

100-922

6/8/2009

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

OFFICE OF
PREVENTION, PESTICIDES
AND TOXIC SUBSTANCES

Adora Clark
Syngenta Crop Protection, Inc.
P.O. Box 18300
Greensboro, NC 27419-8300

JUN 8 2009

Subject: Actigard 50 WG
EPA Registration No. 100-922
Applications dated December 17, 2007 (bulb onions), and April 30, 2008 (cucurbits)
associated with Decision No.s 391028, 393109, 391030, 391032, 393108, 393110,
Petition No.s PP# 8F7352, PP# 8E7337.

Dear Ms. Clark:

The amendments referred to above, submitted in connection with registration under FIFRA, sec. 3(c)(7)(B), adding new uses for cucurbits and onions is acceptable, providing Syngenta submits the conditional data listed below, and submits one copy of a final printed label with the changes herein within 45 days of the date of this letter. A copy of the label stamped "Accepted with Comments" is included.

Label Changes

1. Page 1 and 19 – In the 'Ingredient Statement' there is an asterisk before the CAS number but nothing on this page refers to this asterisk, so make it match the technical label and 40CFR by having the asterisk after the active ingredient and below it, list the CAS number with asterisk. List the AI thusly -----
"Acibenzolar-S-methyl: Benzo (1,2,3) thiazazole-7-carbothioic acid-S-methyl ester*".
2. Page 1 and 19- Add the missing solid horizontal lines in the ingredients statement (dotted line now).
3. Page 1 and 19- As per the Label Review Manual, increase the type size of the Signal Word "CAUTION".
4. Page 3- Add the missing User Safety Recommendations; "Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing". In the second bulleted statement change "clothing immediately" to "clothing/PPE immediately".
5. Page 5 – In the General Information section add the missing information about new crops onions and cucurbits. Throughout this label, confirm whether it's 'bacterial spot' or 'bacterial leaf spot'.
6. Page 6 – in the adjuvant section add "Do not use adjuvants or surfactants on onions". Allowing these additives requires data as per the onion/cucurbit risk assessment we sent to you.

(continued)

- 7. Page 7 – delete “[moved below]”.
- 8. Page 11 – Harmonize inconsistent usage of the abbreviation ‘GPA’ in some locations and elsewhere as ‘gallons per acre’ or similar, to minimize ambiguity. Change “Apply no closer than a 7 day interval” to “Do not apply on less than 7-day interval.”
- 9. Page 12 – change restriction #3 to “8 times per crop per season” which matches the “Remarks”. This page and elsewhere, such as page 17, provide decimal equivalents for the fractions observed for ‘Amount of Actigard 50 WG (oz/A)’ which is consistent with such changes made throughout the label to the ‘Rate per Application’.
- 10. Page 14- clarify or spell out the meaning of “IYSV”. Also add the restriction “Do not use adjuvants or surfactants on onions”.
- 11. Page 15- in restriction #3 change “4 oz” back to the previous “2 ¼”. You can explain this increase by a separate amendment.

Conditional Data Requirements

- 12. By June 1, 2011, submit a valid immunotoxicity study GLN 870.7800.
- 13. By June 1, 2011 submit the following data using technical grade acibenzolar-S-methyl (CGA245704) prepared by the thiazole production process. Do not use the structural isomer designated CGA 362020. Include both plate incorporation and pre-incubation. GLN 870.5100; 870.5300; 870.5395; 870.5375 (needed only if mouse lymphoma cell with colony sizing is not done under 870.5300).
- 14. By June 1, 2011, submit the following field trial/decline data using the label rate and adjuvants.

Zone	Number of Trials	Crop(s) Planted at Each Trial	Trial Descriptions
2	1	Cantaloupe	These are simple decline studies. Collect two samples of cantaloupe at 0, 1, 3, 5, 7, and 10 days after the last application. Total treated cantaloupe samples from these 2 trials = 24
5	1	Cantaloupe	
6	2	Cantaloupe and Honeydew	These are a little different. These are side-by-side/decline studies. At each of the 4 trial locations cantaloupe and honeydew are planted side-by-side (or as close to side-by-side as is practical). Then two samples of each crop are collected at 0, 1, 3, 5, 7, and 10 days after the last application. Total treated cantaloupe samples from these 4 trials = 48. Total treated honeydew samples from these 4 trials = 48 Basically conducting 4 field/decline trials but collecting more samples because at each trial location both cantaloupe and honeydew are planted/collected.
10	2	Cantaloupe and Honeydew	

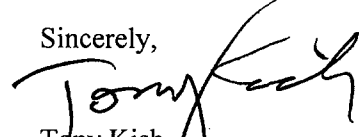
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Actigard 50WG; EPA Registration No. 100-922

If you have any questions, please contact Bryant Crowe by phone at (703) 305-0025 or via email at crowe.bryant@epa.gov.

