, Prune, Walnut:**

- Avoid contact with foliage in sweet cherries as premature leaf drop may result.

**Specific Use Restrictions for Almond, Cherry, Nectarine, Peach, Pear, Plum, Prune, Walnut:**

- Do not make a soil or foliar application of Lorsban 75WG or other products containing chlorpyrifos within 10 days of a dormant/delayed dormant application of chlorpyrifos to the orchard.

**Additional Restrictions Specific to California for Almond, Cherry, Nectarine, Peach, Pear, Plum, Prune, Walnut:**

- Do not use more than 1% dormant oil and/or penetrating surfactants in almond orchards less than 4 years old.
- Use a minimum of 100 gpa of total spray volume.
- Use up to 2% supreme oil with no more than 4 gpa on almonds.
- Use up to 2% supreme oil with no more than 6gpa on peaches and nectarines.
- Refer to the University of California pest management guide for pears, plums, and prunes.
- In orchards with high overwintering populations of European red mite or brown almond mite use higher spray volumes that allow for the use of higher per acre rates of oil.
- Do not use any adjuvants or surfactants in addition to, or as a substitute for, a petroleum spray oil in a tank mix with Lorsban 75WG.
- Do not apply on almonds in the following counties in California: Butte, Colusa, Glenn, Solano, Sutter, Tehama, Yolo, and Yuba.

**Apple**

Target Pests	Lorsban 75WG (lb/acre)
climbing cutworms	2 – 2.67
<i>Lygus</i>	
obliquebanded leafroller	
pandemis leafroller	
rosy apple aphid	
San Jose scale	

**Specific Use Restrictions for Apple:**

- Only one application of any chlorpyrifos containing product can be made per year. The application can be either a pre-bloom dormant/delayed dormant spray to the canopy or the trunk, or a post-bloom application to the lower 4 feet of the trunk (for post-bloom application instructions and restrictions on apple, refer to Apple Tree Trunk section of the label).

**Additional Restrictions Specific to California for Apple:**

- Use a minimum of 100 gpa of total spray volume.
- Refer to the University of California pest management guide for apples.
- In orchards with high overwintering populations of European red mite or brown almond mite, use higher spray volumes that allow for the use of higher per acre rates of oil.
- Do not use any adjuvants or surfactants in addition to, or as a substitute for, a petroleum spray oil in a tank mix with Lorsban 75WG.

**TREE FRUITS<sup>1</sup> AND ALMOND (TRUNK SPRAY AND/OR PREPLANT DIP)  
(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 4 days for tree fruits and 24 hours for almonds unless PPE required for early entry is worn.

<sup>1</sup>Cherry, nectarine, peach, plum

Apply Lorsban 75WG 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. Unless otherwise specified, a second application may be made after 2 weeks and a third application may be made after harvest. Avoid spray contact with foliage in sweet cherries as premature leaf drop may result. Consult your state agricultural experiment station or extension service specialist for proper application timing for your area.

Crop	Target Pests	Lorsban 75WG (lb/100 gal)
cherry	American plum borer greater peach tree borer lesser peach tree borer	2 - 4
almond nectarine peach plum	peach tree borers (1) (2)	4

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

**Pest-Specific Use Directions:**

1. **Preplant Dip Application (Peaches and Nectarines Only).** For preplant control of **peachtree borer**, use Lorsban 75WG at the equivalent application rate of 4 lb per 100 gallons of water. Dip trees several inches above the grafting bud scar and plant immediately, or allow them to dry before returning to storage. Do not allow peach trees to remain in contact with the dip solution.
2. **Peach tree borer:** For control 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 before harvest of almonds, nectarines, peaches and plums or within 21 days before harvest of cherries.
- Do not make more than 1 chlorpyrifos application per year in almonds, nectarines, peaches and plums and no more than 3 chlorpyrifos applications per year in cherries.
- Do not allow meat or dairy animals to graze in treated orchards.

**TREE NUT<sup>1</sup> ORCHARD FLOORS  
(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.

<sup>1</sup>Almond, pecan, walnut

Apply as a ground broadcast spray directed to the orchard floor using ground application equipment that will apply the spray uniformly. Do not allow spray to contact foliage or fruit. Treat when ant activity (excluding fire, harvester, carpenter, and pharaoh ants) becomes evident in the orchard. Since worker ants (excluding fire, harvester, carpenter, and pharaoh 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.

**Chemigation:** Lorsban 75WG may be applied to almond, pecan and walnut orchard floors through sprinkler irrigation systems only if the system uniformly covers the soil surface at the base of the tree. Use specified broadcast application rates to control listed pests. See Chemigation Application section.

Orchard Floor	Target Pests	Lorsban 75WG (lb/acre)
pecan	Ants (1)	2.67
almond		5.33
walnut		

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

**Pest-Specific Use Directions:**

1. Excludes ants of significant public health importance, such as fire ants, harvester ants, carpenter ants, and pharaoh ants.

