



# Lorsban<sup>\*</sup>

## 50W

Wettable Powder Insecticide

For control of various insects on certain ~~fruit and nut crops~~ fruit, nut and vegetable crops

Active Ingredient:

chlorpyrifos: O,O-diethyl O-(3,5,6-trichloro-2 pyridinyl)

phosphorothioate ..... 50%

Inert Ingredients ..... 50%

**Keep Out of Reach of Children**

### WARNING AVISO:

**Precaucion al usuario:** Si usted no lee inglés, no use este producto hasta que la etiqueta le haya sido explicada ampliamente.

**Refer to back panel of bag for precautionary information and First Aid.**

**Refer to label booklet in pocket of bag for Directions for Use.**

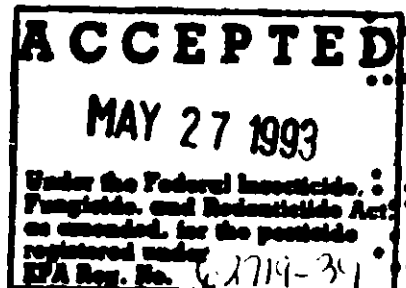
**Notice:** Read the entire label. Use only according to label directions. **Before buying or using this product, read "Warranty Disclaimer" and "Limitation of Remedies" inside label booklet.**

In case of an emergency endangering ~~life or property~~ health or the environment involving this product, call collect 517-636-4400.

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

EPA Reg. No. 62719-39

EPA Est. 477-TX



\*Trademark of DowElanco  
DowElanco • Indianapolis, IN 46268, U.S.A.

**Insecticide**

Net Weight **3 lb**

## Precautionary Statements

### Hazards to Humans and Domestic Animals

#### **WARNING AVISO:**

**Precaucion al usuario:** Si usted no lee ingles, no use este producto hasta que la etiqueta le haya sido explicada ampliamente.

**May Be Fatal If Swallowed • Harmful If Absorbed Through Skin Or Inhaled • Causes Eye Irritation**

Avoid contact with eyes, skin or clothing. Avoid breathing dust or spray mist. Wash thoroughly with soap and water after handling and before eating or smoking. When loading the spray tank or handling the powder, wear a pesticide respirator jointly approved by the Mining Enforcement and Safety Administration (formerly the U. S. Bureau of Mines) and by the National Institute for Occupational Safety and Health under the provisions of 30 CFR Part II. Wear protective clothing such as long pants, long sleeved shirt, gloves, hat and boots when loading the spray tank or handling the powder and during application of the spray mixture. Work to windward to stay out of spray drift or mist. Remove contaminated clothing and wash before reuse.

Do not apply this product in such a manner as to directly or through drift expose workers or other persons. The area being treated must be vacated by unprotected persons. Keep away from food, feedstuffs and water supplies. See attached label booklet for additional farm worker safety requirements under the heading "Note to User - Reentry".

#### **First Aid**

**If swallowed:** Call a physician or Poison Control Center. Drink 1 or 2 glasses of water and induce vomiting by touching back of throat with finger. Do not induce vomiting or give anything by mouth to an unconscious person.

**If on skin:** Wash with plenty of soap and water. Get medical attention if irritation persists.

**If in eyes:** Flush with plenty of water for 5 minutes. Get medical attention if irritation persists.

**If inhaled:** Remove to fresh air if effects occur. Get medical attention.

**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.

#### **Environmental Hazards**

This pesticide is toxic to birds and wildlife, and extremely toxic to fish and aquatic organisms. Do not apply directly to water. Drift and runoff from treated areas may be hazardous to aquatic organisms in adjacent aquatic sites. Cover or incorporate spills. Do not contaminate water when disposing of equipment washwaters. This product is highly toxic to bees exposed to direct treatment or residues on blooming crops or weeds. Avoid use when bees are actively foraging or if bees are likely to come in contact with wet or re-wetted treated surfaces.

Protective information may be obtained from your Cooperative Extension Service. This product may pose a hazard to certain Federally endangered fish species. Refer to the "Endangered Species Restrictions" section of the booklet for any geographic restrictions.

#### **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.

#### **STORAGE AND DISPOSAL**

Do not contaminate water, food or feed by storage or disposal. Open dumping is prohibited.