Enclosure

Sincerely,



Tony Kish
Product Manager (22)
Fungicide Branch
Registration Division (7505P)

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GROUP 21 FUNGICIDE

**Actigard® 50WG
Plant Activator**

Active Ingredient:	
Acibenzolar-S-methyl	
(CAS No. 135158-54-2)*	50.0%
Other Ingredients:	50.0%
Total:	100.0%

Actigard 50WG is a water-dispersible granule.

KEEP OUT OF REACH OF CHILDREN.

CAUTION

See additional precautionary statements and directions for use inside booklet.

EPA Reg. No. 100-922

EPA Est.

_____ ounces
Net Weight

**ACCEPTED
with COMMENTS
In EPA Letter Dated
JUN 8 2009**

**Under the Federal Insecticide,
Fungicide, and Rodenticide Act
as amended, for the pesticide
registered under EPA Reg. No.**

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FIRST AID	
If on skin or clothing	<ul style="list-style-type: none"> • 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 in eyes	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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 swallowed	<ul style="list-style-type: none"> • 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 the poison control center or doctor. • Do not give anything by mouth to an unconscious person.
Have the product container or label with you when calling a poison control center or doctor, or going for treatment.	
<p>HOT LINE NUMBER For 24-Hour Medical Emergency Assistance (Human or Animal) Or Chemical Emergency Assistance (Spill, Leak, Fire or Accident) Call 1-800-888-8372</p>	

PRECAUTIONARY STATEMENTS

Hazards to Humans and Domestic Animals

CAUTION

Causes moderate eye irritation. Harmful if absorbed through skin. Avoid contact with eyes, skin, or clothing. Wash thoroughly with soap and water after handling.

Personal Protective Equipment (PPE)

Some of the materials that are chemically resistant to this product are listed below.

If you want more options, follow the instructions for Category A on an EPA chemical- resistance category selection chart.

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Chemical-resistant gloves made of any waterproof material such as polyethylene or

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- polyvinyl chloride
- Shoes plus socks

The State of California believes prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

Engineering Control Statements

When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(d)(4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

User Safety Recommendations

Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.
- Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.

Environmental Hazards

This pesticide is toxic to fish and aquatic invertebrates. Do not apply directly to water, or to areas where surface water is present, or to intertidal areas below the mean high water mark. Do not contaminate water when cleaning equipment or disposing of equipment wash water or rinsate.

Physical or Chemical Hazards

Do not use, pour, spill, or store near heat or open flame.

CONDITIONS OF SALE AND LIMITATION OF WARRANTY AND LIABILITY

NOTICE: Read the entire Directions for Use and Conditions of Sale and Limitation of Warranty and Liability before buying or using this product. If the terms are not acceptable, return the product at once, unopened, and the purchase price will be refunded.

The Directions for Use of this product must be followed carefully. It is impossible to eliminate all risks inherently associated with the use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as manner of use or application, weather or crop conditions, presence of other materials or other influencing factors in the use of the product, which are beyond the control of SYNGENTA CROP PROTECTION, INC. or Seller.

To the extent consistent with applicable law, Buyer and User agree to hold SYNGENTA and Seller harmless for any claims relating to such factors.

SYNGENTA warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated in the Directions for Use, subject to the inherent risks referred to above, when used in accordance with directions under normal use conditions. To the extent permitted by applicable law: (1) this warranty does not extend to the use of the product contrary to label instructions or under conditions not reasonably foreseeable to or beyond the control of Seller or SYNGENTA, and, (2) Buyer and User assume the risk of any such use. **TO THE EXTENT PERMITTED BY APPLICABLE LAW, SYNGENTA MAKES NO WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE NOR ANY OTHER EXPRESS OR IMPLIED WARRANTY EXCEPT AS WARRANTED BY THIS LABEL.**

To the extent permitted by applicable law, in no event shall SYNGENTA be liable for any incidental, consequential or special damages resulting from the use or handling of this product. **TO THE EXTENT PERMITTED BY APPLICABLE LAW, THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE EXCLUSIVE LIABILITY OF SYNGENTA AND SELLER FOR ANY AND ALL CLAIMS, LOSSES, INJURIES OR DAMAGES (INCLUDING CLAIMS BASED ON BREACH OF WARRANTY, CONTRACT, NEGLIGENCE, TORT, STRICT LIABILITY OR OTHERWISE) RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, SHALL BE THE RETURN OF THE PURCHASE PRICE OF THE PRODUCT OR, AT THE ELECTION OF SYNGENTA OR SELLER, THE REPLACEMENT OF THE PRODUCT.**

SYNGENTA and Seller offer this product, and Buyer and User accept it, subject to the foregoing Conditions of Sale and Limitation of Warranty and Liability, which may not be modified except by written agreement signed by a duly authorized representative of SYNGENTA.

