# Actinovate® Lawn & Garden

For Residential/Home and Garden Use



### 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.

#### **ENVIRONMENTAL HAZARDS**

To protect the environment, do not allow pesticide to enter or run off into storm drains, drainage ditches, gutters or surface waters. Applying this product in calm weather when rain is not predicted for the next 24 hours will help to ensure that wind or rain does not blow or wash pesticide off the treatment area. Rinsing application equipment over the treated area will help avoid runoff to water bodies or drainage systems.

#### **DIRECTIONS FOR USE**

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

#### PRODUCT INFORMATION

Actinovate® Lawn & Garden is a fungicide/bactericide for the suppression or control of root rot, damping-off, club root, and certain turf and foliar diseases. The active ingredient in Actinovate® Lawn & Garden is a microbe that, when applied, colonizes the root system (when soil applied) and foliage of the plant when sprayed on, releasing metabolites and protects it from harmful bacteria and fungi. Actinovate® Lawn & Garden uses several novel modes of action to protect plants and lawns. Actinovate® Lawn & Garden may be used on all labeled vegetables, fruits, and nuts (including tomatoes, peppers, melons, carrots, broccoli, lettuce, onions, apples, pears, and walnuts), in addition to annual and perennial bedding plants and flowers, roses, potted flowers, foliage plants, trees, shrubs and lawns located in non-commercial greenhouses and home landscapes. Plants and turf treated with Actinovate® Lawn & Garden as a soil drench will become hardier and more vigorous.

#### DISEASES SUPPRESSED OR CONTROLLED

Soil Diseases When Watered in:

Root Rot and Damping-Off in ornamentals & vegetables

(Pythium spp., Phytophthora spp., Rhizoctonia spp., Fusarium spp.)

Turf Brown Patch (Rhizoctonia spp.)

Turf Dollar Spot\* (Sclerotinia spp.)

Turf Take-All Patch\* (Gaeumannomyces graminis)

Club Root (Plasmodiophora brassicae)

Gray Snow Mold\* (Typhula spp.)

Pink Snow Mold\* (*Microdochium nivale*)

\*Not for use in California.

#### **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%

 100.000%
 100.000%

\*End-use product contains not less than 10 million (1 X 10<sup>7</sup>) 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

1-314-094-4000			
FIRST AID			
IF IN EYES:	<ul> <li>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.</li> <li>Call a poison control center or doctor for treatment advice.</li> </ul>		
IF INHALED:	<ul> <li>Move person to fresh air.</li> <li>If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth if possible.</li> <li>Call a poison control center or doctor for further treatment advice.</li> </ul>		
IF ON SKIN OR CLOTHING:	<ul> <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>		
IF SWALLOWED:	<ul> <li>Call a poison control center or doctor immediately for treatment advice.</li> <li>Have person sip a glass of water if able to swallow.</li> <li>Do not induce vomiting unless told to do so by a poison control center or doctor.</li> <li>Do not give anything by mouth to an unconscious person.</li> </ul>		

#### **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

#### Manufactured for:

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





Foliar Diseases (When applied as a spray:

Powdery and Downy Mildew

Gray Mold (Botrytis spp.)

Bacterial Spot\* (Xanthomonas perforans)

Citrus Canker\* (Xanthomonas axonopodis pv. citri)

Bacterial Blast\* (Pseudomonas syringae)

Peach Leaf Curl\* (Taphrina deformans)

\*Not for use in California.

#### PREHARVEST INTERVAL

Actinovate® Lawn & Garden can be applied up to and including the day of harvest.

#### RESTRICTIONS AND LIMITATIONS

**Do not mix** Actinovate® Lawn & Garden with chlorinated water, quaternary ammonia, or hydrogen peroxide.

#### **APPLICATION DIRECTIONS (HOW TO APPLY)**

Product should be used promptly after opening the package. Apply any unused product within 4 months of opening and before the expiry date.

#### 1 teaspoon = 0.16 oz or 5 gram

#### **SOIL APPLICATION**

Mix 1-2 teaspoons of Actinovate® Lawn & Garden in 2 gallons of water to create a solution. For more severe disease pressure or likelihood of disease pressure, use higher label rate. Apply solution to pot, base of plant, or roots of plant by watering until soil is completely saturated without creating runoff. One cup of solution usually treats about one 6" pot or its equivalent. For best results, apply to damp soil and/or apply in conjunction with a wetting agent. Apply Actinovate® Lawn & Garden at any stage of the plant life cycle. For best results, apply as early as possible such as at seeding, transplant or potting stage. Reapply every 2-12 weeks as needed. Apply product with watering can, hose-end sprayer or similar devices.

