

9.5"



STATE OF HAWAII  
Department of Agriculture

**ACCEPTED**

LICENSE NO. **9529.239**



**SERENADE<sup>®</sup>**  
**MAX**

*For Agricultural Use*

**ACTIVE INGREDIENT:**

QST 713 strain of *Bacillus subtilis*\* ..... **14.60%**

**OTHER INGREDIENTS:** ..... **85.40%**

\*Contains a minimum of 7.3 x 10<sup>9</sup> cfu/g

**TOTAL: 100.00%**

EPA Reg. No. 264-1151

**KEEP OUT OF REACH OF CHILDREN**  
**CAUTION**

*FOR ADDITIONAL PRECAUTIONARY STATEMENTS: See Inside Booklet.*

For **MEDICAL** And **TRANSPORTATION** Emergencies **ONLY**

Call 24 Hours A Day 1-800-334-7577

For **PRODUCT USE** Information Call 1-866-99BAYER (1-866-992-2937)

US0010-B-007

AQ1340-005

USE OF PRODUCT INDICATES ACCEPTANCE OF "CONDITIONS FOR SALE AND WARRANTY"

Produced for:

Bayer CropScience LP  
P.O. Box 12014, 2 T.W. Alexander Drive  
Research Triangle Park, North Carolina 27709

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Product of Mexico



**Can be Used for Organic Production**

US00000000A P130405A 04/13

4.625"

**FIRST AID**

<b>IF IN EYES:</b>	<ul style="list-style-type: none"> <li>• Hold eye open and rinse slowly and gently with water for 15 - 20 minutes.</li> <li>• Remove contact lenses, if present, after the first 5 minutes, then continue rinsing.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>
<b>IF ON SKIN OR CLOTHING:</b>	<ul style="list-style-type: none"> <li>• Take off contaminated clothing.</li> <li>• Rinse skin immediately with plenty of water for 15 - 20 minutes.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>
<b>IF INHALED:</b>	<ul style="list-style-type: none"> <li>• Move person to fresh air.</li> <li>• If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible.</li> <li>• Call a poison control center or doctor for further treatment advice.</li> </ul>
<p>In case of emergency call toll free the Bayer CropScience Emergency Response Telephone No. 1-800-334-7577. Have the product container or label with you when calling a poison control center or doctor, or going for treatment.</p>	

**PRECAUTIONARY STATEMENTS****HAZARDS TO HUMANS & DOMESTIC ANIMALS****CAUTION**

Causes moderate eye irritation. Harmful if absorbed through skin or inhaled. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals. Avoid contact with skin, eyes or clothing. Avoid breathing dust or spray mist. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Remove and wash contaminated clothing before reuse.

**ENVIRONMENTAL HAZARDS**

For terrestrial uses: Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment washwater or rinsate. Do not apply when weather conditions favor drift or run-off from treated areas.

**PERSONAL PROTECTIVE EQUIPMENT (PPE)**

The PPE requirements below apply to both Worker Protection Standard (WPS) uses (in general, agricultural-plant uses are covered by the Worker Protection Standard (40 CFR Part 170) and Non-WPS uses.

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Waterproof gloves
- Shoes plus socks

Mixers/loaders and applicators must wear a dust/mist filtering respirator meeting NIOSH standards of at least N-95, R-95, or P-95. Repeated exposure to high concentrations of microbial proteins can cause allergic sensitization.

Follow manufacturer's instructions for cleaning and maintaining PPE. If no instructions are available, use detergent and hot water for washables. Keep and wash PPE separately from other laundry.

**ENGINEERING CONTROLS**

When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(d)(4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

**IMPORTANT:** When reduced PPE is worn because a closed system is being used, handlers must be provided all PPE specified above for "applicators and other handlers" and have such PPE immediately available for use in an emergency, such as a spill or equipment break-down.

**USER SAFETY RECOMMENDATIONS****Users should:**

- Remove clothing/PPE immediately if pesticides get inside. Then wash thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

**DIRECTIONS FOR USE**

**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 State or Tribal agency responsible for pesticide regulation. For use only as described on this label. Not for isolation or deformulation. Do not culture.

### AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR Part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE) and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

**Do not enter or allow worker entry into treated areas during the restricted-entry interval (REI) of 4 hours.**

Exception: If the product is soil injected or soil incorporated, 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.

PPE required for early entry to treated areas (that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil or water) is:

- coveralls
- waterproof gloves
- shoes plus socks

### BASIC USE INFORMATION

Serenade® MAX is a broad spectrum, preventative product for the control or suppression of many important plant diseases. Apply Serenade MAX as a foliar spray alone, in alternating spray programs or in tank mixes with other registered crop protection products. Apply Serenade MAX as a soil drench alone or in tank mixes with other registered crop protection products. When conditions are conducive to heavy disease pressure, use Serenade MAX in a rotational program with other registered fungicides. Apply Serenade MAX with spray equipment commonly used for making ground or aerial applications and irrigation systems commonly used for chemigation. Heavy rainfall or irrigation shortly after application may require retreatment.

Serenade MAX is most effectively used in a preventive disease management program. For improved performance, use Serenade MAX in a tank-mix or rotational program with other registered fungicides. When using Serenade MAX alone for the first time, use a rate of 2 lb Serenade MAX per acre. Increase the application rate and/or decrease spray intervals of Serenade MAX according to the application

instructions depending upon disease pressure. To enhance performance, consider adding a surfactant, known to be safe to the target crop, to the spray tank to improve penetration and coverage of above-ground portions of the plant.

### INTEGRATED PEST MANAGEMENT (IPM)

Integrate Serenade MAX into an overall disease and pest management strategy whenever fungicide use is necessary. Follow practices known to reduce disease development. Consult local agricultural authorities for specific IPM strategies developed for your crop(s) and location.

Be sure use of this product conforms to resistance management strategies, which may include rotating and/or tank mixing with other products with different modes of action.

### USE RATE DETERMINATION

Carefully read and follow all label directions, use rates and restrictions. Application of Serenade MAX prior to or in the early stages of disease development provides the best control or suppression of the targeted plant disease. Use maximum label rates and shortened spray intervals for conditions conducive to threatening or rapid disease development. For proper application, determine the number of acres to be treated, the label use rate and select appropriate gallonage to give good canopy penetration and coverage of plant parts to be protected. Prepare only the amount of spray solution required to treat the measured acreage. Accurate spray equipment calibration is essential prior to use.

### PREHARVEST INTERVAL

Serenade MAX can be applied up to and on the day of harvest.

### APPLICATION INSTRUCTIONS

**SPRAY DRIFT:** Avoiding spray drift at the application site is the responsibility of the applicator. The interaction of many equipment- and weather-related factors determines the potential for spray drift. The applicator and the grower/treatment coordinator are responsible for considering all of these factors when making decisions. Where states have more stringent regulations, they should be observed.

**GROUND:** This product can be applied by commonly used ground equipment, such as hose-end, pressurized, greenhouse and hand-held sprayers. Consult spray nozzle and accessory catalogues for specific information on proper equipment calibration. Maintain agitation during mixing and application to assure uniform product suspension. Thorough coverage of all foliage is essential for effective disease control or suppression. Use the application rate, indicated for the appropriate crop in the Application Rate tables of this label, in sufficient water to achieve thorough coverage. Overall, to achieve good coverage, use proper spray pressure, gallonage per acre, nozzles, nozzle spacing and ground speed.

