UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, DC 20460

OFFICE OF CHEMICAL SAFETY
AND POLLUTION PREVENTION

July 5, 2019

Nakia Smith, M.S.
Regulatory Product Manager
Syngenta Crop Protection, LLC
P.O. Box 18300
Greensboro, NC 27419

Subject: Registration Review Label Mitigation for Acibenzolar
Product Name: Actigard 50WG Plant Activator
EPA Registration Number: 100-922
Application Date: February 1, 2019
Decision Number: 552355

Dear Ms. Smith:

The Agency, in accordance with the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA), as amended, has completed reviewing all of the information submitted with your application to support the Registration Review of the above referenced product in connection with the Acibenzolar Interim Decision, and has concluded that your submission is acceptable. The label referred to above, submitted in connection with registration under FIFRA, as amended, is acceptable.

Should you wish to add/retain a reference to the company's website on your label, then please be aware that the website becomes labeling under the Federal Insecticide Fungicide and Rodenticide Act and is subject to review by the Agency. If the website is false or misleading, the product would be misbranded and unlawful to sell or distribute under FIFRA section 12(a)(1)(E). 40 CFR 156.10(a)(5) list examples of statements EPA may consider false or misleading. In addition, regardless of whether a website is referenced on your product's label, claims made on the website may not substantially differ from those claims approved through the registration process. Therefore, should the Agency find or if it is brought to our attention that a website contains false or misleading statements or claims substantially differing from the EPA approved registration, the website will be referred to the EPA's Office of Enforcement and Compliance.

A copy of your label stamped "Accepted" is enclosed. Products shipped after 12 months from the date of this amendment must bear the new revised label. Your release for shipment of the product bearing the amended label constitutes acceptance of these conditions. If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA section 6.

If you have any questions about this letter, please contact Jaclyn Pyne by phone at 703-347-0445, or via email at pyne.jaclyn@epa.gov

Sincerely,

Linda Arrington, Branch Chief
Risk Management and Implementation Branch 4
Pesticide Re-Evaluation Division
Office of Pesticide Programs

Enclosure

ACIBENZOLAR-S-METHYL	GROUP	P01	FUNGICIDE

Actigard® 50WG Plant Activator

Active Ingredient:	
Acibenzolar-S-methyl:*	50.0%
Other Ingredients:	50.0%
Total:	100.0%

*CAS No. 135158-54-2

Actigard 50WG Plant Activator is formulated as a water-dispersible granule and contains 0.5 lb ai acibenzolar-S-methyl per pound of product.

KEEP OUT OF REACH OF CHILDREN.

CAUTION

See additional precautionary statements and directions for use inside booklet.

EPA Reg. No. 100-922

EPA Est.

_____
Net Weight

[Batch Code: _____] (*For nonrefillables only.)*

ACCEPTED
Jul 05, 2019
Under the Federal Insecticide, Fungicide and Rodenticide Act as amended, for the pesticide registered under EPA Reg. No. 100-922

TABLE OF CONTENTS

DIRECTIONS FOR USE

1.0 FIRST AID

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 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.	
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**	

2.0 PRECAUTIONARY STATEMENTS

2.1 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.

2.2 Personal Protective Equipment (PPE)

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Waterproof gloves
- Shoes plus socks

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

2.2.1 User Safety Requirements

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

2.2.2 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.

2.2.3 User Safety Recommendations

User Safety Recommendations

Users should:

- 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.

2.3 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.

2.4 Physical or Chemical Hazards

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

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.

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

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
- Shoes plus socks

3.0 PRODUCT INFORMATION

Actigard 50WG Plant Activator is a selective, non-pesticidal systemic compound used for the control of several listed fungal, bacterial, and viral plant diseases. Actigard 50WG Plant Activator is an inducer of host plant resistance. Actigard 50WG Plant Activator exhibits a unique mode of action which mimics the natural systemic activated resistance (SAR) response found in most plant species. Actigard 50WG Plant Activator has no direct activity against target pathogens.

For best performance, Actigard 50WG Plant Activator needs to be applied preventively, before disease is observed. An Actigard 50WG Plant Activator application mimics the SAR response in plants. Maximum disease protection is normally obtained 4 days after an Actigard 50WG Plant Activator application.

