

COTTON - PREEMERGENT USE

General Information

DIRECTIONS FOR USE

RESTRICTED USE PESTICIDE

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

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.

Resistance

For resistance management, this product contains a Group 3A insecticide. Any insect population may contain individuals naturally resistant to this product and other Group 3A insecticides/acaricides. The resistant individuals may dominate the insect/mite population if this group of insecticides/acaricides are used repeatedly in the same fields. Appropriate resistance-management strategies should be followed.

To delay insecticide/acaricide resistance, take the following steps:

- Rotate the use of this product or other Group 3A insecticides/acaricides within a growing season, or among growing seasons, with different groups that control the same pests.
- Use tank mixtures with insecticides/acaricides from a different group that are equally effective on the target pest when such use is permitted.

Do not rely on the same mixture repeatedly for the same pest population.

Consider any known cross-resistance issues for the targeted pests between the individual components of a mixture. In addition, consider the following recommendations provided by the Insecticide Resistance Action Committee (IRAC):

- Individual insecticides selected for use in mixtures should be highly effective and be applied at the rates at which they are individually registered for use against the

target species.

- Mixtures with components having the same IRAC mode of action classification are not recommended for insect resistance management.
- When using mixtures, consider any known cross-resistance issues between the individual components for the targeted pest(s).
- Mixtures become less effective if resistance is already developing to one or both active ingredients, but they may still provide pest management benefits.
- The insect resistance management benefits of an insecticide mixture are greatest if the two components have similar periods of residual insecticidal activity. Mixtures of insecticides with unequal periods of residual insecticide activity may offer an insect resistance management benefit only for the period where both insecticides are active.
- Adopt an integrated pest management program for insecticide/acaricides use that includes scouting, uses historical information related to pesticide use, crop rotation, record keeping, and which considers cultural, biological and other chemical control practices.
- Monitor after application for unexpected target pest survival. If the level of survival suggests the presence of resistance, consult with your local university specialist or certified pest control advisor.
- Contact your local extension specialist or certified crop advisors for any additional pesticide resistance-management and/or IPM recommendations for the specific site and pest problems in your area. For further information or to report suspected resistance contact Loveland Products at 970-685-3300 or at www.lovelandproducts.com.

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.

BUFFER ZONES

Vegetative Buffer Strip

Construct and maintain a minimum 10-foot-wide vegetative filter strip of grass or other permanent vegetation between the field edge and down gradient aquatic habitat (such as, but not limited to, lakes, reservoirs, rivers, permanent streams, marshes or natural ponds; estuaries, and commercial fish farm ponds).

Only apply products containing cypermethrin (Holster® Insecticide) onto fields where a maintained vegetative buffer strip of at least 10 feet exists between the field and down gradient aquatic habitat.

For guidance, refer to the following publication for information on constructing and maintaining effective buffers:

Conservation Buffers to Reduce Pesticide Losses. Natural Resources Conservation Services. USDA, NRCS. 2000. Fort Worth, Texas. 21 pp.
https://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs143_023819.pdf

Buffer Zone for Ground Application (groundboom, overhead chemigation, or airblast) Do not apply within 25 feet of aquatic habitats (such as, but not limited to, lakes, reservoirs, rivers, permanent streams, marshes, natural ponds, estuaries, and commercial fish ponds).

Buffer Zone for ULV Aerial Application Do not apply within 450 feet of aquatic habitats (such as, but not limited to, lakes, reservoirs, rivers, permanent streams, marshes, natural ponds, estuaries, and commercial fish ponds).

Buffer Zone for Non-ULV Aerial Application Do not apply within 150 feet of aquatic habitats (such as, but not limited to, lakes, reservoirs, rivers, permanent streams, marshes, natural ponds, estuaries, and commercial fish ponds).

Additional Requirements for Ground Applications

Wind speed must be measured adjacent to the application site on the upwind side, immediately prior to application.

For ground boom applications, apply using a nozzle height of no more than 4 feet above the ground or crop canopy.