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

**Container Disposal:** Completely empty bag into application equipment. Then dispose of empty bag in a sanitary landfill or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

45386

**See label booklet on bottom of bag.**

DowDanco

# Lorsban

## 50W

For control of various insects on certain fruit and nut crops—

Active ingredient:  
 chlorpyrifos: O,O-diethyl O-(3,5,6-trichloro-2-pyridinyl) phosphorothioate..... 50%  
 Inert ingredients ..... 50%

Keep Out of Reach of Children

### WARNING AVISO:

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EPA Reg. No. 62719-39 EPA Est. 477-TX-1  
45386 900-000872

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Insecticide

### Precautionary Statements

#### Hazards to Humans and Domestic Animals

#### WARNING AVISO:

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May Be Fatal if Swallowed • Harmful if Absorbed Through Skin or Inhaled • Causes Eye Irritation

Avoid contact with eyes, skin or clothing. Avoid breathing dust or spray mist. Wash thoroughly with soap and water after handling and before eating or smoking. When loading the spray tank or handling the powder, wear a pesticide respirator jointly approved by the Mining Enforcement and Safety Administration (formerly the U. S. Bureau of Mines) and by the National Institute for Occupational Safety and Health under the provisions of 29 CFR Part II. Wear protective clothing such as long pants, long sleeved shirt, gloves, hat and boots when loading the spray tank or handling the powder and during application of the spray culture. Work to windward to stay out of spray drift or mist. Remove contaminated clothing and wash before reuse.

Do not apply this product in such a manner as to directly or through drift expose workers or other persons. The area being treated must be vacated by unprotected persons. Keep away from food, feedstuffs and water supplies. See attached label booklet for additional farm worker safety requirements under the heading "Note to User - Reentry".

#### First Aid

If swallowed: Call a physician or Poison Control Center. Drink 1 or 2 glasses of water and induce vomiting by touching back of throat with finger. Do not induce vomiting or give anything by mouth to an unconscious person.

If on skin: Wash with plenty of soap and water. Get medical attention if irritation persists.

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#### Environmental Hazards

This pesticide is toxic to birds and wildlife, and extremely toxic to fish and aquatic organisms. Do not apply directly to water. Drift and runoff from treated areas may be hazardous to aquatic organisms in adjacent aquatic sites. Cover or incorporate spills. Do not contaminate water when disposing of equipment washwaters. This product is highly toxic to bees exposed to direct treatment or residues on blooming crops or weeds. Avoid use when bees are actively foraging or if bees are likely to come in contact with wet or re-wetted treated surfaces. Protective information may be obtained from your Cooperative Extension Service. This product may pose a hazard to certain Federally endangered fish species. Refer to the "Endangered Species Restrictions" section of this label for any geographic restrictions.

#### Endangered Species Restrictions

The use of Lorsban 50W may pose a hazard to certain Federally endangered fish species. This product cannot be used on sour cherry trees in the following counties:

Colorado: Delta, Larimer and Mesa  
Ohio: Washington  
Utah: Emery, Grand, Utah and Washington  
Wisconsin: Iowa, Pierce, Racine and Vernon

#### 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 spraying.

#### Note to User - Reentry

Do not allow reentry into treated areas within 24 hours unless protective clothing is worn. Protective clothing consists of at least a hat or other suitable head covering, a long-sleeved shirt and long-legged trousers or a covered type garment (all of closely woven fabric covering the body, including the arms and legs), shoes and socks. Because certain uses may require more restrictive re-entry intervals for various crops treated with this product, consult your State Department of Agriculture for further information.

Written or oral warnings must be given to workers who are expected to be in a treated area or in an area about to be treated with this product. These oral warnings shall inform workers of areas or fields that may not be entered without protective clothing and attire to wear in case of accidental exposure as shown by the First Aid section on this label. When oral warnings are given, written warnings shall be given in a language commonly understood by workers. Written warnings must include the following information: WARNING. Area treated with Lorsban 50W variable powder insecticide on fruit date of application. Do not enter without protective clothing for 24 hours. In case of accidental exposure, first aid steps to take as shown by the First Aid section on this label.

#### STORAGE AND DISPOSAL

Do not contaminate water, food or feed by storage or disposal. Open burning is prohibited. Pesticide Disposal: Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

Container Disposal: Completely empty bag into application equipment. Then dispose of empty bag in a sanitary landfill or by incineration, or if allowed by state and local authorities, by burning. If burned, stay out of smoke.

