

COMMERCIAL

**Actinovate® SP**  
**Fungicide**

For the suppression of: Botrytis fruit rot (*Botrytis cinerea*) and powdery mildew (*Sphaerotheca macularis*) on field and greenhouse strawberry, powdery mildew (*Erysiphe cichoracearum*) in field and greenhouse Gerber Daisy, powdery mildew (*Leveillula taurica*) on field and greenhouse Pepper, powdery mildew (*Podosphaera xanthii*) on field and greenhouse cucurbit vegetables (Crop Group 9) and powdery mildew (*Leveillula taurica*, *Oidium lycopersicum*) on field and greenhouse tomato. May reduce symptoms of anthracnose fruit rot (*Colletotrichum acutatum*) on strawberry.

SOLUBLE POWDER

READ THE LABEL BEFORE USING

**ACTIVE INGREDIENTS:**

GUARANTEE: *Streptomyces lydicus* strain WYEC 108.....1.0 x 10<sup>7</sup> CFU/g (min.) (0.0371%)

Warning: This product contains the allergen dairy whey.

CAUTION: EYE IRRITANT

POTENTIAL SENSITIZER

REGISTRATION NO: 28672 PEST CONTROL PRODUCTS ACT

US Patent Number: 5,403,584  
Canadian Patent Number: 2,166,096

**Manufacturer:**

Natural Industries, Inc.  
6223 Theall Road  
Houston, Texas 77066  
Questions? (888) 261-4731  
Net Contents: 562 ml  
Date of Manufacture:

## **PRECAUTIONS**

### **KEEP OUT OF REACH OF CHILDREN**

May cause sensitization. May irritate eyes. Avoid contact with eyes, skin and clothing. Avoid breathing dust and spray mist. Workers (includes mixer/loader, applicators, and early-entry workers) must wear a long sleeved shirt, long pants, shoes plus socks, waterproof gloves and a NIOSH approved respirator with any N-95, R-95, P-95 or HE filter for biological products when mixing/loading or applying the product and during all clean-up/repair activities. Workers wearing appropriate personal protective equipment (PPE) can enter treated areas during the restricted entry interval (REI) of 1 hour, or until solution has dried. Wash thoroughly with soap and water after handling. Remove contaminated clothing and follow manufacturers directions for cleaning/maintaining PPE before reuse. If no such instructions are available use clothing detergent and hot water for cleaning all washable PPE. Keep and wash PPE separately from other laundry.

## **FIRST AID**

### **IF SWALLOWED:**

Call a poison control centre 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 centre or doctor. Do not give anything by mouth to an unconscious person.

### **IF ON SKIN OR CLOTHING:**

Take off contaminated clothing. Rinse skin immediately with plenty of water for 15–20 minutes. Call a poison control centre 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 centre or doctor for further treatment advice.

### **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 centre or doctor for treatment advice.

Take container, label or product name and Pest Control Product Registration Number with you when seeking medical attention.

**TOXICOLOGICAL INFORMATION:** Treat symptomatically.

## **ENVIRONMENTAL PRECAUTIONS:**

DO NOT apply this product directly to freshwater habitats (such as lakes, rivers, sloughs, ponds, prairie potholes, creeks, marshes, streams, reservoirs, ditches and wetlands), estuaries or marine habitats.

DO NOT contaminate irrigation or drinking water supplies or aquatic habitats by cleaning of equipment or disposal of wastes.

Do NOT apply by air.

To reduce runoff from treated areas into aquatic habitats, consider the characteristics and conditions of the site before treatment. Site characteristics and conditions that may lead to runoff include, but are not limited to: heavy rainfall, moderate to steep slope, bare soil, poorly draining soil (e.g. soils that are compacted or fine textured such as clay).

Avoid application of this product when heavy rain is forecast.

Contamination of aquatic areas as a result of runoff may be reduced by including a vegetative strip between the treated area and the edge of the water body.

DO NOT allow effluent or runoff from greenhouses containing this product to enter lakes, streams, ponds or other waters.

### DIRECTIONS FOR USE

**General Information:** Actinovate SP is a biological fungicide for the suppression of Botrytis fruit rot and powdery mildew on field and greenhouse grown strawberry, powdery mildew on field and greenhouse grown peppers, powdery mildew in field and greenhouse grown Gerber daisy, powdery mildew on field and greenhouse cucurbit vegetables (crop group 9) and powdery mildew on field and greenhouse tomato. Actinovate SP may also reduce symptoms of anthracnose fruit rot on strawberry.

#### Directions for Use:

**Strawberries (field and greenhouse): For suppression of Botrytis fruit rot (*Botrytis cinerea*) and powdery mildew (*Sphaerotheca macularis*).**

Dissolve 425 g Actinovate SP in 1100 L water per hectare, and apply as foliar spray to leaves and blossoms. Spray to wet, but avoid run-off. Make the first application when conditions are conducive to disease development, and repeat applications every 7-14 days. Use the shorter application interval under high disease pressure. 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.

Crop	Diseases	Actinovate SP Rate per ha	Remarks
Strawberry (field and greenhouse)	Botrytis Fruit Rot ( <i>Botrytis cinerea</i> )  Powdery Mildew ( <i>Sphaerotheca macularis</i> )	425 g/1100 L water	Make the first application when conditions are conducive to disease development. Apply to foliage and blossoms. Repeat application every 7-14 days.

**Gerber Daisy (field and greenhouse): For suppression of powdery mildew (*Erysiphe cichoracearum*)**

Dissolve 170 g Actinovate SP in 380 L water (or 500 g in 1100 L water per ha) and apply as a foliar spray. Spray to wet, but avoid run-off. Begin at transplant and apply two subsequent sprays at seven day intervals. Clean application equipment before use of this product, and use prepared sprays within 4 hours of preparation.

