

# Existing Foundations: Chlorpyrifos Label Requirements

## The Label is the Law



**ODA Chlorpyrifos Workgroup**

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Rose Kachadoorian

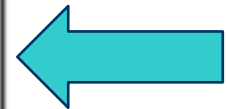
Pesticides Program

Oregon Department of Agriculture

**Dow AgroSciences\* / Lorsban Advanced  
(EPA Reg. No 62719-591)**

**RESTRICTED USE PESTICIDE**

For retail sale to and use only by Certified Applicators or persons under their direct supervision and only for those uses covered by the Certified Applicator's certification.



Dow AgroSciences

**Lorsban<sup>®</sup> Advanced**

**INSECTICIDE**

\* Corteva Agriscience United States

## **Dow AgroSciences / Lorsban Advanced (EPA Reg. No 62719-591)**

### **Hazard to Humans and Domestic Animals**

#### **WARNING**

- May Be Fatal If Swallowed , Causes Skin Irritation
- Causes Moderate Eye Irritation, Harmful If Inhaled
- Prolonged Or Frequently Repeated Skin Contact May Cause Allergic Reactions In Some Individuals
- Do not get on skin or on clothing. Avoid contact with eyes and breathing vapor or spray mist.
- Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet.

**Do not apply this product in a way that will contact workers or other persons, either directly or through drift.**

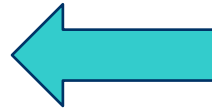
## **Personal Protective Equipment (PPE)**

**All other mixers, loaders, applicators and handlers must wear:**

- Coveralls over long-sleeved shirt and long pants
- Chemical-resistant gloves
- Chemical-resistant apron when mixing or loading or exposed to the concentrate
- Chemical-resistant footwear plus socks
- Chemical-resistant headgear for overhead exposure
- A NIOSH-approved dust mist filtering respirator with MSHA/NIOSH approval number prefix TC-21C or a NIOSH-approved respirator with any R, P, or HE filter.

## Dow AgroSciences / Lorsban Advanced (EPA Reg. No 62719-591)

### Environmental Hazards



Warnings and restrictions

- This pesticide is toxic to fish, aquatic invertebrates, small mammals and birds.
- Do not apply directly to water, or to areas where surface water is present, or to intertidal areas below the mean high water mark.
- Drift and runoff from treated areas may be hazardous to aquatic organisms in water adjacent to treated areas.
- Do not contaminate water when disposing of equipment washwaters or rinsate.
- This product is highly toxic to bees exposed to direct treatment or residues on blooming crops or weeds. Do not apply this product or allow it to drift to blooming crops or weeds if bees are visiting the treatment area.

## **Dow AgroSciences\* / Lorsban Advanced (EPA Reg. No 62719-591)**

### **Engineering Controls**

Mixers and loaders supporting aerial applications must use a mechanical transfer system that meets the requirements under WPS for dermal protection, & must:

- Wear PPE required above for mixers/loaders
- Wear protective eyewear if the system operates under pressure, and
- Be provided and have immediately available for use in an emergency, such as broken package, spill, or equipment breakdown: coveralls,
- chemical resistant footwear and chemical-resistant headgear if overhead exposure

## Crop Specific REIs (WPS) Rates Specific to Pests Detailed Use Instructions

### 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 spray using a total spray volume of 10 gpa or more using ground equipment.

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

Target Pests	Lorsban Advanced (pint/acre)
cutworm (1)	2 – 4
garden symphylans(2) mint root borer (3)	4

## 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 2 pint 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.



## Label Contains Many Restrictions

### Specific Use Restrictions:

**Preharvest Interval:** Do not apply within 90 days before harvest.

Make only one application of Lorsban Advanced 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 Advanced or other product containing chlorpyrifos per season.

**Dow AgroSciences\* / Lorsban Advanced  
(EPA Reg. No 62719-591)**

**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.

## Dow AgroSciences\* / Lorsban Advanced (EPA Reg. No 62719-591)

### Spray Drift Management – Aquatic Sites (label)

The following treatment setbacks or buffer zones must be utilized for applications **around the aquatic and wetland sites** 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

## Spray Drift Management - Sensitive Sites (Label)

- For airblast and other ground applications, the required set-back (buffer zone) between applications and sensitive sites is 10 (ten) feet.
  - This is regardless of application rate or nozzle droplet size.
- Variable for aerial applications.

Buffer distances are the distances in feet that must exist to separate sensitive sites from the targeted application site.

Buffers are measured from the edge of the sensitive site to the edge of the application site.

