Actinovate® SP

Biological fungicide

ATTENTION:

This specimen label is provided for general information only.

- This pesticide product may not yet be available or approved for sale or use in your area.
- It is your responsibility to follow all Federal, state and local laws and regulations regarding the use of pesticides.
- Before using any pesticide, be sure the intended use is approved in your state or locality.
- Your state or locality may require additional precautions and instructions for use of this product that are not included here.
- Monsanto does not guarantee the completeness or accuracy of this specimen label. The information found in this label may differ from the information found on the product label. You must have the EPA approved labeling with you at the time of use and must read and follow all label directions.
- You should not base any use of a similar product on the precautions, instructions for use or other information you find here.
- Always follow the precautions and instructions for use on the label of the pesticide you are using.

ACTIVE INGREDIENT: (% w/w)	
Streptomyces lydicus WYEC 108*	0.037%
OTHER INGREDIENTS	99.963%
TOTAL	100.000%

*End-use product contains not less than 10 million (1 X 10^7) colony forming units per gram [cfu/g] *Streptomyces lydicus* WYEC 108

Keep Out of Reach of Children

CAUTION

See complete label for additional precautionary statements, first aid, complete directions for use and warranty.

For product use information call: 1-877-775-8787

For Medical, Transportation, Spill, or Other Emergencies Call Collect 24 Hours a Day 1-314-694-4000

FIRST AID	
IF IN EYES:	• Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. • Call a poison control center or doctor for treatment advice.
IF INHALED:	• Move person to fresh air. • If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth if possible. • Call a poison control center or doctor for further treatment advice.
IF ON SKIN OR CLOTHING:	• Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15 – 20 minutes. • Call a poison control center or doctor for treatment advice.
IF SWALLOWED:	• Call a poison control center or doctor immediately for treatment advice. • Have person sip a glass of water if able to swallow. • Do not induce vomiting unless told to do so by a poison control center or doctor. • Do not give anything by mouth to an unconscious person.

HOTLINE NUMBER

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. In case of an emergency involving this product, or for medical assistance, call collect day or night: 1-314-694-4000.

EPA Reg. No.: 524-641

PRECAUTIONARY STATEMENTS
HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION

Avoid contact with eyes, skin, 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.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Applicators and other handlers must wear:

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

Mixer/loaders and applicators must wear a NIOSH-approved particulate respirator with any R or P filter with NIOSH approval number prefix TC-84A; or a NIOSH-approved powered air purifying respirator with an HE filter with NIOSH approval number prefix TC-21C. Repeated exposure to high concentrations of microbial proteins can cause allergic sensitization.

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

ENGINEERING CONTROLS

When handlers use closed systems or enclosed cabs in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides, 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 breakdown.

USER SAFETY RECOMMENDATIONS

Users should:

- Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. As soon as possible, wash thoroughly and change into clean clothing.

ENVIRONMENTAL HAZARDS

For terrestrial uses: Do not apply directly to water, 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. Cover or collect product spilled during use.

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.

Manufactured for:
Monsanto Company
800 N. Lindbergh Blvd.
St. Louis, Missouri 63167

OMRI LISTED For Organic Use

VALENT®

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 (REI). 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 four (4) hours.

Exception: If the product is 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 into 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
- Chemical-resistant gloves (made of any waterproof material)
- Shoes plus socks

Non-Agricultural Use Requirements

The requirements in this box apply to uses of the product that are NOT within the scope of the Worker Protection Standard for agricultural pesticides (40 CFR Part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries or greenhouses.

Keep unprotected persons out of treated areas until sprays have dried.

Keep unprotected persons out of treatment area until seeds have dried or have been packaged.

PRODUCT INFORMATION:
Actinovate® SP is a biological fungicide/bactericide for the suppression or control of a broad range of soil-borne and foliar diseases across multiple crops. The active ingredient in Actinovate® SP is a microbe that colonizes the root system and foliage of the plant releasing metabolites and protects it from harmful bacteria and fungi.

