# 7/20/2010



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



OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION

July 20, 2010

Kenneth D. Racke Dow AgroSciences 9330 Zionsville Road Indianapolis, IN 46268

Dear Dr. Racke:

Subject:

Amended label

Lorsban® 75WG

EPA Registration No. 62719-301 Your submission dated July 1, 2010

The labeling referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act, is acceptable. A stamped copy of the label is enclosed for your records.

Please be reminded that 40 CFR Part 156.140(a)(4) requires that a batch code, lot number, or other code identifying the batch of the pesticide distributed and sold be placed on non-refillable containers. The code may appear either on the label or durably marked on the container itself. This information can be added by non-notification per PR Notice 98-10.

Please submit two copies of your final printed labeling before you release the product for shipment. Your release for shipment of the product constitutes acceptance of these conditions. If these conditions are not complied with, the registration will be subject to cancellation in accordance with FiFRA section 6(e). If you have any questions, please contact Julie Chao by phone at: (703) 308-8735, or by email at: chao.julie@epa.gov.

Regards,

Venus Eagle, Product Manger (01) Insecticide-Rodenticide Branch Registration Division (7505P)

Venus Eage

Enclosure

(Box label):

## Lorsban® 75WG

Insecticide

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

The contents of this package are not for individual resale. This product is not for residential use.

Group 1B INSECTICID	
Active Ingredient: chlorpyrifos: O,O-diethyl O-(3,5,6-trichloro- 2 pyridinyl) phosphorothioate	JUL 20 2010 Under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, for the pesticide registered under:
Total	EPA. Reg. No: 62719-301

## Keep Out of Reach of Children WARNING AV

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.)

**AVISO** 

#### 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 no 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. You may also contact 1-800-992-5994 for emergency medical treatment information.

## **Precautionary Statements**

#### Hazards to Humans and Domestic Animals

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.

## 30F51

## 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, R, 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 disposing of equipment washwaters or rinsate. This product is highly toxic to bees exposed to direct treatment or residues on blooming crops or weeds. Do not apply this product or allow it to drift to blooming crops or weeds if bees are visiting the treatment area.

## Storage and Disposal

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

**Pesticide Storage:** Store in original container in secured dry storage area. Prevent cross-contamination with other pesticides and fertilizers. 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:** Wastes resulting from the use of this product must be disposed of on site or at an approved waste disposal facility.

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

#### Refer to label booklet for Directions for Use.

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

In case of emergency endangering health or the environment involving this product, call 1-800-992-5994.

Agricultural Chemical: Do not ship or store with food, feeds, drugs or clothing.

EPA Reg. No. 62719-301

EPA Est.

Trademark of Dow AgroSciences LLC
Produced for
Dow AgroSciences LLC
9330 Zionsville Road
Indianapolis, IN 46268

Net Weight 4 X 5 X 1.33 lb

(Overpack label):

## Lorsban® 75WG

#### Insecticide

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

The contents of this package are not for individual resale. This product is not for residential use.

Group	1B	INSECTICIDE
Active Ingredient:		
chlorpyrifos: C	O,O-diethyl O-(3,5,6-trichlo	ro-
2 pyridinyl	) phosphorothioate	75%
Other Ingredients	· · · · · · · · · · · · · · · · · · ·	25%
Total	•••••	100%

## Keep Out of Reach of Children

## WARNING AVISO

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

#### First Aid

#### **Organophosphate**

**If swallowed:** 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 no 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. You may also contact 1-800-992-5994 for emergency medical treatment information.

## **Precautionary Statements**

### Hazards to Humans and Domestic Animals

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.

## 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, R, 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 disposing of equipment washwaters or rinsate. This product is highly toxic to bees exposed to direct treatment or residues on blooming crops or weeds. Do not apply this product or allow it to drift to blooming crops or weeds if bees are visiting the treatment area.

## **Agricultural Use Requirements**

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR Part 170. Refer to label booklet under "Agricultural Use Requirements" in the Directions for Use section for information about this standard.

### Storage and Disposal

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

**Pesticide Storage:** Store in original container in secured dry storage area. Prevent cross-contamination with other pesticides and fertilizers. 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:** Wastes resulting from the use of this product must be disposed of on site or at an approved waste disposal facility.

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

#### Refer to label booklet for Directions for Use.

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

In case of emergency endangering health or the environment involving this product, call 1-800-992-5994.

Agricultural Chemical: Do not ship or store with food, feeds, drugs or clothing.

EPA Reg. No. 62719-301

FF	Δ	Est.	
	$\overline{}$	L. 31.	

Trademark of Dow AgroSciences LLC
Produced for
Dow AgroSciences LLC
9330 Zionsville Road
Indianapolis, IN 46268

Net Weight 5 X 1.33 lb water soluble packets

(Bulk base label):

## Lorsban® 75WG

#### Insecticide

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

Group	1B	INSECTICIDE
	D,O-diethyl O-(3,5,6-trichlo	
2 pyridiny	I) phosphorothioate	75%
Other Ingredients		25%

### Keep Out of Reach of Children

## WARNING

## **AVISO**

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

#### First Aid

#### Organophosphate

If swallowed: 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 no 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. You may also contact 1-800-992-5994 for emergency medical treatment information.

