7547-L1017348 09-16-15 SCP 01-03 (01-19-16)

Actigard® 50WG - 7.5 oz booklet/base - Mech/Trad. FPL

SCP 1137... 1688... 1863... 2379... 2745... 3455... 3579... 5153... 5893... 7547...



Active Ingredient: Acibenzolar-S-methyl: Benzo (1,2,3) thiadiazole-7-

carbothioic acid-S-methyl ester\* . . . 50.0% Other Ingredients: 50.0%

\_\_\_\_\_ Total:

100.0%

\*CAS No. 135158-54-2

Actigard 50WG is a water-dispersible granule. Contains 0.5 pounds acibenzolar-S-methyl per pound product.

# KEEP OUT OF REACH OF CHILDREN. CAUTION

See additional precautionary statements and directions for use inside booklet.

EPA Reg. No. 100-922 Product of the USA EPA Est. 67545-AZ-1 Formulated in the USA SCP 922A-L2T 0915

7.5 ounces Net Weight

	FIRST AID		
If on skin	<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 in eyes	<ul> <li>Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li> <li>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 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 the poison control center or doctor.</li> <li>Do not give anything to an unconscious person.</li> </ul>		
Have the product container or label with you when calling a poison control center or doctor, or going for treatment.			
	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		

#### **PRECAUTIONARY STATEMENTS**

#### **Hazards to Humans and Domestic Animals**

#### **CAUTION**

Harmful if absorbed through skin. Causes moderate eye irritation. Avoid contact with skin, eyes or clothing. 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.

#### **Personal Protective Equipment (PPE)**

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

#### Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Chemical-resistant gloves made of any waterproof material such as polyethylene or polyvinyl chloride
- · Shoes plus socks

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

#### **Engineering Controls**

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/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- 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.

#### **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 washwater 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, LLC 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

#### PRODUCT INFORMATION

Actigard 50WG is a selective, non-pesticidal systemic compound used for the control of several listed fungal, bacterial, and viral plant diseases. 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.

#### **USE INSTRUCTIONS**

**Timing:** For best performance, Actigard 50WG should be applied preventively, before disease is observed. 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; when making foliar applications, 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, the use of an adjuvant that meets the standards of the Chemical Producers and Distributors Association (CPDA) adjuvant certification program is recommended.

**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.

#### GROUP 21 FUNGICIDE

#### **Resistance Management**

Actigard 50WG exhibits a mode of action uniquely different 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:** Although plant tolerance has been found to be acceptable for all crops on the label, 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**

Crop	Days to Plantback after last Actigard 50WG application
Fruiting Vegetables Tomatoes Peppers (all types) Eggplant Groundcherry Pepino Brassica (cole) crops Cucurbits Tobacco Lettuce (all types) Spinach Onion, dry bulb group Shallot	0 day
All other crops for food or feed	30 days

#### **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.
- 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 <sup>1</sup>/<sub>2</sub> 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 <sup>1</sup>/<sub>2</sub> 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. Do not exceed any label rate, and the most restrictive label precautions and limitations must be followed. Do not mix this product with any other 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 are essential for good disease control.

#### **Ground Application**

- Apply in a minimum of 10 GPA, 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.
- Thorough coverage is necessary to provide good disease protection.
- Apply in a minimum of 10 GPA 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.

#### **Application through Irrigation Systems (Chemigation)**

• Apply this product only through center pivot, solid set, hand move, moving wheel, micro-sprinkler, or drip irrigation systems. Do not apply this product through any other type of irrigation system.

Crop injury, lack of effectiveness, or illegal pesticide residues in the crop can result from non-uniform distribution of treated water.

- If you have questions about calibration, you should contact State Extension Service specialists, equipment manufacturers, or other experts.
- Applications via Drip Irrigation: The amount of product needed is based on the rate per acre. The
  rate per 1000 linear feet will vary depending on the row spacing but the rate per acre will be the
  same. The following table is general guide for the amount of product per 1000 linear feet.

	oz Actigard 50WG/1000 row feet based on rate/Acre					
			Rate (oz Actigard 50WG)/Acre			
centers	linear feet/A	0.33	0.5	0.75	1	2
24"	21780	0.015 0.023 0.034 0.046 0.092				
36"	14520	0.023	0.034	0.052	0.069	0.138
48"	10890	0.03	0.046	0.069	0.092	0.183

- Do not connect an irrigation system (including greenhouse systems) used for pesticide application to a public water system, unless the pesticide label-prescribed safety devices for public water systems are in place.
- A person knowledgeable of the chemigation system and responsible for its operation, or under the supervision of the responsible person, shall shut the system down and make necessary adjustments should the need arise.
- Actigard 50WG must be applied on the schedule specified in the specific crop use directions, not according to the irrigation schedule.