#### General Information

Lorsban 50W Variable Powder Insecticide is designed for use as a cover spray to control various pests. The pests controlled are listed in the accompanying label. Lorsban 50W is compatible with insecticides, miticides and fungicides commonly recommended for use on these crops, except for alkaline materials such as Bordeaux mixture and lime.

Test compatibility of the intended tank mixture before adding Lorsban 50W to the spray or mix tank. Add representative amounts of each ingredient to a pint or quart jar, stir, shake, and let set 15 minutes. Formation of precipitates that do not readily redispense indicates an incompatible mixture that should not be used.

#### Mixing Directions

Lorsban 50W mixes readily with water to form a suspension. Mix the required amount of Lorsban 50W with a small quantity of water and add the premix while filling the spray tank. Alternatively, fill the tank with the required amount of water and then add the premix. Maintain sufficient agitation during both mixing and application to ensure uniformity of the spray mixture. Lorsban 50W contains a wetting agent. Do not use additional wetting agents, surfactants or stickers.

#### Use and Dosage Recommendations

Use Lorsban 50W at the dosage indicated by application as a cover spray to control pests listed in the following table. Where a rate range is listed in the use directions, use the higher rate for more severe infestations. Mix the required dosage in sufficient water to ensure adequate coverage and apply as a concentrate or dilute spray using conventional power-operated ground spray equipment or by aircraft (fixed-wing or helicopter). For dilute sprays applied to tree fruits and nuts, mix the required dosage in sufficient water to allow for spray to run off. For concentrate sprays, apply an equivalent amount of Lorsban 50W per acre. Treat when pests appear or in accordance with local conditions. Mow or beat down orchard blooming wood cover legs before applying spray to tree fruit crops to reduce hazard to bees. This step is especially important in relation to early spring cover sprays when morning conditions may be wet from dew. Lorsban 50W will perform best in an orchard or walnut pest control program that includes winter sanitation removal of mummy nuts and regular mowing of larger pests. To control apple and flowering apple spray every 10 to 14 days on a preventative schedule. To suppress pecan leaf scorch use on pecans use in a preventative program. For best pecan Phytophthora control use two applications 7 to 10 days apart starting at bud swell or

for agricultural crops.

Generally

fruit, nut and vegetable crops

ending by early leaf expansion. For ant control on pecans, do not apply where weed growth or other obstructions would impede uniform coverage of the orchard floor. Consult your state agricultural experiment station, certified pest control adviser, or extension service specialist for specific use information in your area.  
Lorsban 50W may also be used on almonds and walnuts as a dormant/delayed dormant treatment applied at the dosages indicated in a dilute or concentrate spray. Proper equipment must be used

to obtain complete coverage of the entire bark area. If scale infestations are severe, double sprays should be used to ensure complete coverage. Use oil as recommended by your state agricultural experiment station, state extension service specialist, or certified pest control adviser. Do not use oil with Lorsban 50W on walnuts. Because dry or cold conditions may cause Lorsban 50W plus oil sprays to injure trees resulting in bud damage or drop, do not apply until winter rains or irrigation has replenished soil moisture such that bark and twigs are not desiccated.

Apply: Use Lorsban 50W to control the pests listed in the following table at the rates indicated.