#### **Precautionary Statements**

#### Hazards to Humans and Domestic Animals

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.

#### 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, R, 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 disposing of equipment washwaters or rinsate. This product is highly toxic to bees exposed to direct treatment or residues on blooming crops or weeds. Do not apply this product or allow it to drift to blooming crops or weeds if bees are visiting the treatment area.

## **Agricultural Use Requirements**

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR Part 170. Refer to label booklet under "Agricultural Use Requirements" in the Directions for Use section for information about this standard.

## (Storage and Disposal for refillable rigid containers greater than 5 gal)

## Storage and Disposal

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

**Pesticide Storage:** Store in original container in secured dry storage area. Prevent cross-contamination with other pesticides and fertilizers. 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:** Wastes resulting from the use of this product must be disposed of on site or at an approved waste disposal facility.

**Container Handling:** Refillable container. Refill this container with pesticide only. Do not reuse this container for any other purpose.

Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To clean the container before final disposal, empty the remaining contents from this container into application equipment or a mix tank. Fill the container about 10% full with water and, if possible, spray all sides while adding water. If practical, agitate vigorously or recirculate water with the pump for two minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times.

## (Storage and Disposal for nonrefillable rigid containers larger than 5 gal)

## Storage and Disposal

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

**Pesticide Storage:** Store in original container in secured dry storage area. Prevent cross-contamination with other pesticides and fertilizers. 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:** Wastes resulting from the use of this product must be disposed of on site or at an approved waste disposal facility.

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

Triple rinse or pressure rinse container (or equivalent) promptly after emptying. **Triple rinse** as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. **Pressure rinse** as follows: Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 psi for at least 30 seconds. Drain for 10 seconds after the flow begins to drip.

Refer to label booklet for Directions for Use.

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

In case of emergency endangering health or the environment involving this product, call 1-800-992-5994.

Agricultural Chemical: Do not ship or store with food, feeds, drugs or clothing.

EPA Reg. No. 62719-301

EPA Est.

Trademark of Dow AgroSciences LLC
Produced for
Dow AgroSciences LLC
9330 Zionsville Road
Indianapolis, IN 46268

Net Weight \_\_\_\_\_

(WSP label):

## Lorsban® 75WG

#### Insecticide

This bag [container] is not for individual resale. This product is not for residential use.

## 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.)

Refer to label booklet for Directions for Use.

EPA Reg. No. 62719-301

(Label booklet cover):

## 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%
Other Ingredients	25%
Total	

## 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.)

## **Agricultural Use Requirements**

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR Part 170. Refer to label booklet under "Agricultural Use Requirements" in the Directions for Use section for information about this standard.

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 Risks of Use, and Limitation of Remedies at end of label booklet. If terms are unacceptable, return at once unopened.

In case of emergency endangering health or the environment involving this product, call 1-800-992-5994.

Agricultural Chemical: Do not ship or store with food, feeds, drugs or clothing.

EPA Reg. No. 62719-301

EPA Est.

Trademark of Dow AgroSciences LLC
Produced for
Dow AgroSciences LLC
9330 Zionsville Road
Indianapolis, IN 46268

N	let	V	۷	е	ig	t	١t	
---	-----	---	---	---	----	---	----	--

## (Page 1 through end):

Table of Contents	Page
First Aid	_
Precautionary Statements	-
Hazards to Humans and Domestic Animals	-
Personal Protective Equipment (PPE)	-
Engineering Controls	-
User Safety Recommendations	-
Environmental Hazards	-
Directions for Use	-
Agricultural Use Requirements	-
Storage and Disposal	-
Product Information	-
Use Precautions	<del>-</del>
Application Directions	-
Mixing Directions	-
Uses	-
Alfalfa	-
Apple Tree Trunk	-
Asparagus	-
Brassica (Cole) Leafy Vegetables and Radish, Rutabaga, and Turnip	-
Christmas Trees (Plantations)	-
Citrus Fruits	-
Citrus Orchard Floors	<del>-</del>
Corn (Corn, Sweet, Seed)	-
Cotton	· <u>-</u>
Cranberry	-
Fig -	
Grape	-
Legume Vegetables (Succulent or Dried) (Except Soybean)	-
Onion (Dry Bulb)	-
Peanut	-
Pear	-
Peppermint and Spearmint	-
Sorghum - Grain Sorghum (Milo)	-
Soybean	-
Strawberry	-
Sugarbeet	-
Sunflower	-
Sweet Potato	-
Tobacco	-
Tree Fruits, Almond and Walnut (Dormant/Delayed Dormant Sprays)	-
Tree Fruits and Almond (Trunk Spray and/or Preplant Dip)	-
Tree Nuts (Foliar Sprays)	-
Tree Nut Orchard Floors	-
Wheat	-
Terms and Conditions of Use	-
Warranty Disclaimer	-
Inherent Risks of Use	-
Limitation of Remedies	-

#### 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 no 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.

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact 1-800-992-5994 for emergency medical treatment information.

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.