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 interval. 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 12 hours.

PPE required 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
- Chemical-resistant gloves made of any waterproof material such as polyethylene or polyvinyl chloride
- Shoes plus socks

GENERAL INFORMATION

Actigard 50WG is a selective, non-pesticidal systemic compound used for the control of downy mildew (and suppression of black rot) of cole crops, downy mildew of leafy vegetables, downy mildew and white rust of spinach, bacterial spot and bacterial speck of fruiting vegetables, and blue mold of tobacco. Actigard 50WG is an inducer of host plant resistance. Actigard 50WG exhibits a unique mode of action which mimics the natural systemic activated resistance (SAR) response found in most plant species. Actigard 50WG has no direct activity against target pathogens.

FAILURE TO FOLLOW DIRECTIONS AND PRECAUTIONS ON THIS LABEL MAY RESULT IN CROP INJURY, POOR DISEASE CONTROL, AND/OR ILLEGAL RESIDUES.

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GENERAL USE INSTRUCTIONS

Timing: For best performance, Actigard 50WG should be applied preventively, before disease is observed in the field. An Actigard 50WG application mimics the SAR response in plants. Maximum disease protection is normally obtained 4 days after an Actigard 50WG application.

Application: Actigard 50WG moves systemically within the plant; however uniform spray coverage is essential for best performance. Make no more spray solution than is needed for application. Avoid spray overlap, as crop injury may occur.

Adjuvants: When an adjuvant is to be used with this product, SYNGENTA recommends the use of a Chemical Producers and Distributors Association certified adjuvant.

Efficacy: Actigard 50WG provides protection against certain diseases in the crops listed on this label. Actigard 50WG provides sufficient protection to reduce disease levels but should be tank mixed with other registered products with curative activity if disease is present at the time of application, to ensure adequate disease control as well as to broaden the spectrum of disease control.

Integrated Pest Management (IPM): Actigard 50WG should be integrated into an overall disease and pest management strategy whenever the use of a fungicide is required. Cultural practices known to reduce disease development should be followed. Consult your local agricultural authorities for additional IPM strategies established for your area.

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FUNGICIDES

Resistance Management:

Actigard 50WG exhibits a mode of action unique from currently available fungicides and bactericides. Since Actigard 50WG has no direct activity on plant pathogens, the likelihood that resistance (insensitivity) will develop in the pathogens is low. However, plant pathogens are known to develop tolerance to host plant resistance and to products used repeatedly for control. Because insensitivity development cannot be fully predicted, the use of this product should conform to sensitivity management strategies established for the crop and use area. Such strategies may include rotating and/or tank mixing with products with different modes of action as well as the use of good cultural practices. Consult your local pest control advisor or extension office for details. If insensitivity to this product develops in your area, this product or other products with a similar mode of action may not provide adequate control. If you experience difficulty with control, and insensitivity is a likely cause, consult your local Syngenta Crop Protection representative, local agricultural extension office, or pest control advisor for the best alternative method of control. Syngenta encourages responsible product stewardship to ensure effective long-term disease control.

Crop Tolerance: Plant tolerance has been found to be acceptable for all crops on the label, however, not all possible tank-mix combinations have been tested under all conditions. When possible, it is recommended to test the combinations on a small portion of the crop to ensure that a phytotoxic response will not occur as a result of application.

ROTATIONAL (PLANTBACK) RESTRICTIONS

Rotational Crops: To avoid possible illegal residues, do not plant any other crop within 30 days of an Actigard 50WG application to the preceding crop unless the crop appears on this label or is a member of the Fruiting Vegetable crop group (eggplant, groundcherry, pepino, bell pepper, chili pepper, cooking pepper, pimento, or sweet pepper).

MIXING AND APPLICATION METHODS

Spray Equipment

Thorough coverage is necessary to provide maximum disease control. Applications using sufficient water volume to provide thorough and uniform coverage generally provide the most effective disease control.

To avoid spray drift, do not apply when conditions favor drift beyond the target area. Avoid spray overlap, as crop injury or illegal residues may occur.