#### **Operating Instructions**

- The system must contain a functional check-valve, vacuum relief valve, and low pressure drain appropriately located on the irrigation pipeline to prevent water-source contamination from backflow.
- 2. The pesticide injection pipeline must contain a functional, automatic, quick-closing check-valve to prevent the flow of fluid back toward the injection pump.
- 3. The pesticide injection pipeline must also contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.
- 4. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.
- The irrigation line or water pump must include a functional pressure switch which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.

- 6. Systems must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.
- 7. Do not apply when wind speed favors drift beyond the area intended for treatment.

#### **Specific Instructions for Public Water Systems**

- 1. Public water system means a system for the provision to the public of piped water for human consumption if such system has at least 15 service connections or regularly serves an average of at least 25 individuals daily at least 60 days out of the year.
- 2. Chemigation systems connected to public water systems must contain a functional, reduced-pressure zone, back-flow preventer (RPZ) or the functional equivalent in the water supply line upstream from the point of pesticide introduction. As an option to the RPZ, the water from the public water system should be discharged into a reservoir tank prior to pesticide introduction. There shall be a complete physical break (air gap) between the outlet end of the fill pipe and the top or overflow rim of the reservoir tank of at least twice the inside diameter of the fill pipe.
- 3. The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.
- 4. The pesticide injection pipeline must contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.
- 5. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops, or in cases where there is no water pump, when the water pressure decreases to the point where pesticide distribution is adversely affected.
- 6. Systems must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.
- 7. Do not apply when wind speed favors drift beyond the area intended for treatment.

#### **DIRECTIONS FOR USE IN THE FIELD**

Crop	Pest	Rate per Application	Remarks
Apples Pears See additional pome fruit below.	Suppression of: Fire Blight (Erwinia amylovora)	Per Acre 1-2 oz/A	Foliar Application:  For best results for suppression and to improve activity of standard products, apply Actigard in a tank mix with antibiotic products.  Apply 1 - 2 oz/A in a tank mix with a fire blight treatment (generally an antibiotic) that is standard in your area. This is generally 2-3 applications between 20% bloom and petal fall depending on the environmental conditions. Do not apply closer than a 7 day interval.
		1 oz/1 quart of 1% penetrant	Paint application after canker cut-outs or grafts:  Mix 1 oz Actigard in 1 quart of 1% Pentrabark or similar penetrant. Apply to the branch area immediately below canker after cutting to an area extending 1 - 1 ½ feet. One quart will treat approximately 500 cuts. Do not apply within 60 days of harvest (60 –day PHI).

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Crop	Pest	Rate per Application	Remarks
Apples Pears	Suppression of:	Per Tree 0.0012 –	Soil applications via drench or chemigation:
(continued)	Fire Blight (Erwinia	0.035 oz	Begin applications at green tip.
See additional pome fruit below.	amylovora)		Drench Application: Apply as a drench in the desired amount of the mix solution (8-16 fl oz of solution) around the base of the tree – within the first 4-6 inches around the tree. NOTE: Lower rates are recommended for younger trees while higher rates for trees over 4 years old. Refer to Table 1 below to determine amount of Actigard in solution needed. Do not exceed 3.2 oz/A/application at any time.  Chemigation Application: Actigard may be applied via drip irrigation or via microsprinkler irrigation.

**Pome Crop Group 11-10:** Apple; azarole; crabapple; loquat; mayhaw; medlar; pear; pear, Asian; quince; quince, Chinese; quince, Japanese; tejocote; cultivars, varieties, and/or hybrids of these.

#### Specific Use Restrictions:

- (1) Do not apply more than 3.2 oz (0.1 lb ai) Actigard 50WG per acre per application.
- (2) Do not apply more than 12.8 oz (0.4 lb ai) of all products containing acibenzolar-S-methyl per acre per year.
- (3) When applying to the soil, may be applied the day of harvest (0-day PHI).
- (4) When applying foliarly, do not apply within 60 days of harvest (60-day PHI).