Plants and turf treated with Actinovate® SP as a soil drench will become hardier, more vigorous and will have a robust and protected root system.

INTEGRATED PEST MANAGEMENT (IPM):
Users may integrate Actinovate® SP into an overall disease and pest management strategy whenever fungicide/bactericide 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.

USE INFORMATION:
Since Actinovate® SP contains live spores of a microbe, best results will be obtained if the product is used prior to disease onset or in the early stages of disease development. Actinovate® SP becomes active when the temperature is above 45ºF and is less effective at cooler temperatures. Actinovate® SP can be applied to sterilized or fumigated soil, but it must be applied after the sterilization is complete or the fumigant has dissipated.

For best results, apply to damp soil. Always follow good agricultural practices, including but not limited to, crop rotation, planting resistant varieties, sanitation, irrigation, and fertility management. If high pest pressure is anticipated, tank mix higher rates of Actinovate® SP with another pesticide labeled for use on the target pest and shorten spray interval (within the label limits).

PREHARVEST INTERVAL:
Actinovate® SP can be applied up to and including the day of harvest.

RESTRICTIONS AND LIMITATIONS:
Do not tank mix Actinovate® SP with chlorinated water, quaternary ammonia, or hydrogen peroxide.

APPLICATION DIRECTIONS:
Carefully read and follow all label directions, use rates, and restrictions. For best results for the labeled plant diseases, apply Actinovate® SP prior to or in the early stages of disease development. Prepare only the amount of product to treat the measured area. Product should be used promptly after opening the package. Apply any unused product within 4 months of opening and before the expiry date. Accurate spray equipment calibration is essential prior to use. Use the higher labeled application rates when weather conditions are expected to be conducive for disease development, if the field has a history of disease problems.

Foliar Applications for Plant Diseases:
Since Actinovate® SP contains live spores of a microbe, best results will be obtained if the product is used prior to disease onset or in the early stages of disease development. Actinovate® SP becomes active on the plant foliage when the temperature is above 45ºF and is less effective at cooler temperatures.

For proper foliar application, determine the number of acres or square feet to be treated and the specified label use rate, and select the appropriate gallonage to give thorough and uniform coverage of all plant parts to be protected. Mix with 10 to 150 gallons of water per acre (for use in California, mix with 20 to 150 gallons of water per acre). Apply initial application prior to disease onset or in the early stages of disease development. This product can be used in all types of ground spray equipment.

Soil or Planting Medium Applications for Plant Diseases:
Since Actinovate® SP contains live spores of a microbe, best results will be obtained if the product is used prior to disease onset or in the early stages of disease development. Actinovate® SP becomes active in soil when the temperature is above 45ºF and is less effective at cooler temperatures. This product can be applied to sterilized or fumigated soil, but it must be applied after the sterilization is complete or the fumigant has dissipated.

For proper soil or planting medium application, determine the number of acres or square feet to be treated and the specified label use rate, and select the appropriate gallonage to give good saturation of the soil in order for the product to establish itself on the root system. For best results, apply product solution to damp soil or planting medium. Maintaining moist soil or planting medium after application will enable the product to perform as expected.

- **Soil Surface (Drench) Applications:** Use at planting, seeding, transplant or any stage of growth. Apply finished spray mixture at a rate to thoroughly soak the planting medium or soil through the root zone, as a drench or directed spray using hand-held, mechanical or motorized spray equipment.
- **Soil Treatment Through Irrigation:** This product may be used in drip, overhead, or other irrigation systems listed in the "Chemigation" section at any stage of plant growth as a soil treatment. See "Chemigation" section for additional information.
- **In-Furrow Applications (not for use in California):** Apply as an in-furrow spray in the required amount of water per acre for the crop at planting. Mount the spray nozzle so the spray is directed in the furrow just before the seeds are covered.