**Sensitive sites<sup>1</sup> are areas frequented by non-occupational bystanders (especially children).**

- Includes residential lawns, pedestrian sidewalks, outdoor recreational areas such as school grounds, athletic fields, parks, and all property associated with buildings occupied by humans for residential or commercial purposes.
- Homes, farmworker housing, or other residential buildings, schools, daycare centers, nursing homes, and hospitals.

Only pesticide handlers are permitted in the setback area during application of this product. Do not apply this product if anyone other than a mixer, loader, or applicator, is in the setback area.

Exception: Vehicles and persons riding bicycles that are passing through the setback area on public or private roadways are permitted.

<sup>1</sup>Regardless of whether people are present at the time of application.

# Buffers Next to Sensitive Sites (Label)

Application Rate (lb a.i./A)	Nozzle Droplet Type	Required Setback (Buffer Zones) (feet)		
		Aerial	Airblast	Ground
> 0.5 - 1	Coarse or very coarse	10	10	10
> 0.5 - 1	Medium	25	10	10
> 1 - 2	Coarse or very coarse	50	10	10
> 1 - 2	Medium	80	10	10

Note: The application rates listed in the first column are for pounds of active ingredient (a.i.) of chlorpyrifos per acre. 1.88 lbs of chlorpyrifos is equivalent to applying 2 quarts (4 pts) of Lorsban Advanced (EPA Reg. No. 62719-519).

## Synopsis of Buffers Currently in Effect for Chlorpyrifos

To Be Protected	Source	Required Setback (Buffer Zones) (feet)		
		Aerial	<u>Airblast</u> ***	Ground
People, Migrant Labor Housing*	Pesticide Label	10 - 80	10	10
Aquatic	Pesticide Label	150	50	25****
Salmonids	Court-Ordered**	300	60	60

\* Includes all listed sensitive sites

\*\* Neither ODA or EPA have the legal authority to enforce court-ordered buffers.

\*\*\* Airblast application equipment is most typically used in fruit orchards, hazelnuts, berry crops and some nurseries.

\*\*\*\* Does not include airblast

**Under WPS there is the Application Exclusion Zone (AEZ) for both on ag establish and off ag establishment.**

**Current proposal by EPA to eliminate the AEZ for off ag establishment.**

## Current AEZ, subject to change

EPA is proposing to eliminate references to droplet size, as well as off-ag establishment AEZ.

### Distance Requirements (Federal, not OR-OSHA)

Depending on application type, the size of the AEZ can range from 0 to 100 feet in all directions around the application equipment. Reference the table below for detailed guidance.

Cat.	Application Type	Spray Height	Distance Requirement
1	<ul style="list-style-type: none"><li>• Aerial ←</li><li>• Fumigant, smoke, mist or fog</li><li>• Air blast ←</li><li>• Spray with extra fine, very fine or fine droplets</li></ul>	Any	At least 100 feet in all directions <b>100 feet</b>
2	<ul style="list-style-type: none"><li>• Applications NOT listed in row 1</li></ul> <b>AND</b> <ul style="list-style-type: none"><li>• Spray with medium droplets (or larger)</li></ul>	Greater than 12 inches	At least 25 feet in all directions <b>25 feet</b>
3	Any other application type not described in rows 1 and 2	--	No AEZ required

On ag-establishment sensitive sites: The AEZ is larger than label buffers for aerial, airblast, and ground applications.



## OR-OSHA's Rule is More Protective than Federal Rule

The EPA rule requires that workers be evacuated to a distance of 100 feet from the spray equipment until the equipment has moved on. Since this AEZ is outside the treated area, the pesticide label's re-entry interval does not apply and workers can return immediately as soon as the equipment moves past.

By contrast, Oregon OSHA requires evacuation to 150 feet – 50 feet more than the EPA rule – when the pesticide applicator is required to use a respirator.

For most situations OR-OSHA also require evacuation to last at least 15 minutes after the spray equipment (aerially and air blast sprayer) has moved on, rather than end immediately, as is the case with the EPA rule.

When the pesticide applicator is required to use a respirator, the AEZ expands from 100 feet to 150 feet and people must evacuate – there is no option to stay indoors.

**Remember: All Pesticide Labels State:**

**Do not apply this product in a way that will contact workers or other persons, either directly or through drift.**

**Thank you**

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**Pesticides Program, Oregon  
Department of Agriculture**

The content in these slides do not represent all the restrictions on the Lorsban Advanced label, see entire label at: [https://www3.epa.gov/pesticides/chem\\_search/ppls/062719-00591-20131112.pdf](https://www3.epa.gov/pesticides/chem_search/ppls/062719-00591-20131112.pdf)