Actigard 50WG Plant Activator 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.

Actigard 50WG Plant Activator provides protection against certain diseases in the crops listed on this label. Actigard 50WG Plant Activator provides sufficient protection to reduce disease levels but needs to 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.

3.1 Integrated Pest Management (IPM)

Actigard 50WG Plant Activator Plant Activator 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. The Crop Use Directions (**Section 7.0**) in this label identifies specific IPM recommendations for each crop. Consult your local agricultural authorities for additional IPM strategies established for your area. Actigard 50WG Plant Activator Plant Activator may be used in State Agricultural Extension advisory (disease forecasting) programs which recommend application timing based on environmental factors favorable for disease development.

3.2 Resistance Management

ACIBENZOLAR-S-METHYL	GROUP	P01	FUNGICIDE

For resistance management, Actigard 50WG contains a Group P01 fungicide. Any fungal populations may contain individuals naturally resistant to Actigard 50WG and other Group P01 fungicides. A gradual or total loss of pest control may occur over time if these fungicides are used repeatedly in the same fields. Appropriate resistance-management strategies should be followed.

To delay fungicide resistance, take one or more of the following steps:

- Rotate the use of Actigard 50WG or other Group P01 fungicides within a growing season sequence with different groups that control the same pathogens.
- Use tank mixtures with fungicides from a different group that are equally effective on the target pest when such use is permitted. Use at least the minimum application rate as labeled by the manufacturer.
- Adopt an integrated disease management program for fungicide use that includes scouting, uses historical information related to pesticide use, and crop rotation, and which considers host plant resistance, impact of environmental conditions on disease development, disease thresholds, as well as cultural, biological and other chemical control practices.

- Where possible, make use of predictive disease models to effectively time fungicide applications. Note that using predictive models alone is not sufficient to manage resistance.
- Monitor treated fungal populations for resistance development.
- Contact your local extension specialist or certified crop advisor for any additional pesticide resistance-management and/or IPM recommendations for specific crops and pathogens.
- For further information or to report suspected resistance contact Syngenta at 1-866-Syngent(a) (866-796-4368). You can also contact your pesticide distributor or university extension specialist to report resistance.

4.0 APPLICATION DIRECTIONS

4.1 Methods of Application

Apply Actigard 50WG Plant Activator Plant Activator at rates specified in **Section 7.0**. Where permitted, applications can be made by ground, by air, and via chemigation as specified in **Section 7.0**. Refer to **Section 4.5** for details of application by chemigation.

4.1.1 Ground Application

- Apply in a minimum of 10 gal/A, unless specified otherwise.
- Thorough coverage is necessary to provide good disease control.

4.1.2 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 gal/A unless specified otherwise.
- Avoid application under conditions when uniform coverage cannot be obtained or when excessive spray drift may occur.
- 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.

4.2 Application Equipment

- Spray equipment configuration needs to be arranged to provide accurate, uniform and thorough coverage of the target crop and minimize potential for spray drift.
- To ensure accuracy, calibrate sprayer before each use.
- For information on spray equipment and calibration, consult spray equipment manufacturers and/or state specifications.
- All ground/aerial/chemigation application equipment must be properly maintained and calibrated using appropriate carriers.

4.2.1 Nozzles

- Equip sprayers with nozzles that provide accurate and uniform application.
- Nozzles need to 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 need to be ***16-mesh or coarser***.
- **DO NOT** place a screen in the recirculation line.
- Use 50-mesh or coar*ser screens between the pump and boom, and where required, at nozzles.
- Check nozzle manufacturer's specifications.

4.2.2 Pumps

- Use a pump with capacity to:
  - Maintain adequate psi at nozzles
  - 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 specifications. For specific local directions and spray schedules, consult the current state agricultural specifications.

4.3 Application Volume and Spray Coverage

- Thorough coverage is necessary to provide good disease control.
- Apply in sufficient water to ensure adequate coverage.
- Avoid application under conditions when uniform coverage cannot be obtained or when excessive spray drift may occur.
- For ground applications, apply in a minimum of 10 gallons of water per acre unless specified otherwise.
- For aerial applications, apply in a minimum of 10 gallons of water per acre unless specified otherwise.