Cutting or Bare-Rooted Transplant Dip: Dip cuttings or transplants in the dry powder of Actinovate® SP or in a solution of 6-18 oz of (California rate is 18 oz) Actinovate® SP and 50 gallons water. If desired, let soak for up to three hours prior to planting. Plant treated cuttings or transplants in potting mix or soil in the usual manner.

Ornamental Bulbs, Corms, Tubers, Rhizomes or Seeds:

- **Dusting (not for use in California):** Prior to planting or shipping, evenly dust at a rate of 2-6 oz. of Actinovate® SP per 100 lb of bulbs, corms, tubers, rhizomes, or seeds.
- **Soak:** For US states except California, soak bulbs, corms, tubers, or rhizomes in solution of Actinovate® SP at 6-18 oz per 100 lb of bulbs, corms, tubers, or rhizomes. For use in California, soak bulbs, corms, tubers, or rhizomes in solution of Actinovate® SP at 18 oz per 100 lb. Dilute in enough water to thoroughly cover all surfaces of bulbs, corms, tubers, or rhizomes with solution for 1 hour prior to planting.

Compatibility:
Actinovate® SP may be used in combination (e.g., tank mixed or dry mixed) with many other products including: chemical fungicides, insecticides, inoculants, and fertilizers. If tank mixes are desired, observe the most restrictive directions, precautions and limitations on labeling of all products used. Consult manufacturer for compatibility questions and pre-check for compatibility as appropriate. Do not apply soil fumigants to areas treated with Actinovate® SP. If fumigants must be applied to the soil, the fumigant must be completely dissipated prior to applying this product.

Mixing Instructions:
Actinovate® SP is completely soluble and does not require agitation to keep suspended in a solution. Use spray mixture within 4 hours.

GREENHOUSE AND NURSERY, TURF, GOLF COURSE CHEMIGATION

General Requirements:

- Apply Actinovate® SP only through 1) overhead boom and mist-type systems; 2) sprinklers such as impact or micro-sprinklers, central pivot, lateral move, end tow, side (wheel) roll, traveler, solid set, or hand-move systems; 3) pressurized drench (flood) or drip (trickle) systems; 4) micro irrigation such as spaghetti tube or individual tube irrigation; 5) hand-held calibrated irrigation equipment such as hand-held wand with injector; and 6) ebb and flow 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 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.

Requirements for Chemigation Systems Connected to Public Water Systems:

1) Public water system 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 public water systems must contain a functional, reduced-pressure zone, back flow preventer (RPZ) 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.
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.
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.
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.
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 for treatment.
8) Continuous agitation is not required in pesticide supply tanks unless tank mixing with other products or fluid fertilizers that require it.
9) Application of the product may be made continuously for the duration of the water application or can be applied at the end or after the water application.
10) To mix in supply tank, fill tank half way with water and add product. Stir until completely dissolved. Fill tank with remaining amount of water.
11) Use appropriate amount of water so as not to create excessive leaching or runoff.

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.
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 that 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 for treatment.
8) Continuous agitation is not required in pesticide supply tanks unless tank mixing with other products or fluid fertilizers that require it.
9) Application of the product may be made continuously for the duration of the water application or can be applied at the end or after the water application.
10) To mix in supply tank, fill tank half way with water and add product. Stir until completely dissolved. Fill tank with remaining amount of water.
11) Use appropriate amount of water so as not to create excessive leaching or runoff.

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 that 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) Use of a supply tank is recommended. Continuous agitation is not required in pesticide supply tanks unless tank mixing with other products or fluid fertilizers that require it.
8) Application of the product may be made continuously for the duration of the water application or can be applied at the end or after the water application.
9) To mix in supply tank, fill tank half way with water and add product. Stir until completely dissolved. Fill tank with remaining amount of water.
10) Use appropriate amount of water so as not to create excessive leaching or runoff.