Nozzles

- Equip sprayers with nozzles that provide accurate and uniform application.
- Nozzles should be the same size and uniformly spaced across the boom.
- Calibrate sprayer before use.

[Moved below]

- It is suggested that screens be used to protect the pump and to prevent nozzles from clogging.
- Screens placed on suction side of pump should be **16-mesh or coarser**.
- Do not place a screen in the recirculation line.
- Use 50-mesh or coarser screens between the pump and boom, and where required, at nozzles.
- Check nozzle manufacturer's recommendations.

Pump

- Use a pump with capacity to:
 - (1) maintain adequate psi at nozzles
 - (2) provide sufficient agitation in the tank to keep mixture in suspension – this requires recirculation of 10% of tank volume per minute.
- Use a jet agitator or liquid sparge tube for agitation.
- Do not air sparge.

For more information on spray equipment and calibration, consult sprayer manufacturers and state recommendations. For specific local directions and spray schedules, consult the current state agricultural recommendations.

MIXING PROCEDURES

Mixing Instructions

- Actigard 50WG is a wettable granular (WG) formulation.
- Prepare no more spray mixture than is required for the immediate operation.
- Thoroughly clean spray equipment before using this product.
- Vigorous agitation is necessary for proper dispersal of the product.
- Maintain maximum agitation throughout the spraying operation.
- Do not let the spray mixture stand overnight in the spray tank.
- Rinse spray tank thoroughly with clean water after each day's use and dispose of pesticide rinsate by application to an already treated area.

Actigard 50WG Alone (no tank mix)

- Add 1/2 of the required amount of water to the spray or mixing tank.
- With the agitator running, add the Actigard 50WG to the tank.
- Continue agitation while adding the remainder of the water.
- Begin application of the spray solution after Actigard 50WG has completely dispersed into the mix water.
- Maintain agitation until all of the mixture has been sprayed.

Actigard 50WG + Tank Mixtures: Actigard 50WG is compatible with most insecticide and fungicide products. However, the physical compatibility of Actigard 50WG with tank mix partners should be tested before use. To determine the physical compatibility of Actigard 50WG with other products, use a jar test described below.

Using a quart jar, add the proportionate amounts of the products to 1 qt. of water. Add wettable powders and water-dispersible granular products first, then liquid flowables, and emulsifiable concentrates last. After thoroughly mixing, let stand for at least 5 minutes. If the combination remains mixed or can be remixed readily, it is physically compatible. Once compatibility has been demonstrated, use the same procedure for adding required ingredients to the spray tank.

Mixing in the Spray Tank

- Add 1/2 of the required amount of water to the mix tank.
- Start the agitator running before adding any tank mix partners.
- In general, tank mix partners should be added in this order: products packaged in water-soluble packaging, wettable powders, wettable granules (dry flowables) such as Actigard 50WG, liquid flowables, liquids and emulsifiable concentrates.
- Always allow each tank mix partner to become fully dispersed before adding the next product. Provide sufficient agitation while adding the remainder of the water.
- Maintain agitation until all the mixture has been applied.

Note: When using Actigard 50WG in tank mixtures, all products in water-soluble packaging should be added to the tank before any other tank mix partner, including Actigard 50WG. Allow the water-soluble packaging to completely dissolve and the product(s) to completely disperse before adding any other tank mix partner to the tank.

If using Actigard 50WG in a tank mixture, observe all directions for use which appear on the tank mix product label. No label dosage rate should be exceeded, and the most restrictive label precautions and limitations should be followed. This product should not be mixed with any product which prohibits such mixing.

APPLICATION INSTRUCTIONS

Actigard 50WG may be applied with all types of spray equipment commonly used for making ground and aerial applications. Proper adjustments and calibration of spraying equipment to give good canopy penetration and coverage is essential for good disease control.

Ground Application

- Apply in a minimum of 10 gallons of water per acre, unless specified otherwise.
- Do not apply through any ultra-low volume (ULV) spray system.
- Thorough coverage is necessary to provide good disease control.

Aerial Application

- Use only on crops where aerial applications are indicated.

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- Thorough coverage is necessary to provide good disease protection.
- Apply in a minimum of 10 gallons of water per acre unless specified otherwise.
- Avoid application under conditions when uniform coverage cannot be obtained or when excessive spray drift may occur.
- Do not apply directly to humans or animals.
- Do not apply through any ultra-low volume (ULV) spray system.
- Avoiding spray drift at the application site is the responsibility of the applicator.
 - The interaction of many equipment and weather related factors determine the potential for spray drift.
 - The applicator and the grower are responsible for considering all these factors when making decisions.