Crop	Diseases	Actinovate SP Rate per ha	Remarks
Gerber Daisy (field and greenhouse)	Powdery Mildew ( <i>Erysiphe cichoracearum</i> )	170 g/380L water (500 g/ 1100 L water/ha)	Begin applications at transplant and make two subsequent sprays at seven day intervals.

**Pepper (field and greenhouse): For suppression of powdery mildew (*Leveillula taurica*)**

Dissolve 425 g Actinovate SP in 1100 L water and apply as a foliar spray to leaves and blossoms. Make the first applications at transplant, and repeat every 7-14 days. Use the shorter application interval under high disease pressure. Spray to wet, but avoid run-off. Actinovate SP can be applied using hand-held backpack or ground spray equipment. Clean equipment before use of this product, and use prepared sprays within 4 hours of preparation.

Crop	Diseases	Actinovate SP Rate per ha	Remarks
Peppers (field and greenhouse)	Powdery Mildew ( <i>Leveillula taurica</i> )	425 g/1100 L water	Begin applications at transplant and make subsequent sprays at seven day intervals.

**NOTE TO USER: READ THE FOLLOWING BEFORE USING THIS PRODUCT FOR THE INDICATED SPECIAL USE APPLICATIONS:**

The DIRECTIONS FOR USE for this product for the use(s) described below were developed by persons other than Natural Industries, Inc. and accepted for registration by Health Canada under the User Requested Minor Use Label Expansion program. Natural Industries, Inc. itself makes no representation or warranty with respect to performance (efficacy) or crop tolerance (phytotoxicity) claims for this product when used on the crop(s) listed below. Accordingly, the Buyer and User assume all risks related to performance and crop tolerance arising, and agree to hold Natural Industries, Inc. harmless from any claims based on efficacy or phytotoxicity in connection with the use(s) described below.

**Directions for Use**

**Cucurbit Vegetables (field and greenhouse): Crop Group 9 – Chayote, Chinese waxgourd, Citron melon, Cucumber, Gherkin, Edible gourd, Momordica species, Muskmelon, Pumpkin, Winter and Summer squash, Watermelon: For suppression of powdery mildew (*Podosphaera xanthii*).**

Dissolve 420 g Actinovate SP in 470 to 800 L water per hectare (select a water volume which will ensure thorough, uniform coverage of the plants), and apply as foliar spray. Spray to wet, but avoid run-off. Make the first application when conditions are conducive to disease development, and repeat applications every 7-14 days. Use the shorter application interval under high disease pressure. 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.

Crop	Diseases	Actinovate SP Rate per ha	Remarks
<b>Cucurbit Vegetables (field and greenhouse): Crop Group 9 – Chayote, Chinese waxgourd, Citron melon, Cucumber, Gherkin, Edible gourd, Momordica species, Muskmelon, Pumpkin, Winter and Summer squash, Watermelon</b>	powdery mildew ( <i>Podosphaera xanthii</i> )	420 g/470 to 800 L water	Make the first application when conditions are conducive to disease development and repeat application every 7-14 days.

**Tomato (field and greenhouse): For suppression of powdery mildew (*Leveillula taurica*, *Oidium lycopersicum*).**

Dissolve 425 to 840 g Actinovate SP in 700 L water per hectare, and apply as foliar spray. Spray to wet, but avoid run-off. Make the first application when conditions are conducive to disease development, and repeat applications every 7-14 days. Use the shorter application interval under high disease pressure. 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.

Crop	Diseases	Actinovate SP Rate per ha	Remarks
Tomato (field and greenhouse)	powdery mildew ( <i>Leveillula taurica</i> , <i>Oidium lycopersicum</i> )	425 to 840 g /700 L water	Make the first application when conditions are conducive to disease development and repeat application every 7-14 days.

<b>Strawberry: May reduce symptoms of Anthracnose fruit rot (<i>Colletotrichum acutatum</i>).</b> Dissolve 425 g Actinovate SP in 1100 L water per hectare, and apply as foliar spray. Spray to wet, but avoid run-off. Make the first application when conditions are conducive to disease development, and repeat applications every 7-14 days. Use the shorter application interval under high disease pressure. 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.			
Crop	Diseases	Actinovate SP Rate per ha	Remarks
Strawberry	Anthracnose fruit rot ( <i>Colletotrichum acutatum</i> )	425 g/1100 L water	Make the first application when conditions are conducive to disease development and repeat application every 7-14 days.

**STORAGE & DISPOSAL:**

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

**PESTICIDE STORAGE:** Store at 5 °C for no more than 6 months. Store out of direct sunlight and away from heat sources. Keep from overheating or freezing. To prevent contamination store this product away from food or feed.

**DISPOSAL**

1. Triple- or pressure-rinse the empty container. Add the rinsings to the spray mixture in the tank.
2. Follow provincial instructions for any required additional cleaning of the container prior to its disposal.
3. Make the container unsuitable for further use.
4. Dispose of the container in accordance with provincial requirements.
5. For information on disposal of unused, unwanted product, contact the manufacturer or the provincial regulatory agency. Contact the manufacturer and the provincial regulatory agency in case of a spill, and for clean-up of spills.

**NOTICE TO USER:** *This pest control product is to be used only in accordance with the directions on the label. It is an offence under the Pest Control Products Act to use this product in a way that is inconsistent with the directions on the label. The user assumes the risk to persons or property that arises from any such use of this product.*

Manufactured By:  
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6223 Theall Road  
Houston, Texas 77066  
Questions? (888) 261-4731  
[www.naturalindustries.com](http://www.naturalindustries.com)

BEST IF USED BY:

LOT NUMBER:

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