Citrus Orange Grapefruit	Suppression of: Citrus Canker	Per single tree 0.0012 – 0.035 oz	Apply preventively. Make up to twelve applications on a 30-day retreatment interval schedule.
Tangerine	(Xanthomonas	D	Book Assilantia Forbotastiti and
Lemon Lime	campestris pv. citri)	Per 100 trees 0.12 – 1.5 oz (Table 1	Drench Application: For best activity, apply as a drench in the desired amount of the mix solution (8-16 fl oz of solution) around
See additional crops below.		<i>below)</i> Per Acre	the base of the tree – within the first 4-6 inches around the tree. NOTE: <b>Determine</b> rate based on tree age using Table 2 below,
crops below.		0.5 - 3.2 oz/A	then use Table 1 to determine the amount of Actigard for the volume of solution desired.
			Chemigation Application: Actigard may be applied via drip irrigation or via microsprinkler irrigation at 0.5 – 3.2 oz/A.

Citrus Crop Group 10-10: Australian desert lime; Australian finger-lime; Australian round lime; Brown River finger lime; calamondin; citron; citrus hybrids; grapefruit; Japanese summer grapefruit; kumquat; lemon; lime; Mediterranean mandarin; mount white lime; New Guinea wild lime; orange, sour; orange, sweet; pummelo; Russell River lime; satsuma mandarin; sweet lime; tachibana orange; Tahiti lime; tangelo; tangerine (mandarin); tangor; trifoliate orange; uniq fruit; cultivars, varieties, and/or hybrids of these.

- (1) Do not apply more than 3.2 oz (0.1 lb ai) Actigard 50WG per acre per application.
- (2) Do not apply more than 12.8 oz (0.4 lb ai) of all products containing acibenzolar-S-methyl per acre per year.
- (3) May be applied the day of harvest (0-day PHI).

Table 1. Amount of Actigard 50WG per 100 gallons of water for drench applications

Rate (c	oz 50WG)	oz Actigard 50WG in	100 gallons of Water
Per Tree	Per 100 Trees	For 8 oz solution per tree	For 16 oz solution per tree
0.00125	0.125	2	1
0.0025	0.25	4	2
0.0038	0.38	6	3
0.005	0.5	8	4
0.0075	0.75	12	6
0.015	1.5	24	12
0.035	3.5	56	28

To determine the total ounces of Actigard 50WG/A, multiply the number of trees per acre by the ounces of 50WG per tree. The rate cannot exceed 3.2 oz Actigard/A.

Table 2. Rate by Tree Age per 100 Trees at 4 or 5 Applications per Year

Number of	Tree Age and oz/100 trees			
applications	< 1 year	1-2 years	2-3 years	>3 years
4 or less applications per year	0.125 – 0.25 oz	0.25 – 0.5 oz	0.5 – 0.75 oz	0.75 – 1.5 oz
5 or more applications per year	0.125 oz	0.25 oz	0.5 oz	0.75- 1.0 oz

Crop	Pest	Rate per Application	Remarks
Peppers (non-bell/ Chili/Hot)	Bacterial Spot (Xanthomonas spp.)	0.33 – 0.75 oz/A	Begin applications within one week of transplanting or emergence. Make up to 8 weekly sequential applications.  0.75 oz per 100 gallons of water (minimum of 0.33 oz/A in early season and maximum of 0.75 oz/A by end of season). See table below.

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 GPA is assumed for fully grown tomato plants). 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 apply an amount of water per application delivering more than 0.75 oz product/A.

Amount of Actigard 50WG (Oz/A)	Gals/A	Weeks Following Transplanting
0.33	30-50	0-2
0.50	60-70	3-4
0.75	70-100	5-8

**Notes:** Actigard 50WG can be applied by ground, by drip irrigation, by overhead irrigation 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, another registered product for that disease should be applied at the same timing as the Actigard 50WG application (can tank mix if applying Actigard 50WG as a foliar spray). Banded applications can be made early when plants are small (7" proportional band) as long as coverage is adequate.

#### **Precautions:**

- 1) Actigard 50WG should be applied to healthy, actively growing plants.
- Actigard 50WG should not be applied to plants that are stressed due to drought, excessive moisture, cold weather, or herbicide injury, etc.
- 3) If transplants treated with mechanical drip when seeded, it is recommended to not use another application of Actigard 50WG until after transplanting to the field.

#### **Specific Use Restrictions:**

- 1) Allow 14 days between the last application and harvest (14-day PHI).
- 2) Do not apply more than 8 times per crop per season.
- 3) Do not apply on less than 7-day interval.
- 4) Do not apply more than 6 oz (0.1875 lb ai) of Actigard 50WG per acre per year.