4.4 Mixing Directions

1. Thoroughly clean spray equipment before using this product.
2. Prepare no more spray mixture than is needed for the immediate operation.
3. Keep product container tightly closed when not in use.
4. Agitate the spray solution before and during application.
5. **DO NOT** let the spray mixture stand overnight in the spray tank.
6. Flush the spray equipment thoroughly following each use and apply the rinsate to a previously treated area.

4.4.1 Actigard 50WG Plant Activator Alone

1. Add 1/2 of the required amount of water to the spray or mixing tank.
2. With the agitator running, add the desired amount of product into the spray tank.

3. Continue agitation while adding the remainder of the water.
4. Begin application of the solution after Actigard 50WG Plant Activator has completely dispersed into the mix water.
5. Maintain agitation until all of the mixture has been applied.

4.4.2 Tank-Mix Precautions

- It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions, limitation and directions for use on all product labels involved in tank mixing. User must follow the most restrictive directions for use and precautionary statement of each product in the tank mixture.
- Tank mixes of Actigard 50WG Plant Activator Plant Regulator with other pesticides, fertilizers, or any other additives not specifically labelled for use with Actigard 50WG Plant Activator Plant Activator may result in tank mix incompatibility or unsatisfactory performance. In such cases, always check tank mix compatibility by conducting a jar test according to guidance in **Section 4.4.3** before actual tank mixing.

4.4.3 Tank-Mix Compatibility

- Conduct a jar test using a 1 pt to 1 qt container with lid by adding water or other intended carrier such a liquid fertilizer to the jar.
- Next, add the appropriate amount of pesticides(s) or tank mix partner(s) in their relative proportions based on specified label rates. Add tank mix components separately in the order described in the tank-mixing section, **Section 4.4.4**. After each addition, shake or stir gently to thoroughly mix.
- After all ingredients have been added, put the lid on the jar, tighten and invert the jar 10 times to mix.
- After mixing, let the mixture stand 15 – 30 minutes and then examine for signs of incompatibility such as obvious separation, large flakes, precipitates, gels or heavy oily film on the jar.
- If the mixture remains mixed or can be remixed readily, it is physically compatible and can be used.
- If the mixture is incompatible, repeat the test using a compatibility agent at the specified rate. Or, if applicable, slurry dry formulations in water before adding to the jar. If incompatibility is still observed after following these procedures, do not use the mixture.
- After compatibility testing is complete, dispose of any pesticide wastes in accordance with the storage and disposal section, (**Section 8.0**) of this label.

4.4.4 Actigard 50WG Plant Activator In Tank Mixtures

1. Fill the tank with *½* volume of the mixing diluent.
2. Start the agitator running before adding any tank-mix partners.
3. Add all products in water-soluble packaging to the tank before any other tank-mix partner. 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.
4. In general, add tank-mix partners in this order:
   a) products packaged in water-soluble packaging

b) wettable powders
c) wettable granules (dry flowables)
d) liquid flowables
e) liquids
f) emulsifiable concentrates

5. Make sure all other products are fully dispersed in the mixing diluent before adding the specified rate of this product to the tank.
6. Add the remainder of the mixing diluent volume.
7. It is specified that mixing and spray equipment have continuous agitation for best results.
8. Follow the precautions and limitations of the most restricted product in the tank mixture.

4.4.5 Spray Additives

- When an adjuvant is to be used with this product, the use of an adjuvant that meets the standards of the standards of the Council of Producers and Distributors of Agrotechnology (CPDA) adjuvant certification program is advised.

4.5 Application through Irrigation Systems (Chemigation)

4.5.1 Chemigation Restrictions

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

4.5.2 Operating Instructions For Chemigation

1. 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.

5. 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.

4.5.3 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 need to 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.

4.5.4 Application Directions For Irrigation Systems

- If you have questions about calibration, you need to 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 1,000 linear feet will vary depending on the row spacing but the rate per acre will be the same. The following table is a general guide for the amount of product per 1,000 linear feet.

oz Actigard 50WG Plant Activator/1,000 row feet based on rate/Acre						
		Rate (oz Actigard 50WG Plant Activator)/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

- 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 if the need arise.
- Actigard 50WG Plant Activator must be applied on the schedule specified in the specific crop use directions, not according to the irrigation schedule.

