

# **BARLEY**

## General Information

### GENERAL INFORMATION

ABSOLUTE Maxx is a broad spectrum fungicide for the control of certain diseases of barley, corn, wheat, and grasses grown for seed. ABSOLUTE Maxx works by interfering with both energy and cell membrane production by plant pathogenic fungi.

UNDER CERTAIN CONDITIONS CONDUCIVE TO EXTENDED INFECTION PERIODS, ADDITIONAL FUNGICIDE APPLICATIONS BEYOND THE NUMBER ALLOWED BY THIS LABEL MAY BE NEEDED. UNDER THESE CONDITIONS, USE ANOTHER FUNGICIDE REGISTERED FOR THE CROP/DISEASE.

### RESISTANCE MANAGEMENT

The active ingredients in ABSOLUTE Maxx belong to two different chemistry classes. Tebuconazole belongs to the DMI (Group 3) class of chemistry which exhibits no known cross resistance to other chemical classes. Tebuconazole may exhibit cross resistance to other Group 3 fungicides, such as propiconazole and myclobutanil. Trifloxystrobin belongs to the QoI (Group 11) class of chemistry which exhibits no known cross-resistance to other chemical classes. Trifloxystrobin does exhibit crossresistance to other Group 11 fungicides, such as azoxystrobin, pyraclostrobin, and kresoxim-methyl. The NA-QoI Working Group has established the following general guidelines for the maximum number of applications of a Group 11-containing fungicide. In addition to that, the maximum number of applications may be restricted to a specific limit on a particular crop (see crop specific recommendations). Follow the specific crop recommendations that limit the total number of sprays on a crop and the required alternations with fungicides from other resistance management groups. In situations requiring multiple fungicide sprays, develop season-long spray programs for Group 11 containing fungicides. In programs in which pre-mixes of a Group 11 fungicide with a fungicide of another Group are utilized, the number of Group 11 fungicide QoI-containing applications should be no more than 1/2 of the total number of fungicide applications per season.

Fungal pathogens are known to develop resistance to products with the same mode of action when used repeatedly. 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 rotating and/or tank mixing with products having different modes of action or limiting the total number of applications per season. Bayer CropScience encourages responsible resistance management to ensure effective long-term control of the fungal diseases on this label.

## SPRAY EQUIPMENT

Thorough coverage is necessary to provide good disease control. Applications using sufficient water volume to provide thorough and uniform coverage generally provide the most effective disease control. For ground application equipment, a minimum of 10 gal/A is recommended. For aerial application equipment, a minimum of 2 gal/A is recommended.

### Broadcast Ground Sprayers

Equip sprayers with nozzles that provide accurate and uniform application. Be certain that nozzles are the same size and uniformly spaced across the boom. Calibrate the sprayer before use.

Use a pump with the capacity to: (1) maintain a minimum of 35 psi at nozzles, and (2) provide sufficient agitation in the tank to keep the mixture in suspension - this requires recirculation of 10% of the tank volume per minute. Use jet agitators or a liquid sparge tube for vigorous agitation.

Use screens to protect the pump and to prevent nozzles from clogging. Screens placed on the suction side of the pump should be 16-mesh or coarser. Do not place a screen in the recirculation line. Use 50-mesh screens at the nozzles. Check nozzle manufacturer's recommendations.

For information on spray equipment and calibration, consult sprayer manufacturer's and/or state recommendations. For specific local directions and spray schedules, consult the current state agricultural experiment station recommendations.

## AERIAL APPLICATION

Avoid application under conditions when uniform coverage cannot be obtained or when excessive spray drift may occur. Do not apply directly to humans or animals.

Not registered for aerial application in New York State.

## CHEMIGATION

Application Through Irrigation Systems (Chemigation) – Apply ABSOLUTE Maxx through irrigation equipment only to crops for which chemigation is specified on this label.

ABSOLUTE Maxx alone or in combination with other pesticides which are registered for application through irrigation systems, may be applied through irrigation systems. Apply this product only through center pivot, solid set, hand move, or moving wheel irrigation systems. Do not apply this product through any other type of irrigation system. 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.

## Operating Instructions

1. 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.
2. The pesticide injection pipeline must contain a functional, automatic, quick-closing check-valve to prevent the flow of fluid back toward the injection pump.
3. 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.
4. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.

5. 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.
6. 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.
7. Do not apply when wind speed favors drift beyond the area intended.

#### Center Pivot Irrigation Equipment

Notes: (1) Use only with drive systems which provide uniform water distribution. (2) Do not use end guns when chemigating ABSOLUTE Maxx through center pivot systems because of non-uniform application.

Determine the size of the area to be treated. Determine the time required to apply 1/8-1/2 inch of water over the area to be treated when the system and injection equipment are operated at normal pressures as recommended by the equipment manufacturer. When applying ABSOLUTE Maxx through irrigation equipment use the lowest obtainable water volume while maintaining uniform distribution. Run the system at 80-95% of the manufacturer's rated capacity. Using water, determine the injection pump output when operated at normal line pressure. Determine the amount of ABSOLUTE Maxx required to treat the area covered by the irrigation system. Add the required amount of ABSOLUTE Maxx and sufficient water to meet the injection time requirements to the solution tank. Make sure the system is fully charged with water before starting injection of the ABSOLUTE Maxx solution. Time the injection to last at least as long as it takes to bring the system to full pressure. Maintain constant solution tank agitation during the injection period. Continue to operate the system until the ABSOLUTE Maxx solution has cleared the sprinkler head.