Precaution: Under certain conditions, this product, when used on hot peppers, 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 hot peppers. 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 hot peppers following use of Actigard 50WG. The decision to use or not use Actigard 50WG in hot peppers 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.

Crop	Pest	Rate per Application	Remarks
Cole (Brassica) Crops (Crop Group 5)  And hybrids or cultivars of these and those listed below.	Downy Mildew (Peronospora parasitica) Suppression of Black Rot (Xanthomonas campestris)	0.5 - 1 oz/A	Apply preventively. Make up to four applications on a 7-day schedule. Begin applications 7-10 days after thinning.

Complete list of brassica leafy vegetables: Broccoli; broccoli, Chinese (gai lon); broccoli raab (rapini); Brussels sprouts; cabbage; cabbage, Chinese (bok choy); cabbage, Chinese (napa); cabbage, Chinese mustard (gai choy); cauliflower; cavalo broccolo; collards; kale; kohlrabi; mizuna; mustard greens; mustard spinach; rape greens

**Notes:** Actigard 50WG can be applied by ground, by drip irrigation, by overhead irrigation 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 downy mildew is present in the production area, use another registered downy mildew fungicide at the same timing as the Actigard 50WG application (can tank mix if applying Actigard 50WG as a foliar spray). Once activated, the supplemental applications of Actigard 50WG may be applied alone.

#### **Precautions**:

- (1) Actigard 50WG should be applied to healthy, actively growing plants.
- (2) Actigard 50WG should not be applied to plants that are stressed due to drought, excessive moisture, cold weather, or herbicide injury, etc.

- (1) Do not apply more than 4 oz (0.125 lb ai) of Actigard 50WG per acre per year.
- (2) Do not apply Actigard 50WG within 7 days of harvest (7-day PHI).

Crop	Pest	Rate per Application	Remarks
Cucurbits (Crop Group 9)	Suppression of:	0.5 - 1 oz/A	Apply preventively prior to disease development. Do not apply on less
Cantaloupe Cucumber	Downy Mildew (Pseudoperonospora cubensis)		than a 7-day interval. Actigard 50WG can be tank mixed with other fungi-
Watermelon Squash Zucchini	Powdery Mildew (Sphaerotheca fuliginea) (Erysiphe cichoracearum)		cides and bactericides such as copper products if disease is present. Use of an adjuvant is recommended.
And hybrids or cultivars of these and those listed	Scab (Cladosporium cucumerimum)		
below. See below for	Bacterial Fruit Blotch (Acidovorax avena citrulli)		
list of cucurbit crops.	Bacterial Leaf Spot (Xanthomonas campestris pv. cucurbitae)		
	Angular Leaf Spot (Pseudomonas syringae pv. lachrymans)		

Complete list of cucurbit crops: Chayote (fruit); Chinese waxgourd (Chinese preserving melon); citron melon; cucumber; gherkin; gourd, edible (includes hyotan, cucuzza, hechima, Chinese okra); *Momordica* spp. (includes balsam apple, balsam pear, bittermelon, Chinese cucumber); muskmelon (includes cantaloupe); pumpkin; squash, summer; squash, winter (includes butternut squash, calabaza, hubbard squash, acorn squash, spaghetti squash); watermelon

**Notes:** Actigard 50WG can be applied by ground, by drip irrigation 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, another registered product labeled for that disease should be applied at the same timing as the Actigard 50WG application (can tank mix if applying Actigard 50WG as a foliar spray). Banded applications can be made early when plants are small (7" proportional band) as long as coverage is adequate.

#### **Precautions:**

- (1) Actigard 50WG should be applied to healthy, actively growing plants.
- (2) Actigard 50WG should not be applied to plants that are stressed due to drought, excessive moisture, or herbicide injury, etc.

- (1) Do not apply more than 8 oz (0.25 lb ai) of Actigard 50WG per acre per year.
- (2) May be applied the day of harvest (0-day PHI).

Crop	Pest	Rate per Application	Remarks
Lettuce (Head and Leaf)	Downy Mildew (Bremia lactucae)	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, by drip irrigation, by overhead irrigation 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 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.

#### **Precautions:**

- (1) Actigard 50WG should be applied to healthy, actively growing plants.
- (2) Actigard 50WG should not be applied 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.
- (3) Do not use more than one application of Actigard 50WG on head lettuce intended for bag purposes (delayed harvest) due to potential fringe burn.
- (4) Do not apply prior to thinning or within 5 days of transplanting.