#### FOLIAR SPRAY

Mix 1-2 teaspoons of Actinovate® Lawn & Garden in 2 gallons of water to create solution. For more severe disease pressure or likelihood of disease pressure, use higher label rate. Spray leaves, stems, and new shoots to runoff, providing complete coverage of entire plant. For best results, apply product prior to disease development or at the first sign of infection. Repeat at 7-day intervals as needed to protect new foliage. Under conditions of heavy rainfall, it may be necessary to reapply the product after the rain has stopped. Do not water foliage within 4 hours of application. Use a pump bottle, handheld pump, backpack or similar type of spray equipment.

For best results, use a compatible spreader-sticker (a product designed to break the surface tension of water and evenly spread it over the surface of the foliage) in conjunction with application. Consult your garden center or dealer for specific product suggestions. (Examples of spreader-stickers include Weather Shield®, Agri-2®, Plant Camel®, and yucca extract.)

#### HYDROPONICS AND INDOOR GARDEN USE

#### For Root Rot Diseases:

Dissolve Actinovate® Lawn & Garden directly into nutrient water tank. Use 1/2 -1 teaspoon of this product per gallon of water (6-12 oz of Actinovate® Lawn & Garden per 100 gallons of water). Reapply each time nutrient water is changed.

Actinovate® Lawn & Garden may also be applied to each plant's root system individually. To do this, mix 1/2 -1 teaspoon of Actinovate® Lawn & Garden in a gallon of water to create solution. Apply solution as a watering directly to the plant's base so as to water in to the roots. Reapply every 2-6 weeks as needed.

#### For Foliar Diseases:

Use as directed under above section titled "Foliar Spray".

#### LAWN TREATMENT

Use direct watering, a Pump-Up Sprayer or Hose-End Sprayer to apply solution until soil is saturated. Reapply at maintenance rate every 4-8 weeks as needed. For best results, use a compatible wetting agent such as yucca extract, Coco-Wet®, Plant Camel® or Mega Wet® in conjunction with Actinovate® Lawn & Garden in order to help move product to the root system of the lawn. Consult your garden center or dealer for specific product suggestions.

#### **Direct Lawn Watering:**

Mix 10 teaspoons of Actinovate® Lawn & Garden in 5 gallons of water and apply to 1,000 sq. ft. of lawn. Thoroughly soak turf so as to move the solution to the root system. Avoid excess runoff or leaching.

#### Pump-Up Sprayer Lawn Application:

<u>Initial Application</u>: Mix 2 teaspoons of Actinovate® Lawn & Garden in a gallon of water to create spray solution. Apply spray solution at 1 gallon per 200 sq ft of lawn. Thoroughly soak turf so as to move the solution to the root system. Avoid excess runoff or leaching.

<u>Maintenance Application:</u> Use 0.5 teaspoons of Actinovate® Lawn & Garden in a gallon of water to create spray solution. Apply spray solution at 1 gallon per 200 sq ft of lawn. Thoroughly soak turf so as to move the solution to the root system. Avoid excess runoff or leaching.

#### **Hose-End Sprayer Lawn Application:**

Make a spray solution from Actinovate® Lawn & Garden by following the instructions below.

Initial Application				
Area Covered	Actinovate® Lawn & Garden	Water	Hose-end Setting	
200 sq ft	2 tsp	4 oz	4 oz	
1,000 sq ft	9 tsp	20 oz	4 oz	
<b>Maintenance Application</b>				
Area	Actinovate®		Hose-end	
Covered	Lawn & Garden	Water	Setting	
200 sq ft	0.5 tsp	4 oz	4 oz	
1,000 sq ft	3 tsp	20 oz	4 oz	

#### **Storage and Disposal**

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

#### PESTICIDE STORAGE:

Store in a dry, cool area inaccessible to children and out of direct sunlight and away from heat sources. Keep from overheating and freezing. Store between 40°F and 77°F. 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 AND CONTAINER HANDLING:

**Nonrefillable container.** Do not reuse or refill this container. **If empty:** Place in trash or offer for recycling, if available. **If partly filled:** Call your local solid waste agency for disposal instructions. Never place unused product down any indoor or outdoor drain.

#### LIMITS OF LIABILITY AND WARRANTY

To the extent consistent with applicable law, buyer assumes all responsibility for safety and use not in accordance with directions. If for any reason you are not satisfied after using this product, simply send us original proof of purchase and we will replace the product or refund the purchase price.

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