Flood Chemigation Requirements:
1) Systems using a gravity flow pesticide dispensing system must meter the pesticide into the water at the head of the field and downstream of a hydraulic discontinuity such as a drop structure or weir box to decrease potential for water source contamination from back flow if water flow stops.
2) Systems utilizing a pressurized water and pesticide injection system must meet the following requirements:
   a. 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.
   b. The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.
   c. 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.
   d. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.
   e. The irrigation line or water pump must include a functional pressure switch that will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.
   f. 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.
3) Use of a supply tank is recommended. Continuous agitation is not required in pesticide supply tanks unless tank mixing with other products or fluid fertilizers that require it.
4) Application of the product may be made continuously for the duration of the water application or can be applied at the end or after the water application.
5) To mix in supply tank, fill tank half way with water and add product. Stir until completely dissolved. Fill tank with remaining amount of water.
6) Use appropriate amount of water so as not to create excessive leaching or runoff.

GREENHOUSE AND NURSERY CROP, ORNAMENTAL LANDSCAPE OR INTERIORSCAPE SOIL APPLICATION

Diseases	Application Instructions
Suppression or Control of: *Aphanomyces, Armillaria, Fusarium, Phytophthora, Pythium, Rhizoctonia, Sclerotinia*,* and *Verticillium**	***Soil drench:*** Mix 4-6 oz (for California, use rate is 6 oz) of Actinovate® SP in 100 gallons of water to create solution. Apply solution as a drench to plants/ growing media at a rate of 1 gallon per cubic foot of growing media. This equates to enough solution to saturate soil without creating runoff. For smaller quantities: Use 1 teaspoon of Actinovate® SP per 2 gallons of water to create solution and apply as indicated immediately above. ***Application to soil at blending (Not for use in California):*** Any time prior to planting, incorporate Actinovate® SP into potting soil as a spray during blending. Use 1.5-4 oz of this product in an appropriate amount of water per yard of soil. ***Hydroponics systems (not for use in California):*** Use 0.5–1.5 oz per 1,000 square feet of growing area.
Actinovate® SP can be applied through low pressure watering nozzles such as fan nozzles, through overhead boom type sprayers or sprinklers, hydroponics systems, injectors, flood benches or other drench watering systems.	

* Not for use in California.

GREENHOUSE AND NURSERY CROP, ORNAMENTAL LANDSCAPE AND INTERIORSCAPE FOLIAR SPRAYS

For indoor and outdoor applications including field stock and field grown cut flowers

Diseases	Application Instructions
For Suppression or Control of: Powdery Mildew, Downy Mildew*, *Botrytis, Sclerotinia*, Xanthomonas,* and *Alternaria**	Apply 6–12 oz of Actinovate® SP per acre. Mix Actinovate® SP in 50–100 gallons of water and apply to foliage and blossoms every 7 to 14 days depending on disease pressure. Crop size, spray equipment, and local practices will determine the volume of water needed. Spray to wet, but do not allow runoff. ***For smaller quantities* (not for use in California):** Use 1 teaspoon of Actinovate® SP per gallon of water as a dilution and apply as indicated immediately above.
Actinovate® SP can be applied using hand-held backpack or ground spray equipment. Clean application equipment before use of this product and use prepared sprays within 4 hours of preparation. For best results, use a non-ionic spreader-sticker in conjunction with application. Consult manufacturer or sales representative for specific suggestions.	

* Not for use in California.

APPLICATIONS TO ORNAMENTAL BULBS, CORMS, TUBERS, RHIZOMES, AND SEEDS

Region	Application Instructions
All US states except CA	***Soak:*** Soak bulbs, corms, tubers, or rhizomes in solution of Actinovate® SP at 6–18 oz per 100 lb. Dilute in enough water to completely cover bulbs, corms, tubers, or rhizomes. Thoroughly cover all surfaces with solution for 1 hour prior to planting. ***Soil drench:*** Apply to soil through irrigation or as an in-furrow seed spray in 10–200 gallons of water at a rate of 6–12 oz of Actinovate® SP per acre. ***Dusting:*** Prior to planting or shipping, evenly dust bulbs, corms, tubers, rhizomes, or seeds at a rate of 2–6 oz of Actinovate® SP per 100 lb.
CA	***Soak:*** Soak bulbs, corms, tubers, or rhizomes in solution of Actinovate® SP at 18 oz per 100 lb. Dilute in enough water to completely cover bulbs, corms, tubers, or rhizomes. Thoroughly cover all surfaces with solution for 1 hour prior to planting.