Chemigation: Do not apply this product through any type of irrigation system.

DIRECTIONS FOR USE

Crop	Pest	Rate per Application	Remarks
Cole (Brassica) Crops	Downy Mildew <i>(Peronospora parasitica)</i> Suppression of Black Rot <i>(Xanthomonas campestris)</i>	0.5 - 1 oz./A	Apply preventively. Make up to four applications on a 7-day schedule. Begin applications 7-10 days after thinning.

Notes: Actigard 50WG can be applied by ground or by air. Apply in sufficient water to ensure adequate coverage. A minimum of 20 gallons of water per acre should be used for ground applications and a minimum of 10 gallons of water per acre should be used for aerial applications. If downy mildew is present in the production area, the first application should be made in tank mixture with another registered downy mildew fungicide. Once activated, the supplemental applications of Actigard 50WG may be applied alone.

Restrictions:

- (1) Actigard 50WG should be applied to healthy, actively growing plants. Do not apply Actigard 50WG to plants that are stressed due to drought, excessive moisture, cold weather, or herbicide injury, etc.
- (2) Do not apply more than 4 oz. (0.125 lb ai) of Actigard 50WG per acre per season.
- (3) Allow 7 days between the last application and harvest (7 day PHI).

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Crop	Pest	Rate per Application	Remarks
<p>Cucurbits</p> <p>Cantaloupe Cucumber Watermelon Squash Zucchini</p> <p>And hybrids or cultivars of these and those listed below.</p> <p>See below for additional cucurbit crops.</p>	<p>Suppression of:</p> <p>Downy Mildew (<i>Pseudoperonospora cubensis</i>)</p> <p>Powdery mildew (<i>Sphaerotheca fuliginea</i>) (<i>Erysiphe cichoracearum</i>)</p> <p>Scab (<i>Cladosporium cucumerinum</i>)</p> <p>Bacterial fruit blotch (<i>Acidovorax avena citrulli</i>)</p> <p>Bacterial leafspot (<i>Xanthomonas campestris pv cucurbitae</i>)</p> <p>Angular leafspot (<i>Pseudomonas syringae pv lachrymans</i>)</p>	<p>Foliar Application:</p> <p>0.5 - 2 oz./A</p>	<p>Apply preventively prior to disease development. Apply no closer than a 7 day interval. Actigard 50WG can be tank mixed with other fungicides and bactericides such as copper products if disease is present. Use of an adjuvant is recommended.</p>

Additional cucurbit crops: Chayote, Chinese waxgourd, Gourds, Honeydew, Momordica spp. (Bitter melon, Balsam apple), Muskmelon, Pumpkin

Notes: Actigard can be applied by ground or by air. Apply in sufficient water to ensure adequate coverage. A minimum of 20 GPA should be used for ground applications and a minimum of 10 GPA should be used for aerial applications. If disease is present in the production area, the first applications should be made in tank mixture with another registered fungicide. Banded applications can be made early when plants are small (7" proportional band) as long as coverage is adequate.

Restrictions:

- (1) Actigard 50WG should be applied to healthy, actively growing plants. Do not apply Actigard 50WG to plants that are stressed due to drought, excessive moisture, or herbicide injury, etc.
- (2) Do not apply more than 16 oz. (0.5 lb ai) of Actigard 50WG per acre per season.
- (3) May be applied the day of harvest (0 day PHI).

Crop	Pest	Rate per Application	Remarks
Fruiting Vegetables (excluding tomatoes) Eggplant Groundcherry Pepino Pepper (includes bell pepper, chili pepper, cooking pepper, pimento, sweet pepper)	Bacterial Spot <i>(Xanthomonas campestris pv. vesicatoria)</i>	0.33 – 0.75 oz./A	Begin applications within one week of transplanting or emergence. Make up to 8 weekly, sequential applications.
	Bacterial Speck <i>(Pseudomonas syringae pv. tomato)</i>		

For Ground Applications: Begin season with low water volumes. As plant canopy increases, the Actigard 50WG rate should increase to ensure activity. The table below provides guidance on increasing the rate through the season (a dilute carrier volume of 100 gals. of water per acre is assumed for fully grown plants).

<u>Amount of Actigard 50WG (oz./A)</u>	<u>Gals./A</u>	<u>Weeks Following Transplanting</u>
1/3	30-50	0-2
1/2	60-70	3-4
3/4	70-100	5-8

For Aerial Applications: Apply in a minimum of 10 GPA.