## **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.

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

## **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.

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

#### Nonrefillable nonrigid containers:

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

#### Refillable rigid containers larger than 5 gal:

**Container Handling:** Refillable container. Refill this container with pesticide only. Do not reuse this container for any other purpose.

Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To clean the container before final disposal, empty the remaining contents from this container into application equipment or a mix tank. Fill the container about 10% full with water and, if possible, spray all sides while adding water. If practical, agitate vigorously or recirculate water with the pump for two minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times.

#### Nonrefillable rigid containers larger than 5 gal:

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

Triple rinse or pressure rinse container (or equivalent) promptly after emptying. **Triple rinse** as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. **Pressure rinse** as follows: Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert

pressure rinsing nozzle in the side of the container, and rinse at about 40 psi for at least 30 seconds. Drain for 10 seconds after the flow begins to drip.

#### **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**

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.

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.

#### 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, the following practices are recommended:

- 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 Dow AgroSciences by calling 800-258-3033.

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

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

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

#### **Aerial Application**

- 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 to 340 microns volume median diameter) per ASABE Standard 572 under application conditions. Airspeed, pressure, and nozzle angle can all effect droplet size. See manufacturer's catalog or USDA/NAAA Applicator's Guide for spray size quality ratings.
- Applications must not be made at a height greater than 10 feet above the top of the target plants unless a greater height is required for aircraft safety. Making applications at the lowest height that is safe reduces exposure of droplets to evaporation and wind.
- 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 recommended pressures. For many nozzle types, lower pressure produces larger droplets. When higher flow rates are needed, use higher flow rate nozzles instead of increasing pressure.
- Number of nozzles Use the minimum number of nozzles that provide uniform coverage.
- Nozzle orientation Orienting nozzles so that the spray is released parallel to the airstream produces larger droplets than other orientations and is the recommended practice. Significant deflection from horizontal will reduce droplet size and increase drift potential.
- Nozzle type Use a nozzle type that is designed for the intended application. With most nozzle types, narrower spray angles produce larger droplets. Consider using low-drift nozzles. Solid stream nozzles oriented straight back produce the largest droplets and the lowest drift.

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

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

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

**Wind:** Drift potential is lowest between wind speeds of 2 to 10 mph. However, many factors, including droplet size and equipment type, determine drift potential at any given speed. Application should be avoided below 2 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:** Applications should not occur during a temperature inversion because drift potential is high. Temperature inversions restrict vertical air mixing, which causes small suspended droplets to remain in a concentrated cloud. This cloud can move in unpredictable directions due to the light variable winds common during inversions. Temperature inversions are characterized by increasing temperatures with altitude and are common on nights with limited cloud cover and light to no wind. They begin to form as the sun sets and often continue into the morning. Their presence can be indicated by ground fog; however, if fog is not present, inversions can also be identified by the movement of smoke from a ground source or an aircraft smoke generator. Smoke that layers and moves laterally in a concentrated cloud (under low wind conditions) indicates an inversion, while smoke that moves upward and rapidly dissipates indicates good vertical air mixing.

**Sensitive Areas:** The pesticide should only be applied when the potential for drift to adjacent sensitive areas (e.g., residential areas, bodies of water, known habitat for threatened or endangered species, nontarget 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 to 400 microns) volume median diameter), per ASABE Standard 572. 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.

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

## **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 (gpa) for aerial application equipment (fixed wing or helicopter) or not less than 10 gpa 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 recommendations for insecticide nozzles with respect to nozzle type, pressure, and spacing.

#### **Broadcast Soil Application**

Apply with conventional power-operated spray equipment that will apply the product uniformly to the soil surface. Use nozzles that produce medium or coarse droplets (235 to 400 microns). Unless otherwise indicated, a spray volume of 10 gpa or more is needed. For band application, use proportionally less spray volume.



Use a minimum spray volume of 2 gpa. Marking of swaths by flagging, permanent markers or use of GPS equipment is recommended.

#### **Chemigation Application**

Lorsban 75WG may be applied to the following crops through sprinkler irrigation equipment: alfalfa, almond (orchard floors only), citrus (orchard floors only), corn (field and sweet), cotton, cranberry, peppermint, sorghum, soybeans, spearmint, sugarbeet, orchard floors (pecan and walnut), and wheat, or other crops as specified in Dow AgroSciences supplemental labeling. Do not apply this product by chemigation unless specified in crop-specific directions in this label or Dow AgroSciences supplemental labeling. Do not apply to labeled crops through any other type of irrigation system.

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

#### **Use Directions for Sprinkler Irrigation**

The following use directions must be followed when 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 with soap 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. Do not add crop oil when Lorsban 75WG is applied by chemigation. Maintain continuous agitation during mixing and throughout the application period. Set the sprinkler system to deliver the desired inches of water per acre. Start the water pump and sprinkler, and let the system achieve the desired pressure and speed before starting the injector. Start the injector and calibrate the injector system according to Calibration instructions in the following 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.

**Use Precautions for Sprinkler Irrigation:** The following use precautions will result in a safe and successful application of mixtures containing Lorsban 75WG.

