

## **PINE (SEEDLING - EXCEPT CALIFORNIA)**

### General Information

#### GENERAL INFORMATION

#### Mixing Procedures

Prepare no more spray mixture than is needed for the immediate operation. Thoroughly clean spray equipment before using this product. Agitation is necessary for proper dispersal of the product. Maintain agitation throughout the spraying operation. Do not let the spray mixture stand overnight in the spray tank. Flush the spray equipment thoroughly following each use and apply the rinsate to a previously treated area.

**ARMADA 50 WDG Alone:** Add 1/2 of the required water to the mix tank. With the agitator running, add the prescribed dose of ARMADA 50 WDG to the tank. Continue agitation while adding the remainder of the water. Begin application of the solution after ARMADA 50 WDG has completely dispersed into the mix water. Maintain agitation until all of the mixture has been applied.

**Resistance Management:** ARMADA 50 WDG contains the strobilurin class of chemistry, which exhibits no known cross-resistance to other chemical classes including sterol inhibitors, dicarboximides, benzimidazoles, anilinopyrimidines, or phenylamides. However, certain fungal pathogens are known to develop resistance to products used repeatedly. Because resistance development cannot be predicted, the use of this product should conform to resistance management strategies. Such strategies may include rotating and/or tank mixing with products having different modes of action; or limiting the total number of applications per season. Bayer encourages responsible product stewardship to ensure effective long-term control of the fungal diseases on the label. See specific recommendations in the turf section and the ornamentals section.

#### PLANT HEALTH

Apply ARMADA 50 WDG at 1.2 to 1.5 oz/1,000 sq ft to sod production of warm season grasses such as St. Augustine's, centipede, and Bermuda grass. The following plant health enhancements will be seen 30 to 60 days after application of

ARMADA 50 WDG; visible leaf greenness and density. Sod laid under shade trees also benefits in turf quality when this application is made prior to transfer. Apply ARMADA 50 WDG at 1.2-1.5 oz /1,000 sq ft 15-30 days pre-harvest for plant health benefits.

Refer to label for more informations.

#### Limitations, Restrictions, and Exceptions

Begin application prior to infection period and repeat as necessary at 14 to 21-day intervals depending upon disease pressure. Use lower rates in areas of low disease incidence and higher rates in areas of severe disease incidence. A maximum of 207.1 oz of ARMADA 50 WDG may be applied per acre per season. A spreader-sticker is needed to help adhere spray solution to the pine trees.

Do not apply ARMADA 50 WDG on recent grafted scions until one year after grafting.

#### Restrictions

1. For ground application, use a minimum of 50 gals of water/A.
2. For aerial application, use a minimum of 10 gals of water/A.
3. To avoid spray drift, do not apply when conditions favor drift beyond the target area. Avoid spray overlap. For information on spray equipment and calibration, consult sprayer manufacturers and state recommendations. For specific local directions and spray schedules, consult the current state agricultural experiment station recommendations.
4. Use of spray additives are not required. Any spray additive should be evaluated prior to use. Do not use in conjunction with organosilicate-based products, or plant injury may occur. Label directions are based on data with no additives.

#### Resistance Management for Ornamentals

ARMADA 50 WDG contains a modern, site-specific fungicide belonging to the strobilurin class of chemistry. Fungal pathogens are known to develop resistance to fungicides with a specific mode of action. When sitespecific fungicides are introduced without a clear resistance management strategy, resistance development may be rapid, particularly with greenhouse use.

ARMADA 50 WDG exhibits cross-resistance to other strobilurins and fungicides within the Strobilurin Type Action and Resistance group (STAR compounds), but there is no known cross-resistance to fungicides of other classes including sterol inhibitors, dicarboximides, benzimidazoles, anilinopyrimidines, phenylpyrroles, or phenylamides.

Many fungi which attack ornamentals and flowering plants including Botrytis and powdery mildews have a history of fungicide resistance development. Because resistance development cannot be predicted, implementation of suitable strategies to manage the resistance risk to ARMADA 50 WDG is needed. To minimize the risk of resistance development to ARMADA 50 WDG, the following practices are recommended.

1. Use ARMADA 50 WDG preventively.

2. For Leaf Spots and diseases other than Powdery Mildew, Downy Mildew, and Botrytis:

- Use no more than two (2) applications of ARMADA 50 WDG before rotating to another effective product that is not in the strobilurin class of chemistry for two (2) applications before rotating back to ARMADA 50 WDG.

OR

- Rotate to another fungicide of nonstrobilurin chemistry after each ARMADA 50 WDG application.

3. For Powdery Mildew, Downy Mildew, and Botrytis:

- Between each ARMADA 50 WDG application, make two (2) applications of a fungicide of nonstrobilurin chemistry before rotating back to ARMADA 50 WDG.

OR

- Rotate to another fungicide of nonstrobilurin chemistry after each ARMADA 50 WDG application.

4. Make no more than four (4) foliar applications of ARMADA 50 WDG per season for each at risk pathogen.

Method

[Foliar spray](#)

Rates

[field\\_rates 0](#)

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Restricted Entry Interval

12 hours

Exception: If the product is applied by drenching, the Worker Protection Standard, under certain circumstances, allows workers to enter the treated area if there will be no contact with anything that has been treated.

Timings

[Begin application prior to infection period.](#)