Restrictions:

- (1) Actigard 50WG should be applied to healthy, actively growing plants. Do not apply Actigard 50WG to plants that are stressed due to drought, excessive moisture, cold weather, or herbicide injury, etc.
- (2) Use the higher rate over time, even if water volume does not increase. If gallonage at any particular application is higher than in this example, increase Actigard 50WG accordingly, i.e., keep the concentration the same but do not exceed ¾ oz./100 gal. concentration.
- (3) Do not apply more than 6 times per crop per season.
- (4) Do not apply on less than 7-day interval.
- (5) Do not apply more than 6 oz. (0.1875 lb ai) of Actigard 50WG per acre per season.
- (6) Allow 14 days between the last application and harvest (14 day PHI).

Precautions: Under certain conditions, this product, when used on fruiting vegetables, may lead to reductions in yield. Syngenta recommends that the user and/or grower test this product in order to determine its suitability for its intended use in fruiting vegetables. Syngenta makes this product available to the user, and/or grower solely to the extent that the benefit and utility, in the sole opinion of the user and/or grower, outweigh the extent of potential reductions in yield of fruiting vegetables following use of Actigard 50WG. The decision to use or not use Actigard 50WG in fruiting vegetables must be made by each individual user and/or grower on the basis of possible reductions in yield, the severity of disease incidence, the cost of alternate disease control options, if any, and other factors.

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Crop	Pest	Rate per Application	Remarks
Lettuce (Head and Leaf)	Downy Mildew (<i>Bremia lactucae</i>)	0.75 – 1 oz./A	Apply preventively on a 7 to 10-day schedule. Begin applications after thinning. Do not make more than 4 applications per crop.

Notes: Actigard 50WG can be applied by ground or by air. Apply in sufficient water to ensure adequate coverage. A minimum of 20 gallons of water per acre should be used for ground applications and a minimum of 10 gallons of water per acre should be used for aerial applications. If downy mildew is present in the production area, the first application should be made in tank mixture with another registered downy mildew fungicide. Once activated, the supplemental applications of Actigard 50WG may be applied alone. Banded applications can be made early when plants are small (7-inch proportional band) as long as coverage is adequate.

Restrictions:

- (1) Actigard 50WG should be applied to healthy, actively growing plants. Do not apply Actigard 50WG to plants that are stressed due to drought, excessive moisture, cold weather, or herbicide injury, etc. Do not apply when extended cold or cold and cloudy conditions are expected.
- (2) Do not use more than one application of Actigard 50WG on head lettuce intended for bag purposes (delayed harvest) due to potential fringe burn.
- (3) Do not apply prior to thinning or within 5 days of transplanting.
- (4) Do not apply more than 4 oz. (0.125 lb ai) of Actigard 50WG per acre per season.
- (5) Allow 7 days between the last application and harvest (7 day PHI).

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Crop	Pest	Rate per Application	Remarks
<p>Onions</p> <p>Bulb, dry</p> <p>Including all cultivars and/or hybrids of these.</p> <p>See additional crops below.</p>	<p>For suppression of:</p> <p>Downy Mildew (<i>Peronospora destructor</i>)</p> <p>Iris Yellow Spot (<i>Iris yellow spot virus</i>)</p> <p>Leaf Blight (<i>Xanthomonas axonopodis</i> pv. <i>allii</i>)</p>	<p>Foliar Application:</p> <p>0.75 – 1 oz./A</p>	<p>Apply preventively on a 7-10 day schedule. Begin applications after thinning or after the 3-4 leaf stage.</p> <p>For best results for IYSV, begin at 4 to 6 weeks pre-bulb initiation and continue on a 7-10 day interval. A thrips control program in conjunction with Actigard 50WG is recommended.</p> <p>For Xanthomonas leaf blight, begin 2-4 weeks pre-bulb initiation and continue on a 7-10 day interval. After the final Actigard 50WG application, use a recommended copper-based bactericide program to finish the season.</p>

Additional Crops in Bulb Onion Subgroup: bulb daylily, bulb fritillaria, bulb garlic, great-headed bulb garlic, Serpent bulb garlic, bulb lily, Chinese bulb onion, pearl onion, potato bulb onion, and bulb shallot.

Restrictions:

Apply in sufficient water to ensure adequate coverage. Banded applications can be made early when plants are small (7" proportional band) as long as coverage is adequate.

- (1) Do not apply Actigard 50WG to plants that are stressed due to drought, excessive moisture, cold weather, or herbicide injury, etc.
- (2) Actigard 50 WG should be applied to healthy, actively growing plants. Do not apply prior to thinning or within 5 days of transplanting.
- (3) Avoid spray overlap as injury may occur.
- (4) Do not apply more than 4 oz. (0.125 lb ai) of Actigard 50WG per acre per season.
- (5) Allow 7 days between the last application and harvest (7 day PHI).