- 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.
- Crop injury, lack of effectiveness, or illegal pesticide residues in the crop can result from nonuniform distribution of treated water.
- If you have questions about calibration, contact state extension service specialists, equipment manufacturers, or other experts.
- Do not connect an irrigation system (including greenhouse systems) used for pesticide application to a public water system.
- A person knowledgeable of the chemigation system and responsible for its operation, or under the supervision of the responsible person, shall shut the system down and make necessary adjustments should the need arise.
- The system must contain a functional check valve, vacuum relief valve, and 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.
- The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.
- The pesticide injection pipeline must also contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid

from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.

- The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.
- The irrigation line or water pump must include a functional pressure switch 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. The metering pump must provide a greater pressure than that of the irrigation system at the point of injection. The pump must meet Section 675 for "Electrically Driven or Controlled Irrigation Machines" NEC 70 and must contain viton or Teflon seals.
- To ensure uniform mixing of the insecticide into the water line, inject the mixture through a nozzle placed in the fertilizer injection port or just ahead of an elbow or tee in the irrigation line so that the turbulence will assist in mixing. It is suggested that the injection point be higher than the insecticide tank to prevent siphoning.
- The tank holding the insecticide mixture should be large enough to allow the system to complete the
  application with one filling. It must be free of rust, fertilizer, sediment, and foreign material, and
  equipped with an in-line strainer situated between the tank and the injector pump.
- Calibration: In order to calibrate the irrigation system and injector to apply the mixture of Lorsban 75WG, determine the following: 1) Calculate the number of acres irrigated by the system; 2) Set the irrigation rate and determine the number of minutes for the system to cover the intended treatment area; 3) Calculate the total gallons of insecticide mixture needed to cover the desired acreage. Divide the total gallons of insecticide mixture needed by the number of minutes to cover the treatment area. This value equals the gallons per minute output that the injector must deliver. Convert the gallons per minute to milliliters or ounces per minute. Calibrate the injector pump with the system in operation at the desired irrigation rate. It is suggested that the timed output of the injector pump be checked at least twice before operation, and the system monitored during operation.
- 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.
- Reentry: Follow requirements in the Agricultural Use Requirements section or crop-specific sections of this label
- 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

Application Rate Lorsban 75WG (lb/acre)	Acres Treated per Water Soluble Packet (1.33 lb/Packet)
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
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:

- 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 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 upon 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.

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 pint or quart jar, cap, shake, and let set 15 minutes. Formation of precipitates that do not readily redisperse indicates an incompatible mixture that should not be used.

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

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.

Premixing (Slurry) Prior to Tank Mixing or Mixing with Liquid Fertilizer: Premixing 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 lb 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 to 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)

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

Apply as a broadcast foliar spray using aircraft or ground spray equipment. Use a higher rate in the rate range for increased pest pressure. Use a minimum spray volume of 2 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 for application instructions.

	1 amala an 75340
Townst Doots	Lorsban 75WG
Target Pests	(lb/acre)
corn rootworm adults	0.33 - 0.67
(spotted cucumber beetle)	
grasshoppers	
leafhoppers (1)	<u> </u>
alfalfa blotch leafminer	0.67 - 1.33
alfalfa caterpillar	
alfalfa weevil larvae and adults	
armyworms	
blue alfalfa aphid	
chinch bug	
cowpea aphid	
crickets	
cutworms	
Egyptian alfalfa weevil (larvae and adults)	
(2)	
greenbugs	
green June beetle grubs	
mites, such as	
Bermuda grass stunt	
clover	
two-spotted	
winter grain	
pea aphid	
plant bugs	
sod webworm	
sowbugs	
spittlebugs	
spotted alfalfa aphid (suppression)	
(not for use in California)	<u> </u>
alfalfa webworm	1

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

#### **Pest-Specific Use Directions:**

- 1. A stubble spray may be applied to control leafhopper when present.
- 2. **In California:** For Egyptian alfalfa weevil control, apply the specified dosage in a minimum of 5 gpa of water when larvae are actively feeding.

#### **Specific Use Precautions:**

- Do not tank mix Lorsban 75WG with other pesticides, surfactants, or fertilizer formulations unless prior
  use has shown the combination to be non-injurious to alfalfa under current conditions of use. Some
  phytotoxic symptoms may be observed on young, tender, rapidly growing alfalfa treated with Lorsban
  75WG. Alfalfa will outgrow these symptoms and no yield loss should be expected.
- This product is highly toxic to bees exposed to direct treatment on alfalfa. Do not apply if nearby bees are clustered outside of hives and bees are actively foraging in the treated area. Protective information may be obtained from your Agricultural Extension Service.
- To avoid contamination of irrigation tail waters, do not flood irrigate within 24 hours following an application of Lorsban 75WG.

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

- Preharvest Interval: Do not cut or graze treated alfalfa within 7 days after application of 0.33 lb per acre of Lorsban 75WG, within 14 days after application of 0.67 lb per acre, or within 21 days after application of rates above 0.67 lb per acre.
- Do not make more than four applications of Lorsban 75 WG or other product containing chlorpyrifos per season or apply any product containing chlorpyrifos more than once per alfalfa cutting.
- Maximum single application rate is 1 lb ai chlorpyrifos (1.33 lb of Lorsban 75 WG) per acre.
- Do not make a second application of Lorsban 75WG or other product containing chlorpyrifos within 10 days of the first application.

