

## 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**

**Dow AgroSciences LLC**

**9330 Zionsville Road**

**Indianapolis, IN 46268-1054 USA**

# Lorsban<sup>®</sup> Advanced

EPA Reg. No. 62719-591

**EPA 24(c) Special Local Need Registration SLN WA-090012**

**For Distribution and Use Only Within Clallam, Clark, Cowlitz, Grays Harbor, Jefferson, Kitsap, Lewis, Mason, Pacific, Pierce, Skagit, Skamania, Snohomish, Thurston, Wahkiakum and Whatcom Counties in the State of Washington**

### **Control of Listed Insects by Aerial Application (Helicopter Only) on Christmas Trees Plantations**

#### **Directions for Use**

- It is a violation of Federal law to use this product in a manner inconsistent with its labeling.
- This labeling must be in the possession of the user at the time of application.
- Read the label affixed to the container for Lorsban<sup>®</sup> Advanced insecticide before applying. Follow all applicable directions, restrictions, Worker Protection Standard requirements, and precautions on the EPA-registered label.
- Use of Lorsban Advanced according to this supplemental labeling is subject to all use precautions and limitations imposed by the label affixed to the container for Lorsban Advanced.

Apply Lorsban Advanced in a spray volume of not less than 2 gallons per acre for aerial application equipment (helicopter). Increase spray volume to ensure adequate coverage with increased density and height of crop canopy. Refer to the Spray Drift Precautions section and the recommendations for best management practices for aerial application on the label affixed to the container for Lorsban Advanced. Marking of swaths by flagging, permanent markers or use of GPS equipment is recommended.

<b>Target Pests</b>	<b>Lorsban Advanced (quart/acre)</b>
ants	1
aphids	
adelgids	
(cooley)	
(eastern spruce gall)	
Douglas fir needle	
midge	
European pine sawfly	
European pine shoot	
moth	
grasshoppers	
gypsy moth	
pales weevil (adult)	
pine needle midge	
pine spittlebug	
plant bugs	
spittlebugs	
spruce budworm	
spruce needleminer	
scale (1)	
(black pine)	
(pine needle)	
(pine tortoise)	
(spruce bud)	
(striped pine)	

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

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

1. For **scale control** apply when scale crawlers are active.

### **Specific Use Restrictions:**

- **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.
- Do not make more than two applications of Lorsban Advanced or other product containing chlorpyrifos per season.
- Do not make a second application of Lorsban Advanced or other product containing chlorpyrifos within seven days of the first application.
- Do not allow meat or dairy animals to graze in treated areas.
- **Chemigation:** For use under this SLN label, do not apply this product through any type of irrigation system.

### **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 Advanced 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:

<b>Application Method</b>	<b>Required Setback (Buffer Zone) (feet)</b>
aerial (helicopter)	300

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 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 supersede the mandatory label requirements.**

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

#### **Controlling Droplet Size:**

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

**Boom Length:** For some use patterns, reducing the effective boom length to less than 3/4 of the 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 1.5 mph due to variable wind direction and high inversion potential. **Note:** Local terrain can influence wind patterns. Every applicator should be familiar with local wind patterns and how they affect spray drift.

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

**Temperature Inversions:** 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:** Apply the pesticide only when the potential for drift to adjacent sensitive areas (e.g., residential areas, bodies of water, known habitat for threatened or endangered species, non-target crops) is minimal (e.g., when wind is blowing away from the sensitive areas).

**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 Advanced 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, it is recommended that a small block of plants be treated and observed 7 to 10 days for symptoms of phytotoxicity. **Note:** The user assumes responsibility for determining if it is safe to treat other conifer species with Lorsban Advanced under commercial growing conditions.

**WSDA Aquatic Advisory:** This pesticide is toxic to fish, aquatic invertebrates, small mammals and birds. Lorsban Advanced should not be used under this SLN label where impact on listed threatened or endangered species is likely. You may refer to the WSDA Endangered Species Program web site at <http://agr.wa.gov/PestFert/NatResources/EndangSpecies.aspx>, or contact the Washington Department of Fish & Wildlife, National Marine Fisheries Service (NOAA Fisheries) or US Fish & Wildlife Service for information regarding aquatic species listed as threatened or endangered. Consult the federal label for additional restrictions and precautions to protect aquatic organisms.

**WSDA Container Disposal Guidance:** Pesticide containers must be properly cleaned prior to disposal. The best time to clean empty pesticide containers is during mixing and loading because residue can be difficult to remove after it dries. Triple rinse (or pressure rinse) the pesticide container, empty all pesticide rinse water into the spray tank, and apply to a labeled crop or site. Recycling cleaned containers is the best method of container disposal. Information regarding the recycling of empty and cleaned plastic pesticide containers in Washington is available on the WSDA Waste Pesticide Program web site at <http://agr.wa.gov/PestFert/Pesticides/WastePesticide.aspx>. Cleaned containers may also be disposed of in a sanitary landfill if permitted by the county. Burning is not a legal method of container disposal in Washington.

Certain uses of chlorpyrifos may be restricted by a U.S. District Court final order. You may refer to the WSDA Endangered Species Program web site at <http://agr.wa.gov/PestFert/natresources/Buffers.aspx> for information regarding pesticides that are impacted by the final order.

**Expiration date:** This label for Lorsban Advanced expires and must not be distributed or used in accordance with this SLN registration after December 31, 2021.

®Trademark of The Dow Chemical Company ("Dow") or an affiliated company of Dow

R368-113

Approved: 01/23/17

Replaces R368-092