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**AERIAL:** This product can be applied by aerial application. Refer to the Aerial Drift Reduction Information section of this label for additional directions and precautions. Use the application rate indicated for the appropriate crop in the Application Rate tables of this label, in sufficient water to achieve thorough coverage, typically between 3 – 20 gallons of water per acre depending upon the crop. Three gallons of water per acre is the minimum.

**CHEMIGATION:** This product can be applied through sprinkler (center pivot, lateral move, end tow, side (wheel) roll, traveler, solid set, or hand move) or drip-type irrigation systems. Refer to the Chemigation Directions for Use section of this label for additional directions and precautions. Maintain agitation during mixing and application to assure uniform product suspension. Use the application rate, indicated for the appropriate crop in the Application Rate tables of this label, in sufficient water to achieve thorough coverage.

#### MIXING INSTRUCTIONS

**MIXING:** Serenade MAX must be diluted with water. Partially fill the spray tank with clean water and begin agitation. Add the specified amount of Serenade MAX to the tank. Finish filling the tank to the necessary volume to obtain the proper spray concentration. It is critical that the spray solution be agitated during mixing and application to assure a uniform suspension. Do not allow spray mixture to stand overnight or for prolonged periods. Maintain a spray solution pH between 4.5 and 8.5.

Serenade MAX may be tank mixed with other registered pesticides to enhance plant disease control or suppression. This product cannot be mixed with any product with a prohibition against such mixing. When tank mixing Serenade MAX with other registered pesticides, always read and follow all use directions, restrictions, and precautions of both Serenade MAX and the tank-mix partner(s). Use of the resulting tank mix must be in accordance with the more restrictive label limitations and precautions. Do not exceed label dosage rates.

**COMPATIBILITY:** Do not combine Serenade MAX in the spray tank with pesticides, surfactants or fertilizers if there has been no previous experience or use of the combination to show it is physically compatible, effective and non-injurious under your use conditions.

Serenade MAX is compatible with many commonly used pesticides, fertilizers, adjuvants and surfactants but has not been fully evaluated with all of these. To ensure compatibility of tank-mix combinations, evaluate them prior to use as follows: Using a suitable container, add proportional amounts of product to water. Add wettable powders first, followed by water dispersible granules, then by liquid flowables and lastly, emulsifiable concentrates. Mix thoroughly and let stand for at least five minutes. If the combination stays mixed or can be remixed, it is physically compatible. Test the

combination on a small portion of the crop to be treated to ensure that a phytotoxic response will not occur as a result of application.

**ADDITIVES:** Serenade MAX is compatible with a wide range of additives. Since the product is primarily a protectant, thorough coverage of all above-ground plant parts is required for effective product performance. To improve plant surface coverage, add a nonphytotoxic [adjuvant][surfactant] to spray tank.

#### CHEMIGATION DIRECTIONS FOR USE

##### BASIC REQUIREMENTS:

- 1) Apply this product only through sprinkler (including center pivot, lateral move, end tow, side (wheel) roll, traveler, solid set or hand move) or drip-type irrigation systems. Do not apply this product through any other type of irrigation system.
- 2) Crop injury or lack of effectiveness can result from non-uniform distribution of treated water.
- 3) Ensure that the irrigation system used is properly calibrated. If you have questions about calibration, you should contact State Extension Service specialists, equipment manufacturers or other experts.
- 4) 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.
- 5) 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 any necessary adjustments should the need arise.

##### REQUIREMENTS FOR CHEMIGATION SYSTEMS CONNECTED TO PUBLIC WATER SYSTEMS:

- 1) Public water supply means a system for the provision to the public of piped water for human consumption if such system has at least 15 service connections or regularly serves an average of at least 25 individuals daily at least 60 days out of the year.
- 2) Chemigation systems connected to the public water systems must contain a functional, reduced-pressure zone (RPZ), backflow preventer or the functional equivalent in the water supply line upstream from the point of pesticide introduction. As an option to the RPZ, the water from the public water system should be discharged into a reservoir tank prior to pesticide introduction. There shall be a complete physical break (air gap) between the flow outlet end of the fill pipe and the top or overflow rim of the reservoir tank of at least twice the inside diameter of the fill pipe.

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| <ol style="list-style-type: none"> <li>3) The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.</li> <li>4) The pesticide injection pipeline must 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.</li> <li>5) The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops, or in cases where there is no water pump, when the water pressure decreases to the point where pesticide distribution is adversely affected.</li> <li>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.</li> <li>7) Do not apply when wind speed favors drift beyond the area intended for treatment.</li> <li>8) Remove scale, pesticide residues, and other foreign matter from the chemical supply tank and entire injector system. Flush with clean water. Failure to provide a clean tank, void of scale or residues, may cause Serenade MAX to lose effectiveness or strength.</li> <li>9) Do not combine Serenade MAX with pesticides, surfactants or fertilizers for application through chemigation equipment unless prior experience has shown the combination physically compatible, effective and non-injurious under conditions of use. Serenade MAX has <u>not</u> been fully evaluated for compatibility with all of these. Conduct a spray compatibility test if mixture with other pesticides, surfactants or fertilizers is planned.</li> <li>10) Maintain agitation in the pesticide supply tank.</li> <li>11) Apply Serenade MAX during the last half of the water application.</li> <li>12) Dilute Serenade MAX in enough water to be able to draw through system for the last half of the water application.</li> </ol> | <ol style="list-style-type: none"> <li>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.</li> <li>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.</li> <li>4) The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.</li> <li>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.</li> <li>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.</li> <li>7) Do not apply when wind speed favors drift beyond the area intended for treatment.</li> <li>8) Remove scale, pesticide residues, and other foreign matter from the chemical supply tank and entire injector system. Flush with clean water. Failure to provide a clean tank, void of scale or residues, may cause Serenade MAX to lose effectiveness or strength.</li> <li>9) Do not combine Serenade MAX with pesticides, surfactants or fertilizers for application through chemigation equipment unless prior experience has shown the combination physically compatible, effective and non-injurious under conditions of use. Serenade MAX has <u>not</u> been fully evaluated for compatibility with all of these. Conduct a spray compatibility test if mixture with other pesticides, surfactants or fertilizers is planned.</li> </ol> |
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#### SPRINKLER CHEMIGATION REQUIREMENTS:

- 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 back flow.

#### CENTER PIVOT, LATERAL MOVE, END TOW, AND TRAVELER IRRIGATION EQUIPMENT (USE ONLY WITH ELECTRIC OR OIL HYDRAULIC DRIVE SYSTEMS THAT PROVIDE A UNIFORM WATER DISTRIBUTION):

- Determine size of area to be treated.
- Determine the time required to apply no more than 1/4 inch of water (6,750 gallons water per acre) over the area to be treated when the system and injection equipment are operated at normal pressures specified by the equipment manufacturer. Run system at 80 to 95% of manufacturer's rated capacity.

- Using only water, determine the injection pump output when operated at normal line pressure.
- Determine the amount of Serenade MAX fungicide required to treat area.
- Add required amount of Serenade MAX fungicide and sufficient water to meet the injection time requirements of the solution tank.
- Maintain constant solution tank agitation during the injection period.
- Stop injection equipment after treatment is completed. Continue to operate the system until Serenade MAX fungicide solution has cleared the sprinkler head.