## **Apple Tree Trunk**

(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 unless PPE required for early entry is worn.

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

Target Pests	Lorsban 75WG (lb/100 gal)
American plum borer	2
apple bark borer	
broad necked root borer	
dogwood borer	
flatheaded appletree borer	
roundheaded apple tree borer	
tilehorned prionus	

#### Specific Use Restrictions:

- Preharvest Interval: Do not apply within 28 days before harvest.
- Do not make more than one post-bloom trunk application per year.
- 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 to ensure thorough coverage of crop foliage. Note: Lorsban 75WG may be applied aerially or with ground equipment for control of armyworms and grasshoppers.

	Lorsban 75WG
Target Pests	(lb/acre)

armyworms (1)	1.33
asparagus aphids (1)	
asparagus beetles (1)	
cutworms (2)	
grasshoppers (1)	
symphylans (3)	

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

#### **Pest-Specific Use Directions:**

- 1. For **armyworms**, **asparagus beetles**, **asparagus aphids**, and **grasshoppers**, apply during the fern stage when field counts or crop injury indicates that damaging pest populations are developing or are present.
- For cutworms, it is preferable to apply when the soil is moist and worms are active on or near the soil surface.
- 3. For **symphylans**, apply it at least two weeks before harvest for optimum control.

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

- Do not make more than one preharvest application per season or apply within 1 day before harvest.
- Do not make more than two postharvest applications during the fern stage.
- Maximum single application rate preharvest or postharvest is 1 lb ai chorpyrifos (1.33 lb of Lorsban 75WG) per acre.
- 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<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.

**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.

Crop	Target Pests	Lorsban 75WG (lb/acre)
cauliflower	billbugs	2.66
broccoli Brussels sprout cabbage Chinese cabbage collards kale kohlrabi turnip	cutworms grubs root maggot symphylans wireworms	3

<sup>&</sup>lt;sup>1</sup>Brassica (cole) leafy vegetables including broccoli, broccoli raab, Brussels sprout, cabbage, cauliflower, cavalo broccolo, Chinese broccoli, Chinese cabbage, collards, kale, kohlrabi, mizuna, mustard greens, mustard spinach, rape greens

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.

Crop	Target Pests	Lorsban 75WG (oz/1000 ft of row)
cauliflower	root maggot (1)	1.1 - 1.6
broccoli		1.1 - 1.8
Brussels sprout		
cabbage		
Chinese cabbage		
collard		
kale		
kohlrabi	,	
turnip		
broccoli	root aphid (2)	0.8
cabbage		(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 (cauliflower, broccoli, Brussels sprout, cabbage, Chinese cabbage, collard, kale, kohlrabi, turnip, rutabaga): Apply the specified dosage in a water-based spray as a 4-inch wide band over the row at planting time. Band placement should be 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, Brussels sprout, cabbage, cauliflower, Chinese cabbage, collards, kale, kohlrabi, 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, Brussels sprout, cabbage, Chinese cabbage, collard, kale, kohirabi, 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 (Brussels Sprout Only)

Apply with conventional power-operated spray equipment in 20 to 150 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.

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

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

- Preharvest Interval: Do not apply within 21 days before harvest.
- Do not make more than three applications of productscontaining 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. 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.

Townst Donto	1 7514/0
Target Pests	Lorsban 75WG

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

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

#### **Pest-Specific Use Directions:**

- 1. When large numbers of **spider mite** eggs are present at the first application, a second application after 7 to 10 days may be required to control newly hatched nymphs and maintain effective control. **Not for control of mites in Washington and Oregon**.
- 2. For **scale control**, apply when scale crawlers are active.
- 3. Apply as a cut stump drench.
- 4. 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 three 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<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 including calamondin, chironja, citrus citron, citrus hybrids, grapefruit, kumquat, lemon, lime, mandarin (tangerine), 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 recommended for use on citrus trees may be added to spray mixtures at up to 1.8 gallons per 100 gallons of spray.

Targe	t 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)	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	1.33 - 4.67
citrus rust mites (2) (Florida		2.67 - 4.67
citrus psylla (3) (Florida only)		3.33
thrips suppression and mealybugs (California and Arizona, see restrictions)		4 - 8
California red scale (California and Arizona, see restrictions)		5.33 - 8

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

#### **Pest-Specific Use Directions:**

- 1. **Lubber grasshoppers:** Effective control requires direct contact with spray when grasshoppers are small (less than 1 inch in length).
- 2. For control of citrus rust mites, use a spray concentration of at least 0.67 lb per 100 gallons.
- 3. For control of citrus psylla, 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 Dow AgroSciences 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. Do not apply during the months of December, January, or February.