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Crop	Pest	Rate per Application	Remarks
Spinach	Downy Mildew (<i>Peronospora effusa</i>) White Rust (<i>Albugo occidentalis</i>)	Foliar Application: 0.5 - 3/4 oz./A	Apply preventively on a 7 to 10-day schedule. Begin applications at first to second true leaf or after thinning. Do not make more than 3 consecutive applications per crop.

Notes: Actigard 50WG can be applied by ground or by air. Apply in sufficient water to ensure adequate coverage. A minimum of 20 gallons of water per acre should be used for ground applications and a minimum of 10 gallons of water per acre should be used for aerial applications. Banded applications can be made early when plants are small (proportional band) as long as coverage is adequate. Actigard 50WG may be used following the at-planting Ridomil Gold® EC, Ridomil Gold® SL, or Ridomil Gold® GR application for control of downy mildew or white rust.

Restrictions:

- (1) Actigard 50WG should be applied to healthy, actively growing plants. Do not apply Actigard 50WG to plants that are stressed due to drought, excessive moisture, cold weather, or herbicide injury, etc. Do not apply when extended cold or cold and cloudy conditions are expected.
- (2) Do not apply Actigard 50WG to young seedlings.
- (3) Do not apply more than 4 oz. (0.125 lb ai) of Actigard 50WG per acre per season.
- (4) Allow 7 days between the last application and harvest (7 day PHI).

Crop	Pest	Rate per Application	Remarks
Tobacco	Blue Mold (<i>Peronospora tabacina</i>)	0.5 oz./A	Apply on a preventive schedule when blue mold threatens.
Burley and Binder			Begin applications when plants are an average of 18 inches tall. Another registered blue mold product should be used prior to 18 inches for early season control and after the final application if conditions are conducive for disease. Make up to 3 applications on a 10-day schedule.
Flue-Cured and Dark			Begin applications when plants are an average of 12 inches tall. Another registered blue mold product should be used prior to 12 inches for early season control and after the final application if conditions are conducive for disease. Make up to 3 applications on a 10-day schedule.

Notes: Actigard 50WG can be applied by ground or by air. Apply in sufficient water to ensure adequate coverage. A minimum of 20 gallons of water per acre should be used for ground applications and a minimum of 10 gallons of water per acre should be used for aerial applications. Applications of Actigard 50WG may result in leaf yellowing. This cosmetic yellowing normally disappears after the final application.

Restrictions:

- (1) Apply Actigard 50WG to healthy, actively growing plants. Do not apply Actigard 50WG to plants that are stressed due to drought, excessive moisture, cold weather, or herbicide injury, etc.
- (2) Do not apply Actigard 50WG to tobacco in plant beds or in greenhouses/plant houses.
- (3) Do not apply Actigard 50WG with foliar fertilizers and crop oils.
- (4) Avoid spray overlap because injury may result.
- (5) Do not apply more than 1.5 oz. (0.0468 lb ai) of Actigard 50WG per acre per season.
- (6) Allow 21 days between the last application and harvest (21 day PHI).

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Crop	Pest	Rate per Application		Remarks
		Foliar Application:		
Tomatoes	Bacterial Spot (<i>Xanthomonas campestris pr. vesicatoria</i>)	0.33 - 0.75 oz./A		Begin applications within one week of transplanting or emergence. Make up to 8 weekly sequential applications. 3/4 oz. per 100 gallons of water (minimum of 1/3 oz./A in early season and maximum of 3/4 oz./A by end of season). See table below.
	Bacterial Speck (<i>Pseudomonas syringae pr. tomato</i>)			

For Ground Applications: Begin season with low water volumes. As plant canopy increases, the Actigard 50WG rate should increase to ensure activity. The table below provides guidance on increasing the rate through the season (a dilute carrier volume of 100 gallons of water per acre is assumed for fully grown tomato plants).

<u>Amount of Actigard 50WG (oz./A)</u>	<u>Gals./A</u>	<u>Weeks following transplanting</u>
1/3	30-50	0-2
1/2	60-70	3-4
3/4	70-100	5-8

For Aerial Applications: Apply in a minimum of 10 GPA.