#### **SOLID SET, SIDE (WHEEL) ROLL, AND HAND MOVE IRRIGATION EQUIPMENT:**

- Determine acreage covered by sprinkler.
- Fill injector solution tank with water and adjust flow rate to use contents over a 10- to 30-minute interval.
- Determine the amount of Serenade MAX fungicide required to treat area.
- Add the required amount of Serenade MAX fungicide into the same quantity of water used to calibrate the injection equipment.
- Maintain constant solution tank agitation during the injection period.
- Operate system at normal pressures specified by the manufacturer of the injection equipment and used for the time interval established during calibration.
- Inject Serenade MAX fungicide at the end of the irrigation cycle or as a separate application to maximize foliar fungicide retention.
- Stop injection equipment after treatment is completed. Continue to operate the system until Serenade MAX fungicide solution has cleared the last sprinkler head.

#### **DRIP CHEMIGATION REQUIREMENTS:**

- 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 back flow.
- 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) Remove scale, pesticide residues, and other foreign matter from the chemical supply tank and entire injector system. Flush with clean water. Failure to provide a clean tank, void of scale or residues, may cause Serenade MAX to lose effectiveness or strength.
- 8) Do not combine Serenade MAX with pesticides, surfactants or fertilizers for application through chemigation equipment unless prior experience has shown the combination physically compatible, effective and non-injurious under conditions of use. Serenade MAX has not been fully evaluated for compatibility with all of these. Conduct a spray compatibility test if mixture with other pesticides, surfactants or fertilizers is planned.
- 9) Maintain agitation in the pesticide supply tank.
- 10) Apply Serenade MAX during the last half of the water application.
- 11) Dilute Serenade MAX in enough water to be able to draw through system for the last half of the water application.

#### **AERIAL DRIFT REDUCTION INFORMATION**

**BASIC:** Avoiding spray drift at the application site is the responsibility of the applicator. The interaction of many equipment- and weather-related factors determines the potential for spray drift. The applicator and the grower/treatment coordinator are responsible for considering all these factors when making decisions. Where states have more stringent regulations, they should be observed.

**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 will reduce drift potential but will not prevent 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 specified pressures. For many nozzle types, lower pressure produces larger droplets. When high 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 that are oriented straight back produce the largest droplets and the lowest drift. Use medium or coarser spray according to the ASAE 572 definition for standard nozzles or VMD for spinning atomizer nozzles.

**BOOM WIDTH:** For aerial applications, the boom width must not exceed 75% of the wingspan or 90% of the rotary blade.

**APPLICATION HEIGHT:** Do not release spray at a height greater than 10 feet above the top of the ground or the crop canopy 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. If application includes a no-spray zone, do not release spray at a height greater than 10 feet above the ground or the crop canopy.

**SWATH ADJUSTMENT:** Use upwind swath displacement. When applications are made with a crosswind, the swath will be displaced downward. Therefore, on the upwind and downwind edges of the field, the applicator must 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:** Apply only when wind speed is 3 - 10 miles per hour (mph) as measured by an anemometer. Drift potential is lowest between wind speeds of 3 - 10 mph. Many factors, however, including

droplet size and equipment type, determine drift potential at any given speed. 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:** Do not apply 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:** The pesticide should only be applied when the potential for drift to adjacent, sensitive areas (e.g., residential areas, bodies of water, known habitat for threatened or endangered species, and land planted with nontarget crops) is minimal (e.g., when wind is blowing away from the sensitive areas). 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, nontarget crops, aquatic and wetland areas, woodlands, pastures, rangelands, or animals.

#### FOR USE AS A FOLIAR SPRAY ON SELECT AGRICULTURAL FIELD CROPS

Serenade MAX has a 0-Day PreHarvest Interval for all crops contained on this label.

Under moderate to severe disease pressure, for improved performance, increase rates and reduce spray intervals as stated or use Serenade MAX in a tank-mix or rotational program with other registered fungicides.

### Application Rates of Serenade MAX for Selected Field Crops

Crops	Disease	Rate (lb/acre)	Application Instructions
<b>Asparagus</b>	<b>Botrytis Blight</b> <i>Botrytis cinerea</i>	1 - 3	Begin applications soon after emergence and when conditions are conducive to disease development. Repeat on 7- to 10-day intervals or as needed. Serenade MAX may be applied up to and on the day of harvest.
<b>Berries</b> Blueberry Blackberry Raspberry Loganberry Huckleberry Cranberry Gooseberry Elderberry Currant and other berry crops	<b>Mummy Berry</b> <i>Monilinia vaccinii-corymbosi</i>  <b>Anthracnose Fruit Rot*</b> <i>Colletotrichum gloeosporioides</i>  <b>Botrytis Blight</b> <i>Botrytis cinerea</i>  <b>Alternaria Fruit Rot*</b> <i>Alternaria tenuissima</i>  <b>Bacterial Canker</b> <i>Pseudomonas</i> spp.  <b>*NOT FOR USE IN CALIFORNIA</b>	1 - 3	Mummy Berry - For control, begin applications at the bud break stage of development and repeat on 7- to 10-day intervals or as needed.  Bacterial Canker – Apply before fall rains and again during dormancy before spring growth. Apply throughout the growing season prior to disease development and repeat on 2- to 10-day intervals or as needed.  Alternaria and Anthracnose Fruit Rot - Begin applications at the first sign of disease or when conditions become conducive for disease development. Repeat on 7- to 10-day intervals or as needed.  Botrytis Blight – Begin applications prior to disease development and repeat on 2- to 10-day intervals or as needed. For improved performance of Serenade MAX, add a surfactant to the spray tank to enhance coverage.  Cranberries – Make applications to non-flooded fields only.  Serenade MAX may be applied up to and on the day of harvest.

Crops	Disease	Rate (lb/acre)	Application Instructions
<b>Brassica Leafy Vegetables (Cole Crops)</b> Broccoli Cabbage Cauliflower Brussels Sprouts Collards Kale Mustard Greens Kohlrabi and other brassica leafy vegetables	<b>Pin Rot Complex</b> <i>Alternaria/Xanthomonas</i> <b>Xanthomonas Leaf Spot</b> <i>Xanthomonas campestris</i> <b>Alternaria Leaf Spot</b> <i>Alternaria spp.</i> <b>Downy Mildew</b> <i>Peronospora parasitica</i> <i>Peronospora spp.</i> <b>Powdery Mildew</b> <i>Erysiphe polygoni</i>	1 - 3	<p>Pin Rot - For suppression, begin applications when environmental conditions are conducive to disease development and repeat on 2- to 10-day intervals or as needed. For improved performance, use Serenade MAX in a tank-mix or rotational program with other registered fungicides for Pin Rot control.</p> <p>For all other listed diseases - Begin applications soon after emergence or transplant and when conditions are conducive to disease development. Repeat on 3- to 10-day intervals or as needed.</p>
<b>Bulb Vegetables</b> Onion Garlic Shallots and other bulb vegetables (including those grown for seed production)	<b>Botrytis Neck Rot</b> <i>Botrytis spp.</i> <b>Botrytis Leaf Blight</b> <i>Botrytis squamosa</i> <b>Onion Purple Blotch</b> <i>Alternaria porri</i> <b>Onion Downy Mildew</b> <i>Peronospora destructor</i> <b>Downy Mildew</b> <i>Peronospora spp.</i> <b>Powdery Mildew</b> <i>Erysiphe spp.</i>	1 - 3	<p>Begin applications when environmental conditions are conducive to disease development and repeat on 7- to 10-day intervals or as needed.</p> <p>Apply sufficient water to provide complete coverage of plants. When conditions are conducive to rapid disease development, use Serenade MAX in a rotational program with other registered fungicides.</p>
	<b>Rust</b> <i>Puccinia porri</i>	1 - 3	<p>For suppression, begin applications when conditions are conducive to disease development and repeat on 7- to 10-day intervals or as needed. For improved performance, use Serenade MAX in a tank-mix or rotational program with other registered fungicides for Rust control.</p>