#### Specific Use Restrictions:

- **Preharvest Interval:** Do not apply within 21 days before harvest after applications of up to 4.67 lb of Lorsban 75WG per acre or within 35 days after application of rates above 4.67 lb per acre.
- Do not apply more than 7.5 lb ai chlorpyrifos (10 lb of Lorsban 75WG) per acre per year.
- Do not make more than two applications of Lorsban 75WG or other products containing chlorpyrifos per year (does not include citrus orchard floors).
- 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<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 including calamondin, chironja, citrus citron, citrus hybrids, grapefruit, kumquat, lemon, lime, mandarin (tangerine), 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 for application instructions.

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

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

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

#### **Pest-Specific Use Directions:**

 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 three applications of Lorsban 75WG or other products containing chlorpyrifos per year (does not include foliar applications to citrus trees).
- Do not apply more than 3 lb ai chlorpyrifos (4 lb of Lorsban 75WG) per acre per year.
- Maximum single application rate is 1 lb ai chlorpyrifos (1.33 lb of Lorsban 75WG) per acre.
- 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 (Corn, 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 cutworms	0.67 - 1.33

#### **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 Glyphomax® XRT herbicide or Durango® 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 for application instructions.

	Lorsban 75WG	
Target Pests	(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. For best billbug, chinch bug, or flea beetle 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 greater than 6 inches tall, apply using drop nozzles directed to the base of the plant. Do not reduce the application rate for banded or directed applications. Concentrate the full-labeled dosage rate in the treated zone. When chinch bugs continue to immigrate to corn over a prolonged period or under extreme pest pressure, a second application may be needed.
- 2. The specified dosage will control silk clipping by corn rootworm adults.
- 3. For 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. For **webworm** control, shallow incorporation using a rotary hoe or other suitable equipment immediately before or soon after treatment is necessary.
- 5. For European corn borer 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 borer with a single liquid insecticide treatment is highly dependent upon timing, insecticide placement, and weather conditions.
- 6. For **southwestern corn borer**, a second application may be applied 21 days later if needed due to reinfestation.
- 7. For postemergence control of **corn rootworm larvae** apply at cultivation. Direct the spray to both sides of the row at the base of the plants just ahead of the cultivator shovels. Cover the insecticide with soil around the brace roots. A cultivation application of Lorsban 75WG may be made in addition to an at-plant application of Lorsban 15G insecticide.
- 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 for application instructions.
- 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 three applications of any product containing chlorpyrifos per season, including the maximum allowed of two granular applications, at the 1 lb ai chlorpyrifos rate.
- Do not apply more than a total of 3 lb ai chlorpyrifos (4 lb of Lorsban 75WG) per acre per season.
- Maximum single application rate is 1 lb ai chlorpyrifos (1.33 lb of Lorsban 75WG) per acre.
- 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 one 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 for application instructions.

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

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

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

# **Pest-Specific Use Directions:**

- 1. 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.
- 2. **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.
- 3. **Bollworms** and **budworms**: For best results, it is suggested that fields be scouted twice per week and applications made when worms are 1/4-inch or less in length.

#### Arizona and California

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

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

#### **Pest-Specific Use Directions:**

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

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

- Preharvest Interval: Do not apply within 14 days before harvest.
- Do not make more than three applications of Lorsban 75WG or other product containing chlorpyrifos per crop season
- Do not apply more than 3 lb ai chlorpyrifos (4 lb of Lorsban 75WG) per acre per season.
- Maximum single application rate is 1 lb ai chlorpyrifos (1.33 lb of Lorsban 75WG) per acre.
- 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 for application instructions.

Target Pests	Lorsban 75WG (lb/acre)
brown spanworm	2
cranberry fruitworm	
cranberry weevil (1)	1
cutworms	
fireworms	
sparganothis fruitworms	

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

#### **Pest-Specific Use Directions:**

1. For weevil control, apply once at flower bud development (late May, early June) and, if 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 two applications of Lorsban 75WG or other products containing chlorpyrifos per
- Maximum single application rate is 1.5 lb ai chlorpyrifos (2 lb of Lorsban 75WG) per acre.
- Do not make a second application of Lorsban 75WG or other product containing chlorpyrifos within 10 days of the first application.

# Fia (For use only in California)

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

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

- Preharvest Interval: Do not apply within 217 days (7 months) before harvest.
- Make only one application per year of Lorsban 75WG or other product containing chlorpyrifos.
- Maximum single application rate is 2 lb ai chlorpyrifos (2.67 lb of Lorsban 75WG) per acre.

#### 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 on a 11-square foot area (3.75 ft circle) around the base of each vine.

	Lorsban 75WG
Target Pest	(lb/100 gal)
grape root borer	3

#### **Specific Use Precautions:**

· Do not allow spray to contact fruit or foliage.

#### **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>	1.33
grape mealybugs <sup>2</sup>	

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

#### **Pest-Specific Use Directions:**

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

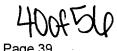
# **Specific Use Precautions:**

Do not use in conjunction with soil surface application for grape borer control.

# 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.
- Maximum single application rate for soil surface application is 2.25 lb ai chlorpyrifos (3 lb of Lorsban 75WG) per 100 gallons.
- Maximum single application rate for prebloom application to minimize phytotoxicity is 1 lb ai chlorpyrifos (1.33 lb of Lorsban 75WG) per acre
- 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)<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 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, 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, Lorsban 75WG must be incorporated 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 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.
- Do not apply more than 1 lb ai chlorpyrifos (1.33 lb of Lorsban 75WG) per acre.
- 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.

