

73314-1

RL 12104

For Fungus Control

# ACTINOVATE®

## SP

- \* Biological fungus control.
- \* Controls soil borne plant diseases such as *Pythium*, *Rhizoctonia*, *Phytophthora*, *Verticillium*, *Fusarium* and others.
- \* 100% Soluble. Will not clog machinery.
- \* Enhances plant vitality.
- \* Encourages larger root systems.

ACTIVE INGREDIENTS:  
*Streptomyces lydicus* WYEC 108\* ..... 00.0371%  
 OTHER INGREDIENTS:..... 99.9629%  
 \* End use product contains not less than 1x10<sup>7</sup> CFU per gram *Streptomyces lydicus* WYEC 108

**KEEP OUT OF REACH OF CHILDREN  
 CAUTION**

See back panel for precautionary statements

US Patent No. 5,403,584  
 EPA Reg. No.: 73314-1  
 EPA Establishment No.: 73314-TX-001

Manufactured By:  
 Natural Industries, Inc.  
 6223 Theall Rd.  
 Houston, TX 77066  
 Questions? (888) 261-4731



Net Contents: 18-oz (504 grams)

#### PRECAUTIONARY STATEMENTS

**Hazard to humans and domestic animals:** Caution. Avoid contact with skin, eyes or clothing. Wash thoroughly with soap and water after handling.

**Personal Protective Equipment (PPE):** Applicators and other handlers must wear long-sleeved shirt and long pants, and shoes plus socks. Mixer/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 / maintaining PPE. Keep and wash PPE separately from other laundry.

**User Safety Requirements:** Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet. Remove PPE immediately after handling this product. If gloves are worn, wash the outside of gloves before removing. Users should remove clothing immediately if pesticide gets inside. As soon as possible, wash thoroughly and change into clean clothing.

**Environmental Hazards:** Do not apply directly to water, or to areas where surface water is present, or to intertidal areas below the mean highwater mark. Do not contaminate water when cleaning equipment or disposing of equipment washwater.

#### 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 agency responsible for pesticide regulation.

#### 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 intervals (REI). The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not allow worker entry into treated areas during the restricted entry interval (REI) of four (4) hours.

PPE requirements 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 and shoes plus socks. **Exception:** If the product is soil-incorporated, the Worker Protection Standard, under certain circumstances, allows workers to enter treated area if there will be no contact with anything that has been treated.

#### 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 or dusts have settled.

#### General Information:

Actinovate® SP is a biological fungicide for the control of root rot and damping-off fungi. Fungi controlled include *Fusarium*, *Rhizoctonia*, *Pythium*, *Phytophthora*, *Phytophthora*, *Aphanomyces*, *Monosporascus*, *Armillaria*, *Sclerotinia*, *Postia*, *Verticillium*, *Geotrichum*, and other root-decay fungi. The active ingredient in Actinovate® SP colonizes the root system and protects it from harmful fungi. Actinovate® SP can also effectively suppress foliar diseases such as Powdery Mildew, *Botrytis* and Downy Mildew. When applied to the soil Actinovate® SP also breaks down mineral and micronutrients making them more available to plants resulting in increased size and vitality. Plants and lawns treated with Actinovate® SP as a soil drench will become hardier, more vigorous and have a robust and protected root system.

#### APPLICATION DIRECTIONS:

Actinovate® SP is completely soluble and does not require agitation to keep suspended. Avoid applying bactericides and soil fumigants to the areas treated with Actinovate® SP. Consult manufacturer for compatibility questions.

#### Greenhouses and Nurseries:

##### Soil Drench/Soil Incorporation

Mix 6 oz. of Actinovate® SP in 100 gallons of water to create solution. Apply solution to plants/growing media at a rate of 1 gallon per cubic foot of growing media (enough to saturate soil without creating run-off). Consult your potting mix guide for the number of 'containers per cubic foot' to determine the ounces of solution to be applied to each pot.