4.5.5 Mechanical Drip System for Transplant Production

Application of Actigard 50WG Plant Activator into seeded transplant trays:

- Actigard 50WG Plant Activator can be applied into individual transplant tray cells containing seed using a mechanical drip system (e.g., the PHYTO-DRIP® application system) with the appropriate dilution of Actigard 50WG Plant Activator in water or water mixed with other products registered to be applied using this method.
- Actigard 50WG Plant Activator may be applied to the transplant tray cells before or after the seeds are covered with soil media but before the trays are watered.
- The mechanical drip system must be calibrated so that each cell in the tray receives the prescribed dose rate of Actigard 50WG Plant Activator. For calibration of the drip system, consult with Syngenta or the equipment manufacturer.
- The Actigard 50WG Plant Activator application solution needs to be applied at an application volume of not less than 0.1 mL per cell and not greater than 1 mL per cell.
- The application pressure needs to be low enough to prevent the application solution from splashing out of the cell to which it is applied during the application process.

5.0 ROTATIONAL CROP RESTRICTIONS

Crop	Actigard 50WG Plant Activator Rotation Interval
Brassica (cole) crops Cucurbits Fruiting Vegetables Eggplant Groundcherry Pepino Peppers (all types) Tomatoes Lettuce (all types) Onion, dry bulb group Shallot Spinach Tobacco	0 day
All other crops for food or feed	30 days

6.0 RESTRICTIONS AND PRECAUTIONS

6.1 Use Restrictions

- **DO NOT** apply through any ultra-low volume (ULV) spray system.
- **DO NOT** apply directly to humans or animals.

6.2 Use Precautions

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

6.3 Mandatory Spray Drift Management

- AVOIDING SPRAY DRIFT AT THE APPLICATION SITE IS THE RESPONSIBILITY OF THE APPLICATOR.
- **DO NOT** spray when conditions favor drift beyond area intended for application.
- The interaction of many equipment and weather related factors determine the potential for spray drift.
- Conditions which may contribute to drift include thermal inversion, wind speed and direction, sprayer nozzle/pressure combinations, spray droplet size, etc.
- Contact your State extension agent for spray drift prevention guidelines in your area.

NOTE: When states have more stringent regulations, they must be observed.

6.3.1 Aerial Applications

- For aerial applications, the release height must be no higher than 10 feet from the top of the crop canopy, unless a greater application height is required for pilot safety.

- The boom length must not exceed 65% of the wingspan for airplanes or 75% of the rotor blade diameter for helicopters.
- Applicators must use ½ swath displacement upwind at the downwind edge of the field.
- Nozzles must be oriented so the spray is directed toward the back of the aircraft.
- **DO NOT** apply when wind speeds exceed 10 miles per hour at the application site.
- **DO NOT** apply during temperature inversions.

6.3.2 Ground Boom Applications

- Apply with the nozzle height recommended by the manufacturer, but no more than 4 feet above the ground or crop canopy.
- For all applications, applicators are required to use a medium or coarser spray droplet size (ASABE S572.1).
- **DO NOT** apply when wind speeds exceed 10 miles per hour at the application site.
- **DO NOT** apply during temperature inversions.

6.3.3 Airblast Applications

- Direct spray into the canopy.
- Turn off outward pointing nozzle at row ends and when spraying outer rows.
- Applicators are required to use a medium or coarser droplet size (ASABE S572.1) for all applications.
- **DO NOT** apply when wind speeds exceed 10 miles per hour at the application site.
- **DO NOT** apply during temperature inversions.

6.4 Spray Drift Advisories

6.4.1 Importance of Droplet Size

- An effective way to reduce spray drift is to apply large droplets. Use the largest droplets that provide target pest control.
- While applying larger droplets will reduce spray drift, the potential for drift will be greater if applications are made improperly or under unfavorable environmental conditions.

6.4.2 Controlling Droplet Size – Ground Boom

- **Volume** - Increasing the spray volume so that larger droplets are produced will reduce spray drift. Use the highest practical spray volume for the application. If a greater spray volume is needed, consider using a nozzle with a higher flow rate.
- **Pressure** - Use the lowest spray pressure recommended for the nozzle to produce the target spray volume and droplet size.
- **Spray Nozzle** - Use a spray nozzle that is designed for the intended application. Consider using nozzles designed to reduce drift.