For airblast applications, turn off outward pointing nozzles at row ends and when spraying the outer two rows. To minimize spray loss over the top in orchard applications, spray must be directed into the canopy.

Additional Requirements for Aerial Applications

The spray boom should be mounted on the aircraft as to minimize drift caused by wingtip or rotor vortices. The minimum practical boom length should be used and must not exceed 75% of the wing span or 80% rotor diameter.

Flight speed and nozzle orientation must be considered in determining droplet size.

Spray must be released at the lowest height consistent with pest control and flight safety. Do not release spray at a height greater than 10 feet above the crop canopy unless a greater height is required for aircraft safety.

When applications are made with a cross-wind, the swath will be displaced downwind. The applicator must compensate for this displacement at the downwind edge of the application area by adjusting the path of the aircraft upwind.

CHEMIGATION USE DIRECTIONS

Apply this product only through sprinkler, including center pivot, lateral move, end tow, side (wheel) roll, traveler, big gun, solid set, or hand move irrigation systems. Do not apply this product through any other type of irrigation system. Do not connect an irrigation system (including greenhouse systems) used for pesticide application to a public water system. Crop injury, lack of effectiveness, or illegal residues in the crop can result from nonuniform distribution of treated water. If you have questions about calibration, you should contact State Extension Service specialists, equipment manufacturers, or other experts. A person knowledgeable of the chemigation system and responsible for its operation, or under the supervision of the responsible person, shall 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 backflow.

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 motor must include a functional pressure switch which 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.

Holster Insecticide should be applied continuously for the duration of the water application. Holster Insecticide should be diluted in sufficient volume to insure accurate application over the area to be treated. When using chemigation, a minimum of 0.5 inch per acre of irrigation water is recommended. Agitation is not required when a suitable diluent is used.

APPLICATION INSTRUCTIONS

Rotational Crops

Rotational crops may not be planted within 30 days after last application.

Use low rate under light to moderate infestation. Higher rates should be used under heavy insect pressure. The rate of application is variable according to insect pressure, timing of spray and field scouting.

Limitations, Restrictions, and Exceptions

Specific Crop Restrictions:

Maximum single application rate of 0.1 lbs a.i./A. The minimum re-treatment interval of 5 days.

Do not make more than 10 synthetic pyrethroid applications (of one product or combinations of products) to cotton in one growing season.

REMARKS

Use Holster Insecticide in the time period from 14 days prior to planting up to emergence of the crop. Apply as a broadcast spray by ground or air, banded (including T-band) or in-furrow spray using sufficient spray volume to achieve adequate coverage. Reduced volumes of water may be used with specialized equipment. Use a minimum of 1.0 gal of water/A by air. Use the higher rates of Holster Insecticide when incorporating into the soil.

Holster Insecticide may be applied in water or refined vegetable oil.

When water is used, apply a minimum of 1.0 gal of finished spray/A by air or 5.0 gals of finished spray with ground equipment. When applying in water by air, 1.0 qt of emulsified oil may be substituted for 1.0 qt of water in the finished spray. When using oil, use a minimum of 1.0 qt/A in the finished spray. Holster Insecticide may be injected into overhead sprinkler irrigation water provided 1) an anti-backflow check valve is present between the injection port and the water source, 2) a check valve is present in the line to prevent irrigation water from entering the chemical supply tank and 3) the injection system has interlocking on-off irrigation switches.

A maximum of 0.4 lb AI may be applied/A/season.

Do not graze or feed cotton for forage.

Method

[Broadcast/Foliar Air](#)

[Broadcast/Foliar Ground](#)

[In Furrow](#)

[Band](#)

[Broadcast/Foliar Air](#)

[Broadcast/Foliar Ground](#)

[In Furrow](#)

[Band](#)

Pre-Harvest Interval

14 days

Rates

[field_rates 0](#)

[field_rates 1](#)

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Restricted Entry Interval

12 hours

Timings

[Preemergence \(Crop\)](#)

[In the time period from 14 days prior to planting up to emergence of the crop.](#)