**Actinovate® STP**

**fungicide**

**PROD. # 5300-700**

For use as a dry coating or in slurry seed treatment application

**ACTIVE INGREDIENT**  
*Streptomyces lydicus WYEC 108*  
0.33%  
**OTHER INGREDIENTS**  
99.67%  
**Total**  
100.0%

*End-use product contains not less than 1 x 10⁷ colony forming units per gram *Streptomyces lydicus WYEC 108*

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

See attached booklet for additional Precautionary Statements, First Aid, Complete Directions for Use and Warranty.

<table>
<thead>
<tr>
<th>FIRST AID</th>
</tr>
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<tbody>
<tr>
<td><strong>IF IN EYES:</strong></td>
</tr>
<tr>
<td>• 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</td>
</tr>
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<td><strong>IF INHALED:</strong></td>
</tr>
<tr>
<td>• Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. Call a poison control center or doctor for further treatment advice</td>
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<tr>
<td><strong>IF ON SKIN OR CLOTHING:</strong></td>
</tr>
<tr>
<td>• Take off contaminated clothing. Rinse skin immediately with plenty of water for 15–20 minutes. Call a poison control center or doctor for further treatment advice</td>
</tr>
<tr>
<td><strong>IF SWALLOWED:</strong></td>
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<tr>
<td>• Call a poison control center or doctor immediately for treatment advice. Have a 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</td>
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**HOT LINE NUMBER**

Have the product container or label with you when calling a poison control center or doctor or going for treatment. For emergency information on this pesticide product (including health concerns, medical emergencies, or pesticide incidents), call the National Pesticide Information Center at 1-800-858-7378, 6:30 AM to 4:30 PM Pacific Time (PT), seven days a week. During other times, call the poison control center at 1-800-222-1222

**Net contents**

16 oz (454 g)

**USA**

US Patent Number: 5,403,584  
EPA Registration Number: 73314-4  
EPA Establishment Number: 73314-TX-001  
Made in the USA. Information regarding the contents and levels of metals in this product is available on the internet [http://www.aapfco.org/metals.htm](http://www.aapfco.org/metals.htm)  
13063 05.13 2621-136-0613

Batch code and expiration date:

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Novozymes BioAg Inc.  
13100 W. Lisbon Road, Suite 600  
Brookfield WI 53005  
1-800-245-4104
Precautionary statements

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 one (1) hour or until solution has dried. Exception: If the product is soil incorporated (such as landscape, ornamental bulbs, seed coating and drench) the Worker Protection Standard, under certain circumstances, allows workers to enter treated area if there is no contact with anything that has been treated.

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® STP Fungicide is a biological fungicide for the suppression of root rot and damping-off fungi. Actinovate® STP Fungicide is specifically formulated to adhere to seeds either as a dry coating or in a slurry. When used as a seed coating, soil borne fungi suppressed include Fusarium, Rhizoctonia, Pythium, Phytophthora, Phytophthora omnivorum, Aphanomyces, Monilimgius, Armillaria, Scerotinia, Pastia, Verticillium, Geotrichum and other root-rot fungi. The active ingredient in Actinovate® STP Fungicide colonizes the seed and root system protecting them from harmful fungi.

Integrated Pest Management (IPM)
Integrate Actinovate® STP Fungicide into overall disease and pest management strategy whenever fungicide use is necessary. Actinovate® STP Fungicide may be used in combination with chemical seed treatment fungicides and/or insecticides.

Application directions
Compatibility:
Actinovate® STP Fungicide is compatible with chemical fungicides, insecticides and fertilizers. If tank mixes are desired, observe all directions, precautions and limitations on labeling of all products used. Actinovate® STP Fungicide can be tank mixed with all chemical fungicides, insecticides and fertilizers unless otherwise restricted.

Application uses:
Actinovate® STP Fungicide is a powdered biological fungicide for use in seed coating applications in or on all raw agricultural commodities, food and fiber crops, and other agricultural production crops.

Agriculture production
For seed treatment for the suppression/control of Pythium, Rhizoctonia, Phytophthora, Fusarium, Verticillium, Phytophthora omnivorum (cotton root rot) and other root decay fungi.