6.4.3 Controlling Droplet Size – Aircraft

- **Adjust Nozzles** - Follow nozzle manufacturer's recommendations for setting up nozzles. Generally, to reduce fine droplets, nozzles should be oriented parallel with the airflow in flight.

6.4.4 Boom Height – Ground Boom

Use the lowest boom height that is compatible with the spray nozzles. Generally, to reduce fine droplets, nozzles should be oriented parallel with the airflow in flight.

6.4.5 Release Height - Aircraft

Higher release heights increase the potential for spray drift. When applying aerially to crops, do not spray at a height greater than 10ft above the crop canopy, unless a greater application height is necessary for pilot safety.

6.4.6 Shielded Sprayer

Shielding the boom or individual nozzles can reduce spray drift. Consider using shielded sprayers. Verify that the shields are not interfering with the uniform deposition of the spray on the target area.

6.4.7 Temperature and Humidity

When making applications in hot and dry conditions, use larger droplets to reduce effects of evaporation.

6.4.8 Temperature Inversions

Drift potential is high during a temperature inversion. Temperature inversions are characterized by increasing temperature with altitude and are common on nights with limited cloud cover and light to no wind. The presence of an inversion can be indicated by ground fog or by the movement of smoke from a ground source or an aircraft smoke generator. Smoke that layers and moves laterally in a concentrated cloud (under low wind conditions) indicates an inversion, while smoke that moves upward and rapidly dissipates indicates good vertical air mixing. Avoid applications during temperature inversions.

6.4.9 Wind

Drift potential generally increases with wind speed. AVOID APPLICATIONS DURING GUSTY WIND CONDITIONS. Applicators need to be familiar with local wind patterns and terrain that could affect spray drift.

BOOM-LESS GROUND APPLICATIONS

Setting nozzles at the lowest effective height will help to reduce the potential for spray drift.

HANDHELD TECHNOLOGY APPLICATIONS

Take precautions to minimize spray drift.

7.0 CROP USE DIRECTIONS

7.1 Brassica (Cole) Leafy Vegetables, Crop Group 5

Crops (Including all cultivars, varieties, and/or hybrids of these)		
Broccoli	Cabbage, Chinese (napa)	Kohlrabi
Broccoli, Chinese (gai lon)	Cabbage, Chinese mustard (gai choy)	Mizuna
Broccoli, raab (rapini)	Cauliflower	Mustard Greens
Brussels sprouts	Cavalo broccoli	Mustard Spinach
Cabbage	Collards	Rape Greens
Cabbage, Chinese (bok choy)	Kale	

Target Pest	Rate (oz/A)	Application Timing	Use Directions
Downy Mildew *(Peronospora parasitica)* **<u>Suppression Only:</u>** Black Rot (*Xanthomonas campestris*)	0.5 – 1	Begin applications 7-10 days after thinning. Apply preventatively.	Apply by ground, drip irrigation, overhead irrigation, or by air. If downy mildew is present in the production area, use another registered downy mildew fungicide at the same timing as the Actigard 50WG Plant Activator application (can tank mix if applying Actigard 50WG Plant Activator as a foliar spray). Once activated, the supplemental applications of Actigard 50WG Plant Activator may be applied alone.

Resistance Management:
- Refer to **Section 3.2**.

Precautions:
- Actigard 50WG Plant Activator needs to be applied to healthy, actively growing plants.
- Actigard 50WG Plant Activator must not be applied to plants that are stressed due to drought, excessive moisture, cold weather, or herbicide injury, etc.