- 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.

# **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 seedcorn maggot	1.33

#### **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 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.

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

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

- Preharvest Interval: Do not apply within 21 days before harvest.
- Do not make more than one preplant application of Lorsban 75WG per season.
- The combined total of preplant and postplant applications of Lorsban 75WG, Lorsban 15G or other product containing chlorpyrifos must not exceed 4 lb ai chlorpyrifos (5.34 lb of Lorsban 75WG) per acre per season.
- Maximum single application rate is 2 lb ai chlorpyrifos (2.67 lb of Lorsban 75WG) per acre.
- 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 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 for application instructions.

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

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.
- Make only one 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.
- Make only one postharvest application of Lorsban 75WG or products containing chlorpyrifos per season.
- Maximum single application rate is 2 lb ai chlorpyrifos (2.67 lb of Lorsban 75WG) per acre.
- 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 for application instructions.

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 three 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 three applications of Lorsban 75WG or other product containing chlorpyrifos per use season.
- Do not apply more than 1.5 lb ai chlorpyrifos (2 lb of Lorsban 75WG) per acre per season.
- Maximum single application rate is 1 lb ai chlorpyrifos (1.33 lb of Lorsban 75WG) per acre.
- 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.

# 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 lesser cornstalk borer	0.67 – 1.33	0.67 – 1.33

Fluid Ounces of Spray Required Per 100 Feet of Row for Listed Row Spacings and Spray Volumes						
Spray Volume Per Acre (gallons) 40" 38" 36" 30" 20" 15"						15"
10	9.8	9.31	8.82	7.35	4.9	3.67
15	14.7	13.97	13.2	11.8	7.35	5.51
20	19.6	18.62	17.6	15.7	9.8	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 Glyphomax XRT or Durango 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 for application instructions.

Target Pests	Lorsban 75WG (lb/acre)
grasshoppers green cloverworm spider mites (1) velvetbean caterpillar	0.33 - 0.67

armyworms	0.67 - 1.33
bean leaf beetle	
corn earworm	
cutworms	
Mexican bean beetle	
potato leafhopper	
saltmarsh caterpillar and other	
woolly bears	
soybean aphid	
thistle caterpillar (painted lady	
butterfly)	
European corn borer	1.33
southern green stink bug	

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 one application after pod set.

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

- Preharvest Interval: Do not apply within 28 days before harvest.
- Do not make more than three applications of Lorsban 75WG or other products containing chlorpyrifos per year.
- Do not apply more than 3 lb ai chlorpyrifos (4 lb of Lorsban 75WG) per acre per season.
- Maximum single application rate is 1 lb ai chlorpyrifos (1.33 lb of Lorsban 75WG) per acre.
- 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 Pest	Lorsban 75WG (lb/acre)
garden symphylans grub	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

	Lorsban 75WG
Target Pest	(lb/acre)

Р	ag	е	45

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.

	Lorsban 75WG
Target Pest	(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 one application of Lorsban 75WG or other product containing chlorpyrifos per year.
- Foliar and Postharvest Application: Do not make more than two applications of Lorsban 75WG or other product 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 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 prebloom 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 for application instructions.

**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.

	Lorsban 75WG	
Target Pests	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 <b>-</b> 1.33	0.67 - 0.89
cutworms	1.33	0.89
flea beetle adults		
sugarbeet root maggot adults	0.33 - 0.67	
(2) (5)		
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:**

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

- Preharvest Interval: Do not apply within 30 days before harvest of beet roots and tops.
- Do not make more than three applications of Lorsban 75WG or other product containing chlorpyrifos per season.
- Do not apply more than 3 lb ai chlorpyrifos (4 lb of Lorsban 75WG) per acre per season.
- Maximum single application rate is 1 lb ai chlorpyrifos (1.33 lb of Lorsban 75WG) per acre.
- 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 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.

	Lorsban 75WG	
Target Pest	(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 seed weevil (4) stem weevil (2) sunflower beetle larvae and adults (1) sunflower moth (3) woolly bears	0.67 - 1
cutworms	1.33
tarnished plant bug ( <i>Lygus</i> ) (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.

- Preharvest Interval: Do not apply within 42 days before harvest.
- Do not make more than three applications of Lorsban 75WG or other product containing chlorpyrifos per season.
- Do not apply more than 3 lb ai chlorpyrifos (4 lb of Lorsban 75WG) per acre 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 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)
Conoderus (wireworm)	2.67
sweet potato flea beetle	
Systena (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 harvest.
- Do not make more than one 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 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 PTO-driven implements that will incorporate Lorsban 75WG to a depth of 4 inches.

Target Pests	Lorsban 75WG (ib/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 Nemacur 3 at the rate of 2.67 lb of Lorsban 75WG plus 4 quarts of Nemacur 3 nematicide per acre. Read and carefully follow all applicable directions, restrictions, and precautions on labeling for Nemacur 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 high populations of *M. incognita*, apply Telone® II soil fumigant at the specified label rate.