#### **Specific Use Restrictions:**

- (1) Do not apply more than 4 oz (0.125 lb ai) of Actigard 50WG per acre per year.
- (2) Do not apply more than 9.5 oz (0.3 lb ai/A) total per acre per year.
- (3) Do not apply within 7 days of harvest (7-day PHI).

Low growing berry subgroup 13-07G, including strawberry Bearberry Bilberry Blueberry, Lowbush Cloudberry Cranberry Lingonberry	For suppression of: Angular Leaf Spot (Xanthomonas fragariae)	0.5 - 0.75 oz/A	Scout fields regularly for angular leaf spot after plant establishment. Begin applications when disease appears, and continue on a 7- to 14-day interval.
Muntries Partridgeberry			
Including all cultivars, varieties, and/or hybrids of these.			

**Notes:** Actigard 50WG can be applied by ground or by air. 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) Actigard 50WG should be applied to healthy, actively growing plants. Do not apply within 5 days of transplanting.
- (2) Do not apply Actigard 50WG to plants that are stressed due to drought, excessive moisture, cold weather, or herbicide injury, etc.
- (3) Avoid spray overlap as injury may occur.
- (4) Fruit may be harvested on the day of application (0-day PHI).
- (5) Do not apply more than 6 oz (0.188 lb ai) of Actigard 50WG per acre per year.

Crop	Pest	Rate per Application	Remarks
Onions	For suppression of:	0.75 – 1 oz/A	Apply preventively on a 7- to 10-day
Bulb, dry	Downy Mildew (Peronospora destructor)		schedule. Begin applications after thinning or after the 3-4 leaf stage.
cultivars and/ or hybrids of these. Crop Group 3-07A	rictuding all cultivars and/ or hybrids of these.  Crop Group 3-07A See additional		For best results for iris yellow spot virus, begin at 4 to 6 weeks prebulb initiation and continue on a 7- to 10-day interval. Use Actigard 50WG in conjunction with a thrips control program.
See additional crops below.			For Xanthomonas leaf blight, begin applications 2-4 weeks pre-bulb initiation and continue on a 7- to 10-day interval. After the final Actigard 50WG application, use a recommended copper-based bactericide program to finish the season.

**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.

**Notes:** Actigard 50WG can be applied by ground, by drip irrigation, by overhead irrigation or by air. 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. A minimum of 20 GPA should be used for ground applications and a minimum of 5 GPA should be used for aerial applications.

#### **Precautions:**

- (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.

- (1) Do not apply more than 4 oz (0.125 lb ai) of Actigard 50WG per acre per year.
- (2) Do not apply within 7 days of harvest (7-day PHI).

Crop	Pest	Rate per Application	Remarks
Spinach	Downy Mildew (Peronospora effusa) White Rust (Albugo occidentalis)	0.5 – 0.75 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, by drip irrigation, by overhead irrigation 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, use another registered fungicide at the same timing as the Actigard 50WG application (can tank mix if applying Actigard 50WG as a foliar spray). Banded applications can be made early when plants are small (proportional band) as long as coverage is adequate.

#### **Precautions:**

- (1) Actigard 50WG should be applied to healthy, actively growing plants.
- (2) Actigard 50WG should not be applied to plants that are stressed due to drought, excessive moisture, cold weather, or herbicide injury, or when extended cold or cold and cloudy conditions are expected.
- (3) Do not apply Actigard 50WG to young seedlings.

#### **Specific Use Restrictions:**

- (1) Do not apply more than 2.25 oz (0.0703 lb ai) of Actigard 50WG per acre per year.
- (2) Do not apply more than 9.5 oz (0.3 lb ai/A) total per acre per year.
- (3) Allow 7 days between the last application and harvest (7-day PHI).

	,		
Tobacco	Blue Mold (Peronospora tabacina)	0.5 oz/A	Apply on a preventive schedule when blue mold threatens.
Burley and Binder			[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			[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 GPA should be used for ground applications and a minimum of 10 GPA should be used for aerial applications. Applications of Actigard 50WG may result in leaf yellowing. This cosmetic yellowing normally disappears after the final application.

#### **Precautions:**

- (1) Apply Actigard 50WG to healthy, actively growing plants.
- (2) Do not apply Actigard 50WG to plants that are stressed due to drought, excessive moisture, cold weather, or herbicide injury, etc.
- (3) Do not apply Actigard 50WG to tobacco in plant beds or in greenhouses/plant houses.
- (4) Do not apply Actigard 50WG with foliar fertilizers and crop oils.
- (5) Avoid spray overlap because injury may result.