Restrictions:

- (1) Actigard 50WG should be applied to healthy, actively growing plants. Do not apply Actigard 50WG to plants that are stressed due to drought, excessive moisture, cold weather, or herbicide injury, etc.
- (2) Use the higher rate over time, even if water volume does not increase. If gallonage at any particular application is higher than in this example, increase Actigard 50WG accordingly, i.e., keep the concentration the same but do not exceed 3/4 oz./100 gals. concentration.
- (3) Allow 14 days between the last application and harvest.
- (4) Do not apply more than 8 times per crop per season.
- (5) Do not apply on less than 7-day interval.
- (6) Do not apply more than 6 oz. (0.187 lb ai) of Actigard 50WG per acre per season.

Precaution: Under certain conditions, this product, when used on tomatoes, may lead to reductions in yield. Syngenta recommends that the user and/or grower test this product in order to determine its suitability for its intended use in tomatoes. Syngenta makes this product available to the user and/or grower solely to the extent that the benefit and utility, in the sole opinion of the user and/or grower, outweigh the extent of potential reductions in yield of tomatoes following use of Actigard 50WG. The decision to use or not use Actigard 50WG in tomatoes must be made by each individual user and/or grower on the basis of possible reductions in yield, the severity of disease incidence, the cost of alternate disease control options, if any, and other factors.

STORAGE AND DISPOSAL

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

Pesticide Storage

Store in a cool, dry place.

Pesticide Disposal

Pesticide wastes may be toxic. Improper disposal of unused pesticide, spray mixture, or rinse water is a violation of Federal law. If these wastes cannot be used according to label instruction, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance in proper disposal methods.

Container Disposal (Paper and Plastic Bags)

Completely empty bag into application equipment. Dispose of empty bag in a sanitary landfill, by incineration, or, alternatives allowed by State and local authorities.

Container Disposal (Plastic Containers)

Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in sanitary landfill, or alternatives allowed by State and local authorities.

For minor spills, leaks, etc., follow all precautions indicated on this label and clean up immediately. Take special care to avoid contamination of equipment and facilities during cleanup procedures and disposal of wastes.

CONTAINER IS NOT SAFE FOR FOOD, FEED, OR DRINKING WATER.

Actigard®, Ridomil Gold®, and the Syngenta logo are trademarks of a Syngenta Group Company

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For non-emergency (e.g., current product information) call
Syngenta Crop Protection at 1-800-334-9481.

Manufactured for:
Syngenta Crop Protection, Inc.
P.O. Box 18300
Greensboro, North Carolina 27419-8300

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[Container/Back Label]

GROUP	21	FUNGICIDE
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Actigard® 50WG
Plant Activator

Active Ingredient:

Acibenzolar-S-methyl

(CAS No. 135158-54-2)*50.0%

Other Ingredients:50.0%

Total:100.0%

Actigard 50WG is a water-dispersible granule.

KEEP OUT OF REACH OF CHILDREN.

CAUTION

See directions for use in attached booklet.

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. Refer to supplemental labeling under "Agricultural Use Requirements" in the Directions for Use section for information about this standard.

EPA Reg. No. 100-922

EPA Est.

Net Weight

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FIRST AID	
If on skin or clothing	<ul style="list-style-type: none"> • 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 in eyes	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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 swallowed	<ul style="list-style-type: none"> • 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 the poison control center or doctor. • Do not give anything by mouth to an unconscious person.
Have the product container or label with you when calling a poison control center or doctor, or going for treatment.	
<p>HOT LINE NUMBER For 24-Hour Medical Emergency Assistance (Human or Animal) Or Chemical Emergency Assistance (Spill, Leak, Fire or Accident) Call 1-800-888-8372</p>	

PRECAUTIONARY STATEMENTS

Hazards to Humans and Domestic Animals

CAUTION

Causes moderate eye irritation. Harmful if absorbed through skin. Avoid contact with eyes, skin, or clothing. Wash thoroughly with soap and water after handling.

Chemigation

Do not apply this product through any type of irrigation system.

Refer to Environmental Hazards, Physical and Chemical Hazards, and Storage and Disposal sections in attached booklet.

Pesticide Storage

Store in a cool, dry place.

Container Disposal (Paper and Plastic Base)

Completely empty bag into application equipment. Dispose of empty bag in a sanitary landfill, by incineration, or, alternatives allowed by State and local authorities.

Container Disposal (Plastic Containers)

Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in sanitary landfill, or alternatives allowed by State and local authorities.

CONTAINER IS NOT SAFE FOR FOOD, FEED, OR DRINKING WATER.

Actigard®, the Syngenta logo and the CP FRAME are trademarks of a Syngenta Group Company

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Manufactured for:
Syngenta Crop Protection, Inc.
P.O. Box 18300
Greensboro, North Carolina 27419-8300

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