SPECIFIC USE DIRECTIONS

TURF GRASS APPLICATIONS

Turf grass Use Sites and Varieties	Diseases Suppressed or Controlled	Rate	Application Instructions
Use Sites: Turf Grass including golf courses, sod farms, commercial and residential lawns, cemeteries, and sports fields **Varieties:** Bluegrass Bentgrass Bermuda grass (Common & Hybrid) Dichondra Fescue Orchard grass *Poa annua* St. Augustine Ryegrass Zoysia Mixtures and other grasses or ornamental turf	**Brown Patch** *Rhizoctonia solani* **Dollar Spot** *Lanzia* spp. *Moellerodiscus* spp. (formerly *Sclerotinia homeocarpa*) **Gray Leaf Spot** *Pyricularia grisea* **Gray Snow Mold** *Typhula* spp. **Pink Snow Mold** *Microdochium nivale* **Powdery Mildew** *Erysiphe graminis* **Rust** *Puccinia* spp. **Slime Molds** *Mucilago* and *Physarum* **Take-All Patch** *Gaeumannomyces graminis*	18-54 oz/ acre (0.5 – 1.25 oz per 1,000 sq ft)	Apply at a 7- to 24- day interval through season or until soil temperatures fall to 45°F or lower. Under moderate to severe disease pressure, increase rates and reduce spray intervals or use in a tank mix or rotational program with other registered fungicides. Consider use of a soil surfactant to best move the solution to the root zone of the turf. Consult manufacturer for product suggestions. Drench Applications: Mix 18-54 oz of Actinovate® SP with appropriate amount of water (100-150 gallons per acre of turf grass). *Initial Application or Problem Areas:* Apply at a rate of 54 oz of Actinovate® SP per acre of turf grass. *Maintenance:* Apply at a rate of 18 oz of Actinovate® SP per acre of turf grass. Spray Applications: Mix 18-54 oz of Actinovate® SP with appropriate amount of water (50-150 gallons per acre of turf grass). Apply at *initial application* or *maintenance rates* as above in early morning or evening, preferably on wet turf. Water in immediately after application with sprinklers for 3-6 minutes. For Smaller Quantities: *Initial Application or Problem Areas:* Use 1.25 oz of Actinovate® SP in 5 gallons of water per 1,000 sq ft of turf grass. *Maintenance:* Use 0.5 oz of Actinovate® SP in at least 2 gallons of water per 1,000 sq ft of turf grass.

APPLICATION CHART FOR SOIL DRENCH & FOLIAR SPRAY ON LANDSCAPE & INTERIORSCAPES

Actinovate® SP has no Pre-Harvest Interval. Under moderate to severe disease pressure, increase rates and reduce spray intervals or use Actinovate® SP in a tank mix or rotational program with other registered fungicides.