- (1) Do not apply more than 1.5 oz (0.0468 lb ai) of Actigard 50WG per acre per year.
- (2) Do not apply Actigard 50WG within 21 days of harvest (21-day PHI).

Crop	Pest	Rate per Application	Remarks
Tomatoes	Bacterial Spot (Xanthomonas spp.) Bacterial Speck (Pseudomonas syringae pv. tomato)	0.33 – 0.75 oz/A	Begin applications within one week of transplanting or emergence. Make up to 8 weekly sequential applications.  0.75 oz per 100 gallons of water (minimum of 0.33 oz/A in early season and maximum of 0.75 oz/A by end of season). See table below.

For Ground Applications: Begin season with low water volumes. As plant canopy increases, the Actigard 50WG rate should increase to ensure activity. 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 apply an amount of water per application delivering more than 0.75 oz. product/A. The table below provides guidance on increasing the rate through the season (a dilute carrier volume of 100 GPA is assumed for fully grown tomato plants).

Amount of Actigard 50WG (Oz/A)	<u>Gal/A</u>	Weeks Following Transplanting
0.33	30-50	0-2
0.50	60-70	3-4
0.75	70-100	5-8

**Notes:** Actigard 50WG can be applied by ground, by drip irrigation, by overhead irrigation, 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, another registered product for that disease should be applied at the same timing as the Actigard 50WG application (can tank mix if applying Actigard 50WG as a foliar spray). Banded applications can be made early when plants are small (7" proportional band) as long as coverage is adequate.

#### **Precautions:**

- (1) Actigard 50WG should be applied to healthy, actively growing plants.
- (2) Actigard 50WG should not be applied to plants that are stressed due to drought, excessive moisture, cold weather, or herbicide injury, etc.
- (3) Actigard 50WG should not be applied more than 8 times per crop per season.

#### **Specific Use Restrictions:**

- (1) Do not apply on less than 7-day interval.
- (2) Do not apply more than 6 oz (0.1875 lb ai) of Actigard 50WG per acre per year.
- (3) Do not apply Actigard 50WG within 14 days of harvest (14-day PHI)

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, or disposal.

#### **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 Handling [Bags]**

Non-refillable container. Do not reuse or refill this container. Completely empty bag into application equipment. Then offer for recycling if available or dispose of empty bag in a sanitary landfill, or by incineration, or by other procedures approved by state and local authorities.

continued...

#### STORAGE AND DISPOSAL (continued)

#### **Container Handling [Bottles]**

Non-refillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, by incineration, or by other procedures approved 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®, the ALLIANCE FRAME
The SYNGENTA Logo and the PURPOSE ICON are Trademarks of a Syngenta Group Company

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

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

**SCP 922A-L2T 0915** 

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#### **Plant Activator**

Active Ingredient:

Acibenzolar-S-methyl: Benzo (1,2,3) thiadiazole-7-carbothioic acid-S-methyl ester\* . . . . . . . 50.0%

Other Ingredients: 50.0%

Total: 100.0%

\*CAS No. 135158-54-2

Actigard 50WG is a water-dispersible granule. Contains 0.5 pounds acibenzolar-S-methyl per pound product.

See additional precautionary statements and directions for use inside booklet.

## KEEP OUT OF REACH OF CHILDREN. **CAUTION**

EPA Reg. No. 100-922 EPA Est. 67545-AZ-1 Actigard® and the Syngenta logo are trademarks of a Syngenta Group Company ©2015 Syngenta Manufactured for:

Syngenta Crop Protection, LLC P.O. Box 18300 Greensboro, North Carolina 27419-8300

SCP 922A-L2T 0915

7.5 ounces
Net Weight

syngenta<sub>®</sub>

## KEEP OUT OF REACH OF CHILDREN. CAUTION

#### **FIRST AID**

If on skin: 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: 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 by mouth-to-mouth, if possible. 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 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 to an unconscious person.

Have the product container or label with you when calling a poison control center or doctor, or going for treatment.

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.

## PRECAUTIONARY STATEMENTS Hazards to Humans and Domestic Animals

#### CAUTION

Harmful if absorbed through skin. Causes moderate eye irritation. Avoid contact with

skin, eyes or clothing. 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.

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

#### **Pesticide Storage**

Store in a cool, dry place.

#### Container Handling [Bottles]

Non-refillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, by incineration, by other procedures approved by state and local authorities.

### 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

#### SCP 922A-L3N 0915