Seed treatment:
Apply Actinovate® STP Fungicide as a dry coating in planter box or in slurry at a rate of 0.25–8 g of Actinovate® STP Fungicide per lb of seed (0.31–32.0 oz per cwt).
<table>
<thead>
<tr>
<th>Crops on which Actinovate® STP Fungicide may be used</th>
<th>Dry Coating or Slurry Seed Application Rate</th>
<th>Small Grains: rye, sorghum, millet, rice and other small grains</th>
<th>4–32 oz/cwt (1–8 g/lb) seed</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CROPS</strong></td>
<td></td>
<td><strong>Root/Tuber and Bulb Crops:</strong> Garlic, onions, white potatoes, sweet potatoes, carrot, ginger, ginseng, horseradish, turpil, beets, radish and other root/tuber/bulb crops</td>
<td>4–32 oz/cwt (1–8 g/lb) seed</td>
</tr>
<tr>
<td>Wheat (Drill Box Application)</td>
<td>0.35–7.0 oz (9.8–19.6 g) per cwt of seed</td>
<td><strong>All Other Fruit, Vegetable and Fiber Field Crops</strong></td>
<td>4–32 oz/cwt (1–8 g/lb) seed</td>
</tr>
<tr>
<td>Alfalfa</td>
<td>1.9–3.8 oz (52–104 g) per cwt of seed</td>
<td><strong>Storage and disposal</strong></td>
<td>Do not contaminate water, food or feed by storage or disposal.</td>
</tr>
<tr>
<td>Corn, Field</td>
<td>1–2 oz (28–56 g) per cwt of seed</td>
<td><strong>Pesticide storage</strong></td>
<td>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.</td>
</tr>
<tr>
<td>Corn, Silage</td>
<td>1–2 oz (28–56 g) per cwt of seed</td>
<td><strong>Pesticide disposal</strong></td>
<td>Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.</td>
</tr>
<tr>
<td>Corn, Sweet</td>
<td>1.75–3.5 oz (50–100 g) per cwt of seed</td>
<td><strong>Container disposal</strong></td>
<td>Non-refillable container. Do not reuse or refill this container. Clean container promptly after emptying. Offer for recycling if available.</td>
</tr>
<tr>
<td>Cotton</td>
<td>4–8 oz (112–224 g) per cwt of seed</td>
<td><strong>WARRANTY</strong></td>
<td>The Directions for Use of this product reflect the opinion of experts based on field use and tests. The directions are believed to be reliable and must be followed carefully. Novozymes BioAg warrants that at the time of the first sale of this product it conforms to the chemical description on the label and when used according to the label directions under normal growing conditions is reasonably fit for the purposes referred to above. Buyers/Uses of this product assume full risk for any use contrary to the specified directions. If this product does not perform as warranted above and to the extent consistent with applicable law, customer’s sole remedy for breach of warranty shall be replacement of the product or refund of the purchase price paid, at the option of Novozymes BioAg. EXCEPT AS PROVIDED ELSEWHERE IN WRITING CONTAINING AN EXPRESSED REFERENCE TO THIS WARRANTY AND LIMITATION OF DAMAGES, SELLER MAKES NO OTHER EXPRESSED OR IMPLIED WARRANTY OR GUARANTEE TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, INCLUDING ANY OTHER EXPRESSED OR IMPLIED WARRANTY OF FITNESS OR OF MERCHANTABILITY, AND NO AGENT OF SELLER IS AUTHORIZED TO DO SO.</td>
</tr>
<tr>
<td>Peanuts</td>
<td>.75–1 oz (21–42 g) per cwt of seed</td>
<td><strong>Storage and disposal</strong></td>
<td>Do not contaminate water, food or feed by storage or disposal.</td>
</tr>
<tr>
<td>Popcorn</td>
<td>1.43–2.86 oz (40–80 g) per cwt of seed</td>
<td><strong>Pesticide disposal</strong></td>
<td>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.</td>
</tr>
<tr>
<td>Sorghum</td>
<td>1–2 oz (28–56 g) per cwt of seed</td>
<td><strong>Pesticide disposal</strong></td>
<td>Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.</td>
</tr>
<tr>
<td>Soybeans</td>
<td>0.31–0.64 oz (9–18 g) per cwt of seed</td>
<td><strong>Container disposal</strong></td>
<td>Non-refillable container. Do not reuse or refill this container. Clean container promptly after emptying. Offer for recycling if available.</td>
</tr>
<tr>
<td>Sugar Beets</td>
<td>3.8–7.6 oz (107–214 g) per cwt of seed</td>
<td><strong>WARRANTY</strong></td>
<td>The Directions for Use of this product reflect the opinion of experts based on field use and tests. The directions are believed to be reliable and must be followed carefully. Novozymes BioAg warrants that at the time of the first sale of this product it conforms to the chemical description on the label and when used according to the label directions under normal growing conditions is reasonably fit for the purposes referred to above. Buyers/Uses of this product assume full risk for any use contrary to the specified directions. If this product does not perform as warranted above and to the extent consistent with applicable law, customer’s sole remedy for breach of warranty shall be replacement of the product or refund of the purchase price paid, at the option of Novozymes BioAg. EXCEPT AS PROVIDED ELSEWHERE IN WRITING CONTAINING AN EXPRESSED REFERENCE TO THIS WARRANTY AND LIMITATION OF DAMAGES, SELLER MAKES NO OTHER EXPRESSED OR IMPLIED WARRANTY OR GUARANTEE TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, INCLUDING ANY OTHER EXPRESSED OR IMPLIED WARRANTY OF FITNESS OR OF MERCHANTABILITY, AND NO AGENT OF SELLER IS AUTHORIZED TO DO SO.</td>