Geographic Location	Pests Controlled*	Dosage Recommendations	Remarks
<b>Restrictions (All Use Areas)</b> Make no more than 8 applications per season. Do not apply last treatment within 28 days before harvest or apply last two treatments closer than 21 days apart. Do not allow livestock to graze in treated orchards.			
<b>Additional Restrictions (By Geographic Location)</b> In California: Do not do work involving contact with trees within 2 days after treatment.			
All Areas	apple aphid <sup>1</sup> apple maggot climbing cutworm codling moth dogwood borer (trunk spray) European apple sawfly European bud moth European corn borer fruitree leafroller green fruitworm lesser appleworm obliquebanded leafroller orange tortrix pearstem leafroller oriental fruit moth periodical cicada plum curculio redbanded leafroller rosy apple aphid San Jose scale tarnished plant bug tufted apple bud moth variegated leafroller woolly apple aphid	3 lb/acre	1 For apple aphid control, Lorsban 50W should not be used alone as a rescue treatment.
Connecticut Delaware Maine Maryland Massachusetts Michigan New Hampshire New Jersey New York N. Carolina Ohio Pennsylvania Rhode Island S. Carolina Vermont Virginia West Virginia	apple aphid <sup>1</sup> apple maggot <sup>1</sup> codling moth dogwood borer (trunk spray) <sup>1</sup> European apple sawfly <sup>1</sup> European corn borer <sup>1</sup> European red mine <sup>1</sup> eyespotted bud moth fruitree leafroller green fruitworm lesser obliquebanded leafroller <sup>1</sup> oriental fruit moth periodical cicada <sup>1</sup> plum curculio <sup>1</sup> cicada leafhopper redbanded leafroller rosy apple aphid San Jose scale spotted tentiform leafroller <sup>1</sup> tarnished plant bug tufted apple bud moth <sup>1</sup> variegated leafroller white apple leafhopper <sup>1</sup> woolly apple aphid	2-3 lb/acre (8-12 oz/100 gal dilute) OR A tank mix of 1 1/2 lb/acre 16 oz/100 gal dilute with one of the following: 1 1/2 parts/acre Lannate 1 BL or 8 oz/100 gal dilute 6 oz/acre Lannate 30SP 1 1/2 oz/100 gal dilute 2 lb/acre mid-insect Lorsban 50W 16 oz/100 gal dilute 1 1/2 lb/acre Guthion 35W 6 oz/100 gal dilute 2 parts/acre PennCap M 8 oz/100 gal dilute	2 For apple aphid control, use 2 to 3 lb/acre Lorsban 50W or a tank mix with Lannate 1 BL or Lannate 30SP as recommended. Lorsban 50W should not be used alone or in a tank mix as a rescue treatment. Treatments should be applied at regular intervals 1 to 2 weeks apart. 3 For apple maggot control in Michigan or in other areas after July, use 3 lb/acre Lorsban 50W or a tank mix with mid-insect Lorsban 50W, Guthion 35W or PennCap M as recommended. 4 No tank mix recommended. 5 For European apple sawfly control, use 2 to 3 lb/acre Lorsban 50W or a tank mix with mid-insect Lorsban 50W, Guthion or PennCap M as recommended. 6 For control of European corn borer or obliquebanded leafroller, use 2 to 3 lb/acre Lorsban 50W or a tank mix with Lannate 1 BL or Lannate 30SP as recommended. 7 European red mine succession with Lorsban 50W is achieved when a regularly scheduled preventative spray program is followed or when used with other pest management practices such as biological control. 8 For plum curculio control in Michigan, use 3 lb/acre Lorsban 50W or a tank mix with mid-insect Lorsban 50W, Guthion 35W or PennCap M as recommended. For other areas, use 2 to 3 lb/acre Lorsban 50W or one of the above-mentioned tank mixes. 9 For control of spotted tentiform leafhopper or white apple leafhopper, use a tank mix with Lannate 1 BL or Lannate 30SP as recommended. Lorsban 50W alone is not recommended for control of these pests. 10 For tufted apple bud moth control, use 3 lb/acre Lorsban 50W or a tank mix with Lannate 1 BL or Lannate 30SP as recommended. 11 Based on 400 gal dilute/acre.

\* Substrates refer to "Remarks"

Brassica (Cole): Use Lorsban 50W to control the pests listed in the following table at the rates indicated.

Crop	Geographical Area	Insects Controlled	Dosage Lorsban 50W	Restrictions
Brassica (Cole) broccoli brussels sprouts cabbage cavercelli cauli florabati	All areas except Texas	cabbage aphid cutworms moths cabbageworm diamond back moth beetle (adult)	2 lb/acre	Make no more than 6 applications per season. Do not apply within 21 days before harvest. To avoid phytotoxicity in vegetable crops, do not treat plants that are under extreme heat and drought stress.
	Texas	beet armyworm cabbage aphid cutworms diamondback moth moths cabbageworm diamond back beetle (adult)	2 lb/acre	Make no more than 6 applications per season. Do not apply within 21 days before harvest. Do not treat plants that are under extreme heat or drought stress. For best applications apply with a minimum of 5 gal of water per acre. Control may be reduced at low spray volumes. Tank mixing is recommended only if previous experience indicates that the combination will not result in phytotoxicity under the current conditions of use, and the other pesticides and spray equipment are registered for the use. Read and carefully follow all applicable directions, restrictions, and precautions on labeling for other products used in combination with Lorsban 50W.