#### Solid Set, Hand Move, and Moving Wheel Irrigation Equipment

When applying ABSOLUTE Maxx through irrigation equipment use the lowest obtainable water volume while maintaining uniform distribution. Determine the amount of ABSOLUTE Maxx required to treat the area covered by the irrigation system. Add the required amount of ABSOLUTE Maxx into the same quantity of

water used to calibrate the injection period. Operate the system at the same pressure and time interval established during the calibration. Stop injection equipment after treatment is completed. Continue to operate the system until the ABSOLUTE Maxx solution has cleared the last sprinkler head.

#### MIXING PROCEDURES

Prepare no more spray mixture than is needed for the immediate operation. Thoroughly clean spray equipment before using this product. Vigorous agitation is necessary for proper dispersal of the product. Maintain maximum 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.

**ABSOLUTE Maxx Alone:** Add approximately 1/2 of the required amount of water to the mix tank. With the agitator running, add the ABSOLUTE Maxx to the tank. Continue agitation while adding the remainder of the water. Begin application of the solution after the ABSOLUTE Maxx has completely and uniformly dispersed into the mix water. Maintain agitation until all of the mixture has been applied.

**ABSOLUTE Maxx + Tank Mix Partners:** Add approximately 1/2 of the required amount of water to the mix tank. Start the agitator running before adding any tank-mix partners. In general, tank-mix partners should be added in this order: products packaged in watersoluble packaging\*, wettable powders, wettable granules (dry flowables), liquid flowables such as ABSOLUTE Maxx, liquids, and emulsifiable concentrates. Always allow each tank-mix partner to become fully and uniformly dispersed before adding the next product. Provide sufficient agitation while adding the remainder of the water. Maintain agitation until all of the mixture has been applied.

\*Note: When using ABSOLUTE Maxx in tank mixtures, all products in watersoluble packaging should be added to the tank before any other tank-mix partner, including ABSOLUTE Maxx. Allow the water-soluble packaging to completely dissolve and the product(s) to completely disperse before adding any other tank-mix partner to the tank. If using ABSOLUTE Maxx in a tank mixture, observe all directions for use, crop/sites, use rates, dilution ratios, precautions, and limitations which appear on the tank-mix partner product label. No label dosage rate must be exceeded, and the most restrictive label precautions and limitations must be followed. This product must not be mixed with any product which prohibits such mixing. Tank mixtures or other applications of products referenced on this label are permitted only in those states in which the referenced products are registered.

ABSOLUTE Maxx is compatible with most insecticide, fungicide, and foliar nutrient products. However, the physical compatibility of ABSOLUTE Maxx with tank-mix partners should be tested before use. To determine the physical compatibility of ABSOLUTE Maxx with other products, use a jar test, as described below.

Using a quart jar, add the proportionate amounts of the products to 1 qt. of water. Add wettable powders and water-dispersible granular products first, then liquid flowables, and emulsifiable concentrates last. After thoroughly mixing, let stand for at least 5 minutes. If the combination remains mixed or can be remixed readily, it is physically compatible. Once compatibility has been proven, use the same procedure for adding required ingredients to the spray tank.

The crop safety of all potential tank mixes including additives and other pesticides on all crops has not been tested. Before applying any tank mixture not specifically recommended on this label, the safety to the target crop should be confirmed. To test for crop safety, apply ABSOLUTE Maxx to the target crop in a small area and in accordance with label instructions for the target crop.

#### RECOMMENDATIONS TO AVOID SPRAY DRIFT

Do not make applications when conditions favor drift beyond the target application area. When drift may be a problem, take measures to reduce drift, including:

1. Do not spray if wind speeds are or become excessive. Do not spray if wind speed is 15 mph or greater. If nontarget crops are located downwind, use caution when spraying if wind is present. Do not spray if winds are gusty.

2. Use caution when conditions are favorable for drift (high temperatures, drought, low relative humidity).

3. Do not apply when a temperature inversion exists. If inversion conditions are suspected, consult with local weather services before making an application.

## Limitations, Restrictions, and Exceptions

### BARLEY

#### Application Timing

Begin applications preventatively when conditions are favorable for disease development.

#### Notes

Absolute Maxx may be applied by ground, aerial or chemigation.

Restrictions: Do not apply within 40 days of harvest. For optimum disease control, the lowest labeled rate of a spray non-ionic surfactant (NIS) may be tank-mixed. For resistance management, do not apply more than 2 consecutive applications of a Group 11 or Group 11-containing fungicide per acre per year without alternation with at least 2 applications of fungicide from a different (not Group 11) mode of action.

Do not allow livestock to graze within the treated area within 30 days after application, and do not harvest the treated crop for forage within 30 days after application or for hay within 45 days after application.

#### Method

[Broadcast/Foliar Air](#)

[Broadcast/Foliar Ground](#)

#### Pre-Harvest Interval

40 days

#### Rates

[field\\_rates 0](#)

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Restricted Entry Interval

12 hours

Timings

[When conditions are favorable for disease development.](#)