</tr>
<tr>
<td>Sunflower</td>
<td>1.43–2.86 oz (40–80 g) per cwt of seed</td>
<td><strong>WARRANTY</strong></td>
<td>The Directions for Use of this product reflect the opinion of experts based on field use and tests. The directions are believed to be reliable and must be followed carefully. Novozymes BioAg warrants that at the time of the first sale of this product it conforms to the chemical description on the label and when used according to the label directions under normal growing conditions is reasonably fit for the purposes referred to above. Buyers/Uses of this product assume full risk for any use contrary to the specified directions. If this product does not perform as warranted above and to the extent consistent with applicable law, customer’s sole remedy for breach of warranty shall be replacement of the product or refund of the purchase price paid, at the option of Novozymes BioAg. EXCEPT AS PROVIDED ELSEWHERE IN WRITING CONTAINING AN EXPRESSED REFERENCE TO THIS WARRANTY AND LIMITATION OF DAMAGES, SELLER MAKES NO OTHER EXPRESSED OR IMPLIED WARRANTY OR GUARANTEE TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, INCLUDING ANY OTHER EXPRESSED OR IMPLIED WARRANTY OF FITNESS OR OF MERCHANTABILITY, AND NO AGENT OF SELLER IS AUTHORIZED TO DO SO.</td>
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<tr>
<td>Other Agronomic Field and Row Crops: buckwheat, canola, safflower, succulent and dry peas, and other agronomic field and row crops</td>
<td>1–4 oz/cwt seed (0.25–1.00 g/lb)</td>
<td><strong>Other Alfalfa Hay and Forage Crops:</strong> Clover, vetch, trefoil</td>
<td>1–4 oz/cwt seed (0.25–1.00 g/lb)</td>
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<td>Other Alfalfa Hay and Forage Crops: Clover, vetch, trefoil</td>
<td>1–4 oz/cwt seed (0.25–1.00 g/lb)</td>
<td><strong>Cucurbit Vegetables:</strong> cucumbers, melons, gourds, squash, cantaloupe, and other cucurbits</td>
<td>4–32 oz/cwt (1–8 g/lb) seed</td>
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<td>Cucurbit Vegetables: cucumbers, melons, gourds, squash, cantaloupe, and other cucurbits</td>
<td>4–32 oz/cwt (1–8 g/lb) seed</td>
<td><strong>Fruiting Vegetables:</strong> Eggplant, sweet peppers, hot peppers, tomatoes, tomatillos and other fruiting vegetables</td>
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<td>4–32 oz/cwt (1–8 g/lb) seed</td>
<td><strong>Herb, Spices and Mints:</strong> sage, rosemary, thyme, peppermint, dill, basil, oregano and other herbs and spices</td>
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<td>4–32 oz/cwt (1–8 g/lb) seed</td>
<td><strong>Leafy Vegetables and Cole Crops:</strong> Broccoli, brussel sprouts, cabbage, cauliflower, celery, collards, endive, kale, kohlrabi, lettuce, mustard greens, parsley, spinach and other leafy vegetable crops</td>
<td>4–32 oz/cwt (1–8 g/lb) seed</td>
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<td>4–32 oz/cwt (1–8 g/lb) seed</td>
<td><strong>Legume and Vegetable Crops:</strong> snap and dry beans, lentils, succulent and dry peas and other legume/vegetable crops</td>
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</tbody>
</table>
For use as a dry coating or in slurry seed treatment application

% w/w

ACTIVE INGREDIENT
Streptomyces lydicus WYEC 108* 0.033%
OTHER INGREDIENTS 99.67%
Total 100.0%

*End-use product contains not less than 1 x 10⁹ colony forming units per gram Streptomyces lydicus WYEC 108

CAUTION
KEEP OUT OF REACH OF CHILDREN
See booklet for additional Precautionary Statements, Directions for Use and Warranty.

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

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Container disposal
Non-refillable container. Do not reuse or refill this container. Clean container promptly after emptying. Offer for recycling if available.

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 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 further treatment advice

IF SWALLOWED:
• Call a poison control center or doctor immediately for treatment advice. Have a 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

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novozymes
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