

# HOPS

## General Information

### PRODUCT INFORMATION

Read the entire Directions for Use and CONDITION OF SALE AND LIMITATION OF WARRANTY AND LIABILITY before using this product.

**Spray Volume** This product may be applied in a minimum of 10 gallons of spray solution per acre by ground sprayer, or in a minimum of 5 gallons of spray solution per acre by aircraft spray equipment. Check equipment calibration frequently. Complete coverage and uniform application are essential for the most effective results, especially when lower spray volumes are applied. If necessary increase the spray volume per acre for complete crop coverage.

**Chemigation:** Apply this product through irrigation equipment only to crops and diseases for which the chemigation use is specified. Apply this product only through center pivot, lateral move, end tow, side (wheel) roll, traveler, big gun, solid set, or hand move; or drip (trickle) irrigation systems. Do not apply this product through any other type of irrigation system. Crop injury, lack of effectiveness, or illegal pesticide residues in the crop can result from non uniform distribution of treated water. If you have questions about calibration you should 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 unless the pesticide label prescribed safety devices for public water systems are in place. 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. 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being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.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 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. Do not apply when wind speed favors drift beyond the area intended for treatment.

Maintain continuous agitation in mix tank during mixing and application to assure a uniform suspension. Allow sufficient time for pesticide to be flushed through all lines and all nozzles before turning off irrigation water. Pesticide may be applied continuously for the duration of the water application.

Mixing: Add labeled amount of this product into the spray tank while filling with water to the desired level. Operate the agitator while mixing. If other materials are added to the spray tank, this product should be thoroughly dispersed prior to the addition of other materials. Do not tank mix with products containing a prohibition against tank mixing. Follow the most restrictive labeling requirements of any tank mix product.

Compatibility: To determine the compatibility of this product with other products, the following procedure should be followed: Pour the recommended proportions of the products into a suitable container of water, mix thoroughly and allow to stand at least five minutes. If the combination remains mixed or can be re-mixed readily, the mixture is considered physically compatible. For further information contact your ALTITUDE CROP INNOVATIONS, LLC representative.

#### Resistance Management Statement

This product is a Group 3 fungicide which exhibits no known cross resistance to other fungicide groups. However fungal pathogens are known to develop resistance to products with the same mode of action when used repeatedly. Any fungal population may contain or develop individuals that are resistant to this product and other Group 3 fungicides. If Group 3 fungicides are used repeatedly in the same field or in successive years as the primary method of control for targeted diseases

the resistant isolates may eventually dominate the fungal population.

Because resistance development cannot be predicted the use of this product should conform to resistance management strategies established for the crop and use area. Such strategies may include rotation and/or tank mixing with products having different modes of action or limiting the total number of applications per season. Contact your local extension specialist certified crop advisor and/or manufacturer for fungicide resistance management and/or integrated disease management recommendations for specific crops and resistant disease populations.

ALTITUDE CROP INNOVATIONS, LLC encourages responsible resistance management to ensure effective long term control of the fungal diseases on the label.

### Limitations, Restrictions, and Exceptions

#### HOPS

Notes: Apply the specified dosage in a protective spray schedule to foliage. Repeat applications at 10 to 14 day intervals. This product may be applied up to 14 days before harvest. Increase the spray volume and the application rate as vine growth increases during the season.

Comments: For optimum results use as a preventative treatment. Begin applications as soon as crop and/or environmental conditions become favorable for disease development. The lowest recommended rate of a spray surfactant may be tank mixed with this product. This product must have two to four hours of drying time on foliage for the active ingredient to move systemically into plant tissue before rain or irrigation occurs. After this period of time this product will be resistant to weathering. This product is a demethylation inhibitor (DMI) fungicide (Group 3).

#### Method

[Broadcast/Foliar Air](#)

[Broadcast/Foliar Ground](#)

#### Pre-Harvest Interval

14 days

#### Rates

[field rates 0](#)

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Restricted Entry Interval

12 hours

Timings

As soon as crop and/or environmental conditions become favorable for disease development.