Crops	Disease	Rate (lb/acre)	Application Instructions
<b>Cereal Grains</b> Barley Corn Millet Oat Rice Rye Sorghum Triticale Wheat and other cereal grain crops	<b>Powdery Mildew*</b> <i>Erysiphe graminis</i> <b>Rust*</b> <i>Puccinia</i> spp. <b>Sheath Spot*</b> <i>Rhizoctonia oryzae</i> <b>Sheath Blight*</b> <i>Thanatephorus</i> <i>cucumeris</i> (Anamorph: <i>Rhizoctonia solani</i> ) <i>Thanatephorus kernel</i> <b>Bacterial Blight and Streak</b> <i>Xanthomonas</i> spp. <b>Brown Rot, Leaf Spots and Smuts</b> <i>Cercospora</i> spp. <i>Entyloma</i> spp. <i>Dreschlera</i> spp. <i>Cochliobolus</i> spp. <i>Ceratobasidium</i> spp. <b>*NOT FOR USE IN CALIFORNIA</b>	1 - 3	Begin applications when environmental conditions and plant stage are conducive to disease development. Repeat on 7- to 10-day intervals or as needed. Use the stated higher rates and shorter application intervals under heavy disease pressure.

Crops	Disease	Rate (lb/acre)	Application Instructions
<b>Citrus Fruit</b> Orange Grapefruit Lemon Tangerine Tangelo Pummelo and other citrus fruit	<b>Greasy Spot</b> <i>Mycosphaerella citri</i> <b>Post Bloom Fruit Drop</b> <i>Colletotrichum acutatum</i> <b>Scab</b> <i>Elsinoe fawcetti</i> <b>Melanose</b> <i>Diaporthe citri</i> <b>Alternaria Leaf Spot</b> <i>Alternaria alternata</i>	1 - 3	Greasy Spot - For suppression, begin applications at first new foliar flush, and repeat with subsequent new flushes. When conditions are conducive to rapid disease development, Serenade MAX must be used in a tank-mix program with other products registered for Greasy Spot, such as spray oil or copper-based fungicides, at labeled rates. Post Bloom Fruit Drop – For suppression, begin applications at early bloom and when conditions are conducive to disease development. Repeat on 7- to 10-day intervals or as needed. Utilize the shorter spray interval between applications if warm, wet conditions persist. Citrus Scab – For suppression, begin applications at first new foliar flush and repeat at petal fall and at 1/2 inch diameter fruit. Melanose – For suppression, begin applications at petal fall and repeat on 14- to 21-day intervals until fruit becomes resistant. Alternaria Leaf Spot – Begin applications when environmental conditions and plant stage are conducive to disease development. Repeat on 7- to 10-day intervals or as needed. For improved performance on Post Bloom Fruit Drop, Scab and Melanose, use Serenade MAX in a tank-mix or rotational program with other registered fungicides.
<b>Corn</b> Sweet Corn Popcorn Seed Corn Silage Corn Field Corn	<b>Common Rust</b> <i>Puccinia sorghi</i> <b>Southern Leaf Blight</b> <i>Bipolaris maydis</i> <i>Helminthosporium maydis</i> <i>Cochliobolus heterostrophus</i>	1 - 3	Begin applications when environmental conditions are conducive to disease development. Continue applications on 7- to 10-day intervals or as needed. Use the stated higher rates and shorter application intervals under heavy disease pressure.
<b>Nongrass Animal Feeds (Forage, Fodder, Straw, and Hay)</b> Clover Alfalfa and other nongrass animal feed crops (including those grown for seed production)	<b>White Mold*</b> <b>(Sclerotinia Stem Rot)</b> <i>Sclerotinia sclerotiorum</i>  <b>*NOT FOR USE IN CALIFORNIA</b>	1 - 3	For suppression of White Mold, begin applications soon after emergence or transplant and when conditions are conducive to disease development. Repeat on 7- to 10-day intervals or as needed.

Crops	Disease	Rate (lb/acre)	Application Instructions
<b>Cucurbit Vegetables</b> Cucumber Cantaloupe Melon Muskmelon Squash Watermelon and other cucurbit vegetables	<b>Powdery Mildew</b> <i>Erysiphe</i> spp. <i>Sphaerotheca</i> spp. <b>Gummy Stem Blight</b> <i>Didymella bryoniae</i> <i>Phoma cucurbitacearum</i> <b>Downy Mildew</b> <i>Pseudoperonospora cubensis</i> <b>Bacterial Fruit Blotch</b> <i>Acidovorax avenae</i>	1 - 3	Begin applications soon after emergence or transplant and when conditions are conducive to disease development. Repeat on 7- to 10-day intervals or as needed. When environmental conditions and plant stage are conducive to rapid disease development, use Serenade MAX in a rotational program with other registered fungicides.
<b>Fruiting Vegetables</b> Pepper Tomato Eggplant Ground Cherry Tomatillo Okra and other fruiting vegetables	<b>Bacterial Spot</b> <i>Xanthomonas</i> spp. <b>Target Spot</b> <i>Corynespora cassiicola</i>	1 - 3	Begin applications soon after emergence or transplant and when environmental conditions are conducive to disease development. Continue applications on 2- to 7-day intervals or as needed. When conditions are conducive to rapid disease development, for improved control, use Serenade MAX in a tank-mix program with copper-based bactericides, registered for control of Bacterial Spot and Target Spot, at labeled rates.
	<b>Bacterial Speck</b> <i>Pseudomonas syringae</i> pv. <i>tomato</i>	1 - 3	Begin applications soon after emergence or transplant and when environmental conditions are conducive to disease development. Continue applications on 2- to 7-day intervals or as needed. Use the stated higher rates when conditions are conducive to rapid disease development.
	<b>Early Blight</b> <i>Alternaria solani</i> <b>Late Blight</b> <i>Phytophthora infestans</i>	1 - 3	For suppression, begin applications when plants are 4 to 6 inches high. Repeat applications on 5- to 7-day intervals or as needed. For improved performance, use Serenade MAX in a tank-mix or rotational program with other registered fungicides. Use the stated shorter spray intervals under conditions conducive to rapid disease development.
	<b>Powdery Mildew</b> <i>Leveillula taurica</i> <i>Erysiphe</i> spp. <i>Oidiopsis taurica</i> <i>Sphaerotheca</i> spp.	1 - 3	For suppression, begin applications soon after emergence or transplant and continue on 7- to 10-day intervals or as needed. For improved performance, use Serenade MAX in a tank-mix or rotational program with other registered fungicides.
	<b>Gray Mold</b> <i>Botrytis cinerea</i>	1 - 3	Begin applications soon after emergence or transplant and repeat on 7- to 10-day intervals or as needed.

Crops	Disease	Rate (lb/acre)	Application Instructions
Grape	<b>Gray Mold</b> <i>Botrytis cinerea</i> <b>Sour Rot</b> [a complex of pathogens: <i>Aspergillus niger</i> , <i>Alternaria tenuis</i> , <i>Botrytis cinerea</i> , <i>Cladosporium</i> <i>herbarum</i> , <i>Rhizopus arrhizus</i> , <i>Penicillium</i> spp., and others]	1 - 3	Begin applications at bloom, before bunch closure, at veraison and preharvest. Apply in sufficient water to provide full coverage. Serenade MAX may be applied up to and on the day of harvest. For Table Grapes - After initiation of Berry set, it is encouraged to switch from Serenade MAX to Serenade ASO to avoid the potential for white deposits on fruit.
	<b>Powdery Mildew</b> <i>Uncinula necator</i>	1 - 3	Begin applications when new shoots are 1/2 to 1 1/2 inches long. Repeat when shoots are 3 to 5 inches long, when shoots are 8 to 10 inches long and then at 7- to 10-day intervals until disease conditions no longer exist. Use the stated higher rates and shorter intervals when conditions are conducive to rapid disease development. Apply in sufficient water to provide thorough coverage. For Table Grapes - After initiation of Berry set, it is encouraged to switch from Serenade MAX to Serenade ASO to avoid the potential for white deposits on fruit.
	<b>Downy Mildew</b> <i>Plasmopara viticola</i>	1 - 3	For suppression, apply at 10-inch shoot, then at 7- to 10-day intervals until bunch closure (berry touch). For improved performance, use Serenade MAX in a tank-mix or rotational program with other registered fungicides for Downy Mildew control. For Table Grapes - After initiation of Berry set, it is encouraged to switch from Serenade MAX to Serenade ASO to avoid the potential for white deposits on fruit.
	<b>Phomopsis</b> <i>Phomopsis viticola</i>	1 - 3	Begin applications when shoots are 1/2 to 1 inch long and repeat when shoots are 6 to 8 inches long.
	<b>Eutypa</b> <i>Eutypa lata</i>	2 - 5% w/v*	Apply solution to pruning wounds. Sanitation is critical. All wood from infected plants must be removed from the vineyard and destroyed (either buried or burned).

\*2 - 5% w/v rate (Serenade MAX to water) for this use only.

Crops	Disease	Rate (lb/acre)	Application Instructions
<b>Hop</b>	<b>Powdery Mildew</b> <i>Sphaerotheca macularis</i>	2 - 4 (lb/100 gal spray volume)	<p>Mix 2 – 4 lb of Serenade MAX per 100 gallons of water. Use the stated higher rates when moderate to high disease pressure is present or expected. Begin applications when environmental conditions are conducive to rapid disease development. Continue sprays at 7-day intervals or as needed. Coverage will vary with the size of the vines and the type of spray equipment. Apply adequate spray volume to achieve complete coverage. Maximum spray volume is 400 gallons per acre.</p> <p>Minimum spray volume for hop growth stages are as follows:  Emergence to training: Apply by ground equipment using a minimum spray volume of 20 gallons per acre.  Training to wire: Apply by ground equipment using a minimum spray volume of 50 gallons per acre.  Wire touch through harvest: Apply by ground equipment using a minimum spray volume of 100 gallons per acre. Consider higher water volumes to achieve thorough coverage after side arms develop.</p>
<b>Leafy Vegetables</b> Lettuce Celery Spinach Parsley Radicchio and other leafy vegetables (including those grown for seed production)	<b>Pink Rot</b> <i>Sclerotinia sclerotiorum</i> <b>Downy Mildew</b> <i>Bremia lactucae</i> <i>Peronospora</i> spp. <b>Powdery Mildew</b> <i>Erysiphe cichoracearum</i> <b>White Rust*</b> <i>Albugo occidentalis</i> <b>Bacterial Blight</b> <i>Xanthomonas campestris</i> <b>*NOT FOR USE IN CALIFORNIA</b>	1 - 3	<p>Pink Rot – Begin applications approximately 8 weeks before harvest and repeat on 14-day intervals. Apply Serenade MAX as a directed spray in sufficient water to ensure thorough coverage of the base of the plants and the surrounding soil surface. After applications, light irrigation will better incorporate Serenade MAX into the soil and may improve disease control.</p> <p>Downy Mildew / Powdery Mildew / White Rust- For suppression, begin applications when conditions are conducive to disease development. Repeat on 2- to 10-day intervals or as needed. For improved performance, use Serenade MAX in a tank-mix or rotational program with other registered fungicides for Downy Mildew, Powdery Mildew and White Rust control.</p> <p>Anthraxnose – For suppression, begin applications prior to disease development when environmental conditions and plant stage are conducive to rapid disease development. Repeat on 7- to 10-day intervals or as needed. Use the stated higher rates and shorter application intervals under heavy disease pressure.</p> <p>Bacterial Blight / Bacterial Leaf Spot- Begin applications when environmental conditions are conducive to disease development. Repeat on 2- to 10-day intervals or as needed.</p>

Crops	Disease	Rate (lb/acre)	Application Instructions
<b>Leafy Vegetables</b> Lettuce Celery Spinach Parsley Radicchio and other leafy vegetables (including those grown for seed production)	<b>Sclerotinia Head and Leaf Drop</b> <i>Sclerotinia</i> spp.	1 - 3	<p>For control of early Sclerotinia Head and Leaf Drop: Apply at planting or immediately following planting but prior to crop emergence as a 4- to 6-inch seed line treatment. Within 7 days of thinning, make a second application as a directed spray with multiple nozzles per each seed line in sufficient water to ensure thorough coverage of lower plant leaves and surrounding soil surface. Repeat applications on 10- to 14-day intervals if conditions for disease development persist. Use the stated higher rates under conditions conducive to moderate to severe disease pressure. After applications, light irrigation will better incorporate Serenade MAX into the soil and may improve disease control.</p> <p style="text-align: center;">OR</p> <p>For control of Sclerotinia Head and Leaf Drop: Within 7 days of thinning or transplanting, apply as a directed spray with multiple nozzles per each seed line in sufficient water to ensure thorough coverage of lower plant leaves and surrounding soil surface. Repeat applications on 10- to 14-day intervals if conditions for disease development persist. Use the stated higher rates under conditions conducive to moderate to severe disease pressure. After applications light irrigation will better incorporate Serenade MAX into the soil and may improve disease control.</p>
<b>Legume Vegetables (Succulent and Dried)</b> Beans Green Beans Snap Beans Shell Beans Soybeans Dry Beans Garbanzo Beans Lima Beans Peas Chick Peas Split Peas Lentils and other legume vegetables (including those grown for seed or oil production)	<b>Rust</b> <i>Uromyces appendiculatus</i>	1 - 3	For suppression, begin applications soon after emergence or transplant and when conditions are conducive to disease development. Repeat on 7- to 10-day intervals or as needed. For improved performance, use Serenade MAX in a tank-mix or rotational program with other registered fungicides for Rust control.
	<b>Rust</b> <i>Puccinia</i> spp. <i>manshurica</i>	1 - 3	Begin applications when environmental conditions and plant stage are conducive to disease development. Repeat on 7- to 10-day intervals or as needed. Use the stated higher rates and shorter application intervals under heavy disease pressure.
	<b>Damping-Off*</b> <i>Aphanomyces</i> spp. <b>*NOT FOR USE IN CALIFORNIA</b>	1 - 3	Begin applications soon after emergence or transplant and when conditions are conducive to disease development. Repeat on 7- to 10-day intervals or as needed.
	<b>White Mold (Sclerotinia Stem Rot)</b> <i>Sclerotinia sclerotiorum</i>	1 - 3	Begin applications soon after emergence or transplant and when conditions are conducive to disease development. Repeat on 7- to 10-day intervals or as needed. When conditions are conducive to rapid disease development, use Serenade MAX in a rotational program with other registered fungicides.

Crops	Disease	Rate (lb/acre)	Application Instructions
<b>Mint and other herbs/spices</b>	<b>Rust</b> <i>Puccinia menthae</i>	1 - 3	Begin applications soon after emergence and when conditions are conducive to disease development. Repeat on 7- to 10-day intervals or as needed. Use the stated higher rates and shorter application intervals under heavy disease pressure.
<b>Oilseed Crops*</b> Canola Castor Cotton Flax Rapeseed Safflower Sesame Sunflower and other oilseed crops (including those grown for seed or oil production)	<b>White Mold*</b> <b>(Sclerotinia Stem Rot)</b> <i>Sclerotinia sclerotiorum</i>  <b>*NOT FOR USE IN CALIFORNIA</b>	1 - 3	Begin applications soon after emergence and when conditions are conducive to disease development. Repeat on 7- to 10-day intervals or as needed. Use the stated higher rates and shorter application intervals under heavy disease pressure.  For suppression of White Mold, begin applications at the first sign of disease or when conditions become conducive for disease development. Repeat on 7- to 10-day intervals or as needed.
<b>Peanut</b> (including those grown for oil production)	<b>Early Leaf Spot</b> <i>Cercospora</i> spp. <i>Cercospora arachidicola</i> <b>Late Leaf Spot</b> <i>Cercosporidium personatum</i> <b>White Mold</b> <i>Sclerotinia sclerotiorum</i>	1 - 3	Begin applications when environmental conditions are conducive to disease development. Repeat applications on 14-day intervals or as needed.  For improved control of Leaf Spot diseases, use Serenade MAX in a tank-mix program with copper-based fungicides registered for control of Peanut Leaf Spot diseases. Peanut hay may be fed to livestock.

Crops	Disease	Rate (lb/acre)	Application Instructions
<b>Pome Fruit</b> Apple Crabapple Pear Quince Mayhaw and other pome fruit	<b>Fire Blight</b> <i>Erwinia amylovora</i>	2 - 3	<p>For suppression, begin applications at 1 – 5% bloom and repeat as needed to protect open, untreated blossoms when conditions favoring disease development are likely to occur. For maximum control, use Serenade MAX prior to and as close as possible to Fire Blight infection events. During periods of rapid bloom development and frequent infection periods, use 2- to 7-day spray intervals. After petal fall, continue applications on 7-day intervals while environmental conditions favor disease development.</p> <p>Apply in sufficient water to provide full coverage. For improved performance, use Serenade MAX in a rotational program with antibiotics registered for Fire Blight control, such as oxytetracycline or streptomycin.</p> <p>Proper orchard cultural practices are essential to eliminate Fire Blight-infected tissue from the orchard to assure good performance of any crop protection product. Care must be taken to remove and destroy dead and diseased wood from the orchard prior to and during the growing season.</p> <p>Use of Serenade MAX alone has not been shown to affect fruit finish. Use caution when selecting spray adjuvants. Select only those adjuvants, which through prior experience, do not affect fruit finish when combined with Serenade MAX.</p>
	<b>Scab</b> <i>Venturia</i> spp.	1 - 3	<p>For suppression, begin applications at green tip or when environmental conditions become favorable for primary Scab development and repeat on 7- to 10-day intervals or as needed. For improved performance, use Serenade MAX in a tank-mix or rotational program with other registered fungicides for Scab control.</p>
	<b>Brooks Spot*</b> <i>Mycosphaerella pomi</i> <b>Cedar Apple Rust*</b> <i>Gymnosporangium juniperi-virginianae</i> <b>Flyspeck*</b> <i>Schizothyrium pomi</i> <b>Sooty Blotch*</b> <i>Gloeodes pomigena</i> <b>Bot Rot*</b> <i>Botryosphaeria dothidea</i> <b>Bitter Rot*</b> <i>Colletotrichum</i> spp. <b>Bull's Eye Rot*</b> <i>Neofabraea</i> spp. <b>*NOT FOR USE IN CALIFORNIA</b>	1 - 3	<p>For control of Brooks Spot, Cedar Apple Rust, Flyspeck, Sooty Blotch, Bot Rot, Bitter Rot and Bull's Eye Rot: Begin applications pre-bloom when environmental conditions are conducive to disease development. Repeat applications at 7- to 14-day intervals or as needed. Apply in sufficient spray volume to ensure thorough coverage. Use the stated higher application rates and shorter spray intervals when conditions are conducive to rapid disease development or heavy disease pressure. For improved performance of Serenade MAX, add a surfactant, known to be safe to the target crop, to the spray tank to enhance coverage and wetting of plant surfaces. Serenade MAX may be applied up to and on the day of harvest (0-day PHI).</p>

Crops	Disease	Rate (lb/acre)	Application Instructions
<b>Pome Fruit (con't)</b> Apple Crabapple Pear Quince Mayhaw and other pome fruit	<b>Powdery Mildew</b> <i>Podospaera leucotricha</i>	1 - 3	Begin applications at tight cluster, or sooner, if conditions are conducive to disease development. Repeat applications through the second cover spray on 7- to 10-day intervals. Additional sprays beyond second cover may be needed on susceptible varieties or when environmental conditions are conducive to rapid disease development. Use the stated higher label rates and shorter spray intervals when conditions are conducive to rapid disease development.
<b>Root and Tuber Vegetables</b> Carrot Potato Sweet Potato Cassava Beets Ginger Horseradish Radish Ginseng Turnip and other root and tuber vegetables (including those grown for seed production)	<b>Black Rot/ Black Crown Rot</b> <i>Alternaria</i> spp.	1 - 3	Begin applications soon after emergence or transplant and when conditions are conducive to disease development. Repeat on 7- to 10-day intervals or as needed. Use the stated higher rates and shorter intervals when conditions are conducive to rapid disease development. Apply in sufficient water to provide thorough coverage.
	<b>Bacterial Leaf Blight</b> <i>Xanthomonas campestris</i> <b>Downy Mildew</b> <i>Peronospora</i> spp. <b>Powdery Mildew</b> <i>Erysiphe</i> spp. <b>White Mold</b> <i>Sclerotinia sclerotiorum</i> <b>Gray Mold</b> <i>Botrytis</i> spp.	1 - 3	Begin applications soon after emergence or transplant and when conditions are conducive to disease development. Repeat on 7- to 10-day intervals or as needed.  For suppression of White Mold, begin applications soon after emergence or transplant and when conditions are conducive to disease development. Repeat on 7- to 10-day intervals or as needed.
	<b>Aerial Stem Rot*</b> <i>Erwinia carotovora</i> <b>*NOT FOR USE IN CALIFORNIA</b>	1 - 3	For suppression, begin applications at the first sign of disease or when conditions become conducive for disease development. Repeat on 7- to 10-day intervals or as needed.

9.5"

Crops	Disease	Rate (lb/acre)	Application Instructions
<b>Root and Tuber Vegetables (con't)</b> Carrot Potato Sweet Potato Cassava Beets Ginger Horseradish Radish Ginseng Turnip and other root and tuber vegetables (including those grown for seed production)	<b>Early Blight</b> <i>Alternaria solani</i> <b>Late Blight</b> <i>Phytophthora infestans</i>	1 - 3	For suppression, begin applications soon after emergence and when conditions are conducive to disease development. Repeat on 5- to 7-day intervals or as needed. For improved performance, use Serenade MAX in a tank-mix or rotational program with other registered fungicides for Early and Late Blight control.

4.625"

Crops	Disease	Rate (lb/acre)	Application Instructions
<b>Stone Fruit</b> Apricot Cherry Nectarine Peach Plum Prune and other stone fruit	<b>Powdery Mildew</b> <i>Sphaerotheca pannosa</i> <i>Podosphaera clandestine</i> <i>Podosphaera</i> spp. <b>Bacterial Canker</b> <i>Pseudomonas</i> spp. <b>Brown Rot Blossom Blight</b> <i>Monilinia laxa</i> <b>Fruit Brown Rot</b> <i>Monilinia fructicola</i> <b>Gray Mold</b> <i>Botrytis cinerea</i> <b>Bacterial Leaf Spot/</b> <b>Bacterial Spot*</b> <i>Xanthomonas arboricola</i>  <b>*NOT FOR USE IN CALIFORNIA</b>	1 - 3	<p>Brown Rot Blossom Blight – Begin applications at early bloom and repeat through petal fall on 7-day intervals or as needed.</p> <p>Scab – Begin applications at petal fall and repeat on 7- to 10-day intervals or as needed.</p> <p>Bacterial Canker – Apply post harvest before fall rains and again during dormancy before spring growth.</p> <p>Powdery Mildew - For suppression, begin applications at popcorn stage and repeat on 7-day intervals or as needed.</p> <p>Bacterial Leaf Spot / Bacterial Spot - Begin applications at bud break and continue on 7- to 14-day schedule or as needed until harvest. During periods of rapid disease development and frequent infection periods, use Serenade MAX in a program with other registered antibiotics and/or copper bactericides. For improved performance of Serenade MAX, add a surfactant to the spray tank to enhance coverage.</p> <p>Anthraxnose and Fruit Brown Rot – For suppression, begin applications prior to disease development when environmental conditions and plant stage are conducive to rapid disease development. Repeat on 7- to 10-day intervals or as needed.</p> <p>For all other listed diseases – Begin applications prior to disease development when environmental conditions and plant stage are conducive to rapid disease development. Repeat on 7- to 10-day intervals or as needed.</p> <p>For all other listed diseases:</p> <p>Use the stated higher rates and shorter application intervals under heavy disease pressure. For improved performance, use Serenade MAX in a tank-mix or rotational program with other registered fungicides.</p> <p>Post-harvest disease protection – To aid in the control of post-harvest infections of Botrytis and Monilinia, apply Serenade MAX prior to harvest with sufficient water to thoroughly cover fruit. Apply on a 7-day schedule or as needed up until the time of harvest.</p> <p>Serenade MAX may be applied up to and on the day of harvest.</p>
<b>Strawberry</b>	<b>Powdery Mildew</b> <i>Sphaerotheca macularis</i> <i>Erysiphe</i> spp. <b>Anthraxnose</b> <i>Colletotrichum acutatum</i> <b>Botrytis</b> <i>Botrytis cinerea</i> <b>Gray Mold</b> <i>Botrytis</i> spp.	1 - 3	<p>Botrytis / Powdery Mildew - For suppression, begin applications at or before flowering and repeat on 7- to 10-day intervals or as needed through harvest. Use the stated higher rates and shorter application intervals under heavy disease pressure. For improved performance, use Serenade MAX in a tank-mix or rotational program with other registered fungicides for Powdery Mildew and Botrytis control.</p> <p>Anthraxnose – Begin applications prior to disease development and repeat on 7- to 10-day intervals or as needed. Use the stated higher rates and shorter application intervals under heavy disease pressure. For improved performance, use Serenade MAX in a tank-mix or rotational program with other registered fungicides. Thorough coverage is essential.</p> <p>Serenade MAX may be applied up to and on the day of harvest.</p>

Crops	Disease	Rate (lb/acre)	Application Instructions
<b>Tree Nuts</b> Almond Pistachio Pecan Walnut Filberts Chestnut Cashew Beechnut Butternut Macadamia and other tree nuts	<b>Walnut Blight</b> <i>Xanthomonas campestris</i> <b>Anthracnose</b> <i>Colletotrichum acutatum</i> <b>Bacterial Canker</b> <i>Pseudomonas syringae</i> <b>Shot Hole</b> <i>Wilsonomyces carpophilus</i> <i>Xanthomonas pruni</i> <i>Blumeriella gaapi</i> <i>Cercospora</i> spp. <b>Brown Rot</b> <i>Monilinia</i> spp.	1 - 3	<p>Walnut Blight – Begin applications no later than pistillate bloom and repeat on 3- to 10-day intervals or as needed. Apply in advance of rain for maximum protection. Under conditions conducive to heavy disease pressure, for improved control, use Serenade MAX in a tank-mix or rotational program with a copper-based bactericide registered for control of Walnut Blight.</p> <p>Anthracnose, Shot Hole and Brown Rot – For suppression, begin applications prior to disease development and repeat on 7- to 10-day intervals or as needed.</p> <p>Bacterial Canker – Begin applications prior to disease development and repeat on 7- to 10-day intervals or as needed. Use the stated higher rates and shorter application intervals under heavy disease pressure. For improved performance, use Serenade MAX in a tank-mix or rotational program with other registered fungicides.</p>
<b>Avocado</b> <b>Mango</b>	<b>Anthracnose</b> <i>Colletotrichum gloeosporioides</i> <i>Colletotrichum ananas</i> <b>Scab</b> <i>Sphaceloma perseae</i> <b>Bacterial Canker</b> <i>Xanthomonas campestris</i>	1 - 3	<p>Anthracnose and Scab - Begin applications at budbreak and repeat on 14- to 21-day intervals or as needed through harvest.</p> <p>Bacterial Canker – Begin applications when environmental conditions are conducive to disease development. Repeat on 7- to 10-day intervals or as needed.</p> <p>Serenade MAX may be applied up to and on the day of harvest.</p>

9.5"

Crops	Disease	Rate (lb/acre)	Application Instructions
<b>Papaya</b>	<b>Anthracnose</b> <i>Colletotrichum gloeosporioides</i> <i>Colletotrichum ananas</i> <b>Bacterial Canker</b> <i>Erwinia</i> spp.	1 - 3	Begin applications at flowering and repeat on 14- to 21-day intervals or as needed through harvest.
<b>Pineapple</b>	<b>Anthracnose</b> <i>Colletotrichum gloeosporioides</i> <i>Colletotrichum ananas</i>	1 - 3	Begin applications at flowering and repeat on 14- to 21-day intervals or as needed through harvest.
<b>Watercress</b>	<b>Cercospora Leaf Spot</b> <i>Cercospora</i> spp.	1 - 3	Begin applications when conditions are conducive to disease development. Continue applications on 7- to 10-day intervals or as needed.
<b>Grass Seed Production*</b> <b>Crops</b> Bluegrass Ryegrass Fescue Orchardgrass, and other grass grown for seed production	<b>Powdery Mildew*</b> <i>Erysiphe</i> spp. <b>Rust*</b> <i>Puccinia</i> spp.  <b>*NOT FOR USE IN CALIFORNIA</b>	1 - 3	Begin applications when environmental conditions and plant stage are conducive to disease development. Repeat on 7- to 10-day intervals or as needed. Use the stated higher rates and shorter application intervals under heavy disease pressure.

4.625"

## STORAGE AND DISPOSAL

Do not contaminate water, food, or feed by storage and disposal.

**PESTICIDE STORAGE:** Store in a dry area inaccessible to children. Store in original container only. Keep container closed when not in use.

**PESTICIDE DISPOSAL:** To avoid waste, use all material in this container by application according to label directions. If wastes cannot be avoided, offer remaining product to a waste disposal facility or pesticide disposal program (often such programs are run by state or local governments or by industry).

**CONTAINER HANDLING:**

**For all nonrefillable, plastic bags:**

Nonrefillable container. Do not reuse or refill this container. Completely empty bag into application equipment. Then offer for recycling if available, or dispose of empty bag in a sanitary landfill or by incineration. Do not burn, unless allowed by state and local ordinances. If burned, stay out of smoke.

## CONDITIONS FOR SALE AND WARRANTY IMPORTANT: READ BEFORE USE

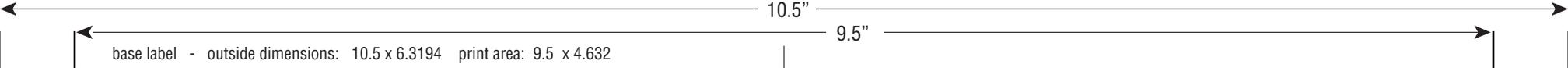
Read the entire Directions for Use, Conditions, Disclaimer of Warranties and Limitations of Liability before using this product. If terms are not acceptable, return the unopened product at once for a refund of the purchase price.

By using this product, user or buyer accepts the following Conditions, Disclaimer of Warranties, and Limitations of Liability. These terms may only be modified by a written document signed by a duly authorized representative of Bayer CropScience LP.

**CONDITIONS:** The directions for use of this product are believed to be adequate and must be followed carefully. However, it is impossible to eliminate all risks associated with the use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as weather conditions, presence of other materials, or the manner of use or application, all of which are beyond the control of Bayer CropScience LP. All such risks shall be assumed by the user or buyer.

**DISCLAIMER OF WARRANTIES:** TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, BAYER CROPSCIENCE LP MAKES NO OTHER WARRANTIES, EXPRESS OR IMPLIED, OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE OR OTHERWISE, THAT EXTEND BEYOND THE STATEMENTS MADE ON THIS LABEL. No agent of Bayer CropScience LP is authorized to make any warranties beyond those contained herein or to modify the warranties contained herein. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, BAYER CROPSCIENCE LP DISCLAIMS ANY LIABILITY WHATSOEVER FOR SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT.

**LIMITATIONS OF LIABILITY:** TO THE EXTENT CONSISTENT WITH APPLICABLE LAW THE EXCLUSIVE REMEDY OF THE USER OR BUYER FOR ANY AND ALL LOSSES, INJURIES OR DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, WHETHER IN CONTRACT, WARRANTY, TORT, NEGLIGENCE, STRICT LIABILITY OR OTHERWISE, SHALL NOT EXCEED THE PURCHASE PRICE PAID, OR AT BAYER CROPSCIENCE LP'S ELECTION, THE REPLACEMENT OF PRODUCT.



Back Panel - remains affixed to the container. EPA Est. No. and Lot No. will be added by codifier at time of labeling.

Lot No.:

EPA Est. No.:

NET WEIGHT: **12 lbs.** (5.44kg.)



**For Agricultural Use**

**ACTIVE INGREDIENT:**  
QST 713 strain of *Bacillus subtilis*\* ..... **14.60%**  
**OTHER INGREDIENTS:** ..... **85.40%**  
\*Contains a minimum of 7.3 x 10<sup>9</sup> cfu/g **TOTAL: 100.00%**

EPA Reg. No. 264-1151

**KEEP OUT OF REACH OF CHILDREN  
CAUTION**

*FOR ADDITIONAL PRECAUTIONARY STATEMENTS: See Attached Booklet.*

For **MEDICAL** And **TRANSPORTATION** Emergencies **ONLY** Call 24 Hours A Day 1-800-334-7577  
For **PRODUCT USE** Information Call Call 1-866-99BAYER (1-866-992-2937)

FIRST AID	
<b>IF IN EYES:</b>	<ul style="list-style-type: none"> <li>Hold eye open and rinse slowly and gently with water for 15 - 20 minutes.</li> <li>Remove contact lenses, if present, after the first 5 minutes, then continue rinsing.</li> <li>Call a poison control center or doctor for treatment advice.</li> </ul>
<b>IF ON SKIN OR CLOTHING:</b>	<ul style="list-style-type: none"> <li>Take off contaminated clothing.</li> <li>Rinse skin immediately with plenty of water for 15 - 20 minutes.</li> <li>Call a poison control center or doctor for treatment advice.</li> </ul>
<b>IF INHALED:</b>	<ul style="list-style-type: none"> <li>Move person to fresh air.</li> <li>If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible.</li> <li>Call a poison control center or doctor for further treatment advice.</li> </ul>

In case of emergency call toll free the Bayer CropScience Emergency Response Telephone No. 1-800-334-7577.  
Have the product container or label with you when calling a poison control center or doctor, or going for treatment.

**PRECAUTIONARY STATEMENTS**

**HAZARDS TO HUMANS & DOMESTIC ANIMALS**  
**CAUTION**  
Causes moderate eye irritation. Harmful if absorbed through skin or inhaled. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals. Avoid contact with skin, eyes or clothing. Avoid breathing dust or spray mist. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Remove and wash contaminated clothing before reuse.

**FOR ADDITIONAL PRECAUTIONARY STATEMENTS:** See attached label booklet: Environmental Hazards, Personal Protective Equipment (PPE), and User Safety Recommendations

**DIRECTIONS FOR USE: See attached booklet.**  
**It is a violation of Federal law to use this product in a manner inconsistent with its labeling.**

**STORAGE AND DISPOSAL**

Do not contaminate water, food, or feed by storage and disposal.

**PESTICIDE STORAGE:** Store in a dry area inaccessible to children. Store in original container only. Keep container closed when not in use.

**PESTICIDE DISPOSAL:** To avoid wastes, use all material in this container by application according to label directions. If wastes cannot be avoided, offer remaining product to a waste disposal facility or pesticide disposal program (often such programs are run by state or local governments or by industry).

**CONTAINER HANDLING:**  
**For all nonrefillable, plastic bags:**  
Nonrefillable container. Do not reuse or refill this container. Completely empty bag into application equipment. Then offer for recycling if available, or dispose of empty bag in a sanitary landfill or by incineration. Do not burn, unless allowed by state and local ordinances. If burned, stay out of smoke.

Bayer CropScience LP  
P.O. Box 12014, 2 T.W. Alexander Drive  
Research Triangle Park, North Carolina 27709  
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**Can be Used for Organic Production**

**Bayer**

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