Crops	Foliar Disease Suppressed or Controlled	Soil Diseases Suppressed or Controlled	Rate	Application Instructions
Interiorscape plants and trees **Outdoor landscape ornamental plants, fruit trees, and community vegetable gardens**	**Botrytis** *Botrytis cinerea* **Downy Mildew** *Peronospora* spp. **Leaf spots** *Alternaria* spp. **Powdery mildew** *Erysiphe* spp. *Oidium* spp. *Podosphaera* spp. *Sphaerotheca* spp. *Phytophthora* spp.	*Pythium* spp. *Phytophthora* spp. *Fusarium* spp. *Rhizoctonia* spp. *Verticillium* *Sclerotinia*	3-12 oz/100 gal water (foliar use); 4-6oz/100 gal water (soil use)	**Foliar Spray:** Apply Actinovate® SP at rates ranging from 3-12 oz of product in 100 gallons of water per acre. For smaller quantities use 1-2 tsp in 2 gallons water). Make applications on a 3- to 14-day schedule. Begin applications when conditions favor disease development prior to the onset of disease. When conditions favor severe disease development, shorten the spray interval or use a higher rate. Spray plants thoroughly wet to runoff. **Soil Application:** Apply Actinovate® SP at rates ranging from 4-6 oz of product in 100 gallons of water. Apply as a soil drench to base of plant and/or root ball until soil is saturated without runoff. Reapply every 4-12 weeks depending on disease pressure.

Storage and Disposal

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

PESTICIDE STORAGE:
Store in original container away from feed and food. Store in a cool, dry place, between 40°F and 77°F. Do not store in direct sunlight and keep away from heat sources. Keep from overheating or freezing. Product should be used promptly after opening the package. Apply any unused product within 4 months of opening and before the expiry date.

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:
Nonrefillable container. Do not reuse or refill this container. Completely empty container into application equipment. Then offer for recycling if available, or dispose of empty container in a sanitary landfill or by incineration.

LIMITS OF LIABILITY AND WARRANTY

Monsanto Company warrants that this product is reasonably fit for the purposes set forth in the DIRECTIONS FOR USE ("Directions") when used in accordance with those Directions under the conditions described therein. This warranty is also subject to the inherent risks, conditions and limitations stated herein. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, NO OTHER EXPRESS WARRANTY OR IMPLIED WARRANTY OF FITNESS FOR PARTICULAR PURPOSE, INFRINGEMENT (ALONE OR IN COMBINATION WITH OTHER REGISTERED PRODUCTS) OR MERCHANTABILITY IS MADE.

To the extent consistent with applicable law, buyer and all users are responsible for all loss or damage from use or handling of the product that results from conditions beyond the control of Monsanto Company, including, but not limited to, crop injury, ineffectiveness due to such factors as weather conditions at planting, environmental conditions during seed storage, presence of other materials, seed of low quality or low vigor or low germination, or other unintended consequences that may result because of the manner of use or application inconsistent with that set forth in the Directions.

Monsanto Company does not warrant any product reformulated or repackaged from this product except in accordance with Monsanto Company's stewardship requirements and with Monsanto Company's express written permission.

TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE LIMIT OF THE LIABILITY OF MONSANTO COMPANY OR ANY OTHER SELLER FOR ANY AND ALL LOSSES, INJURIES OR DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT (INCLUDING CLAIMS BASED IN CONTRACT, NEGLIGENCE, STRICT LIABILITY, OTHER TORT OR OTHERWISE) SHALL BE THE PURCHASE PRICE PAID BY THE USER OR BUYER FOR THE QUANTITY OF THIS PRODUCT INVOLVED, OR, AT THE ELECTION OF MONSANTO COMPANY OR ANY OTHER SELLER, THE REPLACEMENT OF SUCH QUANTITY, OR, IF NOT ACQUIRED BY PURCHASE, REPLACEMENT OF SUCH QUANTITY. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, IN NO EVENT SHALL MONSANTO COMPANY OR ANY OTHER SELLER OF THE PRODUCT BE LIABLE FOR ANY INCIDENTAL, CONSEQUENTIAL, PUNITIVE OR SPECIAL DAMAGES.

Upon opening and using this product, buyer and all users are deemed to have accepted the terms of this LIMITS OF LIABILITY AND WARRANTY that may not be varied by any verbal or written agreement. If terms are not acceptable, return at once unopened.

114041T1-08

EPA Reg. No.: 524-641

Manufactured for:
Monsanto Company
800 N. Lindbergh Blvd.
St. Louis, Missouri 63167

OMRI LISTED For Organic Use

VALENT®