*For Example: Filling 6' pots, you get 18 pots per cubic foot of growing media, therefore, 1 gallon of solution (128-oz) divided by 18 pots = 7-8 oz. per pot. One container of Actinovate® SP will treat approximately 5,000 6" pots.*

##### Turf Grass

Mix Actinovate® SP with appropriate amount of water (100-125 gallons per acre). Apply at a rate of 52-oz of Actinovate® SP per acre for initial application or problem areas. Apply maintenance applications of 18 oz. per acre every 6 to 8 weeks

#### Greenhouses: Foliar Application

For preventative control of *Botrytis*, powdery mildew and downy mildew on greenhouse crops. Apply 6-12 oz Actinovate® SP per acre. Dissolve Actinovate® SP in appropriate amount of water and apply to foliage and blossoms every 7 to 14 days depending on disease pressure. Crop size, spray equipment and local practice will determine the volume of water needed. Spray to wet, but avoid run-off. 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 spreader-sticker in conjunction with application. Consult manufacturer or sales representative for specific product recommendations.

#### Cutting or Bare Rooted Transplant Dip:

Dip cuttings or transplants in Actinovate® SP dry powder or in a solution of 18-oz Actinovate® SP and 5 gallons water. Plant treated cuttings or transplants in potting mix or soil in the usual manner.

#### Ornamental Bulb Crops:

Soak bulbs in solution of Actinovate® SP at 18-oz per 100 lbs. of bulbs. Thoroughly cover all surfaces of bulbs with solution for 1 hour prior to planting.

Do not apply through any type of irrigation system.

#### STORAGE AND DISPOSAL

Do not contaminate water, food or feed by storage or disposal. **Pesticide Storage:** Store in a dry, cool place out of direct sunlight and away from heat sources. Keep from overheating or freezing. Optimum storage temperature is 40 F to 85 F.

**Pesticide Disposal:** Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

**Container Disposal:** Completely empty package into application equipment. Then dispose of empty package in a sanitary landfill or by incineration, or, if allowed by State and local authorities, by burning. If burned, stay out of smoke.

#### Limited Warranty / Disclaimer

Manufacturer warrants that this product is suited for the labeled use when applied according to label directions. Manufacturer makes no warranty of merchantability. There are no warranties that extend beyond the description on this label and in no event shall manufacturer be liable for any consequential damages.

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BEST IF USED BY:

LOT NUMBER:

Label Version: 2

(Back Panel)

#### PRECAUTIONARY STATEMENTS

**Hazard to humans and domestic animals: Caution.** Avoid contact with skin, eyes or clothing. Wash thoroughly with soap and water after handling.

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**User Safety Recommendations:** Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet. Remove PPE immediately after handling this product. If gloves are worn, wash the outside of gloves before removing. Users should remove clothing immediately if pesticide gets inside. As soon as possible, wash thoroughly and change into clean clothing.

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#### AGRICULTURAL USE REQUIREMENTS

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contact with anything that has been treated.

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

#### **General Information:**

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#### **Application Directions:**

##### **Greenhouses and Nurseries Potting Soil Mix:**

Mix 6 oz. in 100 gallons. Apply one gallon of solution to 1 cubic foot of mix. (Check your Potting Mix Guide for 'number of containers per cubic foot' to determine ounces for your specific size container.)

For example:

Filling 6" pots, you get 18 pots per cubic foot of mix, therefore, 1 gallon (128 oz.) divided by 18 pots = 7 – 8 oz. per pot. One container of Actinovate® Soluble will treat approximately 5,000 6" pots.

##### **Turf Grass:**

Mix Actinovate® Soluble with water (100-125 gallons or more per acre). Apply at a rate of 52-oz of Actinovate® Soluble per acre for initial application or problem areas. Apply maintenance applications of 18 oz. per acre every 6 to 8 weeks.

##### **Greenhouse Foliar Application:**

For preventative control of Botrytis, powdery mildew, and other fungal pathogens on greenhouse crops, apply 6-12 oz Actinovate® Soluble per acre. Dissolve Actinovate® Soluble in water and apply to foliage and blossoms every 7 to 14 days depending on disease pressure. Crop size, spray equipment and local practice will determine the volume of water needed. Spray to wet, but avoid run-off. Apply Actinovate® Soluble using hand-held backpack or ground spray equipment. Clean application equipment before use of this product, and use prepared sprays within 4 hours of mixing. Use a spreader in conjunction with application. Consult manufacturer or sales representative for specific product recommendations.

**Cutting or Bare Root Transplant Dip:**

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Do not apply through any type of irrigation system.

**STORAGE AND DISPOSAL**

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