USE RESTRICTIONS

1) Refer to **Section 6.1** for additional product use restrictions.
2) **Maximum Single Application Rate:** 1 oz/A/application
   a. **DO NOT** exceed 0.031 lb ai/A/application of acibenzolar-S-methyl-containing products.
3) **Minimum Application Interval:** 7 days
4) **Maximum Annual Applications:** 4 applications at 1 oz rate or 8 applications at 0.5 oz rate.
5) **Maximum Annual Rate:** 4 oz/A/year
   a. **DO NOT** exceed 0.125 lb ai/A/year of acibenzolar-S-methyl-containing products.
6) **Pre-Harvest Interval (PHI):** 7 days

7.2 Citrus Fruit, Crop Group 10-10

Crops (Including all cultivars, varieties, and/or hybrids of these)		
Australian desert lime	Lemon	Satsuma mandarin
Australian finger-lime	Lime	Sweet lime
Australian round lime	Mediterranean mandarin	Tachibana orange
Brown River finger lime	Mount White lime	Tahiti lime
Calamondin	New Guinea wild lime	Tangelo
Citron	Orange, sour	Tangerine (mandarin)
Citrus hybrids	Orange, sweet	Tangor
Grapefruit	Pummelo	Trifoliate orange
Japanese summer grapefruit	Russell River lime	Uniq fruit
Kumquat		

Target Pest	Rate (oz)	Application Timing	Use Directions
Suppression Only: Citrus Canker (*Xanthomonas campestris* pv. *citri*)	Per single tree 0.0012 – 0.035 oz Per 100 trees 0.12 – 1.5 oz ***(see Table below)*** Per Acre 0.5 - 3.2 oz/A	Apply preventively on a 30-day retreatment interval schedule.	Apply by drench or chemigation. Drench Application: For best activity, 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: Determine rate based on tree age using the second table below, then use the first table below to determine the amount of Actigard 50WG Plant Activator for the volume of solution desired.** To determine the total ounces of Actigard 50WG Plant Activator/A, multiply the number of trees per acre by the ounces of Actigard 50WG Plant Activator per tree. Chemigation Application: Actigard 50WG Plant Activator may be applied via drip irrigation or via micro-sprinkler irrigation at 0.5 – 3.2 oz/A.

Amount of Actigard 50WG Plant Activator per 100 gallons of water for drench applications

Rate (oz Actigard 50WG Plant Activator)		oz Actigard 50WG Plant Activator 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

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

Number of applications	Tree Age and oz/100 trees			
	< 1 year	1-2 years	2-3 years	>3 years
4 or fewer 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

Resistance Management:

- Refer to **Section 3.2.**

USE RESTRICTIONS

1) Refer to **Section 6.1** for additional product use restrictions.
2) **Maximum Single Application Rate:** 3.2 oz/A/application
    a. **DO NOT** exceed 0.1 lb ai/A/application of acibenzolar-S-methyl-containing products.
3) **Minimum Application Interval:** 30 days
4) **Maximum Annual Applications:** 4 applications at 3.2 oz rate or 12 applications at 0.5 oz rate.
5) **Maximum Annual Rate:** 12.8 oz/A/year
    a. **DO NOT** exceed 0.4 lb ai/A/year of acibenzolar-S-methyl-containing products.
6) **Pre-Harvest Interval (PHI):** 0 days

7.3 Cucurbit Vegetables, Crop Group 9

Crops (Including all cultivars, varieties, and/or hybrids of these)	
Chayote (fruit) Chinese waxgourd (Chinese preserving melon) Citron melon Cucumber Gherkin **Gourd, edible** Chinese okra Cucuzza Hechima Hyotan ***Momordica* spp.** Balsam apple Balsam pear Bittermelon Chinese cucumber **Muskmelon**	Cantaloupe Pumpkin **Squash, summer** (field and greenhouse) Crookneck squash Scallop squash Straightneck squash Vegetable marrow Zucchini **Squash, winter** Acorn squash Butternut squash Calabaza Hubbard squash Spaghetti squash Watermelon

Target Pest	Rate (oz/A)	Application Timing	Use Directions
<u>Suppression Only:</u> Angular Leaf Spot (*Pseudomonas syringae pv. lachrymans)* Bacterial Fruit Blotch (*Acidovorax avena citrulli*) Bacterial Leaf Spot (*Xanthomonas campestris* pv. *cucurbitae*) Downy Mildew (*Pseudoperonos pora cubensis*) Powdery Mildew (*Sphaerotheca fuliginea*) (*Erysiphe cichoracearum*) Scab (*Cladosporium cucumerimum*)	0.5 - 2	Apply preventively prior to disease development.	Apply by ground, drip irrigation, or air. Actigard 50WG