Eliminate weed growth that would prevent uniform coverage of the orchard floor by mowing or herbicide treatment. Foliar applications of Lorsban 75WG may be made in addition to the orchard floor treatment.

**Specific Use Precaution:**

- To avoid contamination of irrigation tail waters, do not flood irrigate within 24 hours of application of Lorsban 75WG.

**Specific Use Restrictions:**

- **Preharvest Interval:** Do not apply within 14 days before of harvest.
- Do not make more than 2 applications of Lorsban 75WG or other products containing chlorpyrifos per season to the orchard floor. If the 5.33 lb per acre rate is used, a second application is not allowed.
- Maximum single application rate is 2 lb ai chlorpyrifos (2.67 lb of Lorsban 75WG) per acre to the orchard floor.
- Do not apply more than a total of 4 lb ai chlorpyrifos (5.33 lb of Lorsban 75WG) per acre per season to the orchard floors.
- Do not make a second application of Lorsban 75WG or other product containing chlorpyrifos within 10 days of the first application.
- Do not allow meat or dairy animals to graze in treated orchards.

**WHEAT**

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

**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**

Apply using aerial (fixed wing or helicopter) or power-operated ground spray equipment. Mix the required dosage with water and apply in a minimum of 2 to 5 gpa finished spray volume for aerial equipment or 15 gpa for ground spray equipment. Apply when field counts indicate damaging pest populations are developing or present.

**Chemigation:** Lorsban 75WG may be applied through sprinkler irrigation systems at specified broadcast application rates to control listed foliar pests. See Chemigation Application section.

Target Pests	Lorsban 75WG (lb/acre)
aphids, such as (1) English grain aphid greenbug Russian wheat aphid brown wheat mite grasshoppers	0.33 – 0.67
army cutworms (2) armyworms (3) cereal leaf beetle (4) cutworms (suppression) (2) wheat midge (5)	0.67

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.
3. Expect suppression under conditions of heavy pest populations or large worms.
4. Target application when eggs are near hatching and larvae is emerging as monitored by plant inspection.
5. **Wheat midge:** For control, treat when 75% of the wheat heads have emerged from the boot and when midge adults are found in the crop (1 midge per 4 to 5 heads). If possible, apply in the late afternoon or early evening when temperatures exceed 50°F and wind speed is less than 7 mph.

**Specific Use Restrictions:**

- **Preharvest Interval:** Do not apply within 14 days before harvest for forage and hay or within 28 days before harvest for grain and straw.
- Do not make more than two applications of Lorsban 75WG or other product containing chlorpyrifos per season.
- Maximum single application rate is 0.5 lb ai chlorpyrifos (0.67 lb of Lorsban 75WG) per acre.
- Do not apply more than a total of 1 lb ai chlorpyrifos (1.33 lb of Lorsban 75WG) per acre per year.
- 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.

**STORAGE AND DISPOSAL**

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

**Pesticide Storage:** Store in original container in secured dry storage area. Prevent cross-contamination with other pesticides and fertilizers. Avoid storing above 122°F for extended periods of time. If container is damaged or spill occurs, use product immediately or dispose of product and damaged container as indicated below. Packets may become brittle when stored below 32°F. Handle carefully to avoid breakage.

**Pesticide Disposal:** Waste resulting from the use of this product (that cannot be used according to label instructions) may be disposed of on site or at an approved waste disposal facility.

**Container Handling:** Nonrefillable container. Do not reuse or refill this container. Offer for recycling if available.

**FOR 24-HOUR EMERGENCY ASSISTANCE (SPILL, LEAK, OR FIRE), CALL CHEMTREC® (800) 424-9300.  
For other product information, contact Gowan Company or see Material Safety Data Sheet.**

**NOTICE OF CONDITIONS OF SALE AND WARRANTY AND LIABILITY LIMITATIONS**

Important: Read the entire Directions for Use and Notice of Conditions of Sale and Warranty and Liability Limitations before using this product. If terms are not acceptable return the unopened container for a full refund.

Our directions for use of this product are based on tests believed to be reliable. However, it is impossible to eliminate all risk associated with the use of this product. Crop injury, inadequate performance, or other unintended consequences may result due to soil or weather conditions, off target movement, presence of other materials, method of use or application, and other factors, all of which are beyond the control of Gowan Company. All such risks shall be assumed by the Buyer and User.

Gowan Company warrants that this product conforms to the specifications on the label and is reasonably fit for the intended purpose referred to on the label when used in strict conformance with Direction for Use, subject to the above stated risk limitations. GOWAN COMPANY MAKES NO OTHER EXPRESS OR IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE NOR ANY OTHER EXPRESS OR IMPLIED WARRANTY.

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