#### Specific Use Restrictions:

- Do not make more than one 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 aerially apply this product in Mississippi.

# Tree Fruits, 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 almond 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, oil is recommended to control additional pests such as European red mite. See precautions for use of oil below. Apply as a concentrate or dilute spray using conventional, power-operated spray equipment. For dilute sprays (greater than 200 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:

- Make only one application of 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 pre-bloom or post-bloom application.
- Do not use more than 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

	Lorsban 75WG
Target Pests	(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	

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

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

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

• Do not make a soil or foliar application of Lorsban 75WG or other product 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:

- 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 6 gpa 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
Lygus	
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 prebloom 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 almond days unless PPE required for early entry is worn.

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

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 two 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	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. For control of peach tree borer in established trees, apply before newly hatched borers enter the tree. Use as a coarse, low-pressure trunk spray and thoroughly wet all bark areas from ground level to scaffold limbs. Do not allow spray to contact fruit. Consult written recommendations provided by your State agricultural experiment station or extension service specialist for proper time to treat in your area.

# **Specific Use Restrictions:**

- **Preharvest Interval:** Do not apply within 14 days before harvest of almonds, peaches and nectarines or within 21 days before harvest of cherries.
- Do not make more than one chlorpyrifos application per year in peaches and nectarines and no more than three chlorpyrifos applications per year in cherries.
- Do not allow meat or dairy animals to graze in treated orchards.

# 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 24 hours unless PPE required for early entry is worn.

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

<sup>&</sup>lt;sup>1</sup>Almond, filbert, pecan, walnut



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 navel orangeworm	peach twig borer San Jose scale	2.67
filbert	eye-spotted bud moth filbert aphid filbert leafroller filbert worm	obliquebanded leafroller omnivorous leaftier winter moth	2 - 2.67
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
walnut	codling moth walnut husk fly	walnut scale	2.67

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

#### **Pest-Specific Use Directions:**

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

- Preharvest Interval: Do not apply within 14 days before harvest of almonds, filberts and walnuts, or within 28 days before harvest of pecans.
- Do not make more than three total applications per season of Lorsban 75WG or other product containing chlorpyrifos to almonds, pecans and filberts and no more than two applications per season on walnuts.
- 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.



# Tree Nut1 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 for application instructions.

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

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.

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 harvest.
- Do not make more than two applications of Lorsban 75WG or other product containing chlorpyrifos per season to the orchard floor. If the 5.33 lb per acre rate is used, a second application is not allowed.
- Do not apply more than 4 lb ai chlorpyrifos (5.33 lb of Lorsban 75WG) per acre per season to the orchard floor.
- 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 for application instructions.

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. Suppression should be expected 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. For control of **wheat midge**, treat when 75% of the wheat heads have emerged from the boot and when midge adults are found in the crop (1 midge per 4 to 5 heads). If possible, apply in the late afternoon or early evening when temperatures exceed 50°F and wind speed is less than 7 mph.

#### **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 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.

# **Terms and Conditions of Use**

If terms of the following Warranty Disclaimer, Inherent Risks of Use, and Limitation of Remedies are not acceptable, return unopened package at once to the seller for a full refund of purchase price paid. Otherwise, use by the buyer or any other user constitutes acceptance of the terms under Warranty Disclaimer, Inherent Risks of Use and Limitation of Remedies.

# **Warranty Disclaimer**

Dow AgroSciences warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated on the label when used in strict accordance with the directions, subject to the inherent risks set forth below. TO THE EXTENT PERMITTED BY LAW, Dow AgroSciences MAKES NO OTHER EXPRESS OR IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR ANY OTHER EXPRESS OR IMPLIED WARRANTY.

# Inherent Risks of Use

It is impossible to eliminate all risks associated with use of this product. Plant injury, lack of performance, or other unintended consequences may result because of such factors as use of the product contrary to label instructions (including conditions noted on the label, such as unfavorable temperature, soil conditions, etc.), abnormal conditions (such as excessive rainfall, drought, tornadoes, hurricanes), presence of other materials, the manner of application, or other factors, all of which are beyond the control of Dow AgroSciences or the seller. All such risks shall be assumed by buyer.

#### **Limitation of Remedies**

To the extent permitted by law, the exclusive remedy for losses or damages resulting from this product (including claims based on contract, negligence, strict liability, or other legal theories), shall be limited to, at Dow AgroSciences' election, one of the following:

- 1. Refund of purchase price paid by buyer or user for product bought, or
- 2. Replacement of amount of product used.

Dow AgroSciences shall not be liable for losses or damages resulting from handling or use of this product unless Dow AgroSciences is promptly notified of such loss or damage in writing. In no case shall Dow AgroSciences be liable for consequential or incidental damages or losses.

The terms of the Warranty Disclaimer, Inherent Risks of Use and Limitation of Remedies cannot be varied by any written or verbal statements or agreements. No employee or sales agent of Dow AgroSciences or the seller is authorized to vary or exceed the terms of the Warranty Disclaimer or Limitation of Remedies in any manner.

"Trademark of	Dow AgroSciences	LLC
EPA accepted		