\*Significant organophosphate resistance has been reported for diamondback moth populations in Texas. Lorsban 50W will not control organophosphate-resistant populations of diamondback moth. Contact your local extension service for resistance management information.

†For regional information regarding a specific tank mix, contact your local DowElanco representative. Tank mixes with Thiodan 3EC, Thiodan 50WP, or diazinon 40 are not recommended. Refer to the "General Information" section of this label for direction on testing tank mix compatibility.

Crop	Insects Controlled	Dosage Lorsban 50W	Restrictions
Almonds	newly orangeworm peach ring borer San Jose scale	4 lb/acre	Make only one dormant/delayed dormant spray application and no more than three foliar spray applications on almonds per season. One dormant/delayed dormant spray application and no more than two foliar spray applications on walnuts per season, and no more than three foliar spray applications on filberts per season. Do not apply within 14 days of harvest. Do not allow livestock to graze in treated orchards. Do not apply as a dormant spray application on almonds in the following counties in California: Butte, Colusa, Glenn, Sutter, Tehama, Yuba and Yuba.
Walnuts	codling moth walnut scale walnut husk fly	4 lb/acre	
Filberts	eye-spotted bud moth filbert aphid filbert leafminer filbertworm conquered leafroller American webber winter moth	3 - 4 lb/acre	
Pecans	black pecan aphid hickory shuckworm pecan leaf scorch mite (suppression)	2 lb/100 gal	Make no more than 5 applications per season. Do not apply within 28 days of harvest. Do not allow livestock to graze in treated orchards.
	pecan nut casebearer Phytophthora spp. leaf webworm springbug	1 lb/100 gal	
	fire ants and other ant species (orchard floor)	2 lb/acre	
Sour Cherries	borers (American plum lesser peachtree Pacific redbanded peach twig peachtree moth) candling cutworm green fruitworm leafrollers (nutlet conquered) (sawtooth) (redbanded) lesser spruceworm larched plant bug moth eye-spotted bud moth scale European fruit leucorum San Jose tent bug	2 - 3 lb/acre	Make no more than 8 applications per season. Do not apply within 14 days of harvest. Do not allow livestock to graze in treated orchards. In California, do not do work involving contact with trees within 2 days after treatment.  Do not use on sweet cherries.  Refer to the "Endangered Species Restrictions" section of this label for geographic restrictions on the use of Lorsban 50W on sour cherries.
	black cherry aphid cherry fruit fly plum curculio tree chaffer	3 lb/acre	

### Warranty Disclaimer

DowElanco warrants that the product conforms to the chemical description on the label and is "as represented" for the purposes stated on the label when used in strict accordance with the directions, subject to the inherent risks set forth below. DOWELANCO 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 the product. Crop injury, lack of performance, or other unintended consequences may result because of such factors as use of the product contrary to label restrictions including conditions noted on the label such as unfavorable temperatures, 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 DowElanco or the seller. All such risks shall be assumed by Buyer.

### Limitation of Remedies

The exclusive remedy for losses or damages resulting from the product including claims based on contract, negligence, strict liability or other legal theories, shall be limited to, at DowElanco's election, one of the following:

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

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

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

- Amendments:**
- 1) Revised "sale copy" to reflect use on vegetables.
  - 2) Edited text in "General Information" section.
  - 3) Brassica (cole crops): Deleted separate label instructions for Texas.
  - 4) Filberts: corrected misspelling of insect name.

Insert 1.

Crop	Insects Controlled	Dosage Lorsban 50W	Restrictions
brassica (cole): <del>broccoli</del> broccoli <del>Brussels sprouts</del> Brussels sprouts cabbage cauliflower collards <del>kale</del> kale kohlrabi	cabbage aphid cutworms imported cabbageworm striped flea beetle (adult) armyworms (including beet armyworm) diamondback moth <sup>1</sup>	2 lb/acre	Make no more than 6 applications per season. Do not apply within 21 days before harvest. To avoid phytotoxicity in brassica crops, do not treat plants that are under stress from extreme heat and/or lack of moisture. For aerial applications, apply in a minimum of 5 gal. of water per acre. Control may be reduced at low spray volumes. Tank mixing is recommended only if previous experience indicates that the combination will not result in phytotoxicity under the current conditions of use, and other pesticides and spray adjuvants are registered for this use. <sup>2</sup> Read and carefully follow all applicable directions, restrictions and precautions on labeling for other products used in combination with Lorsban 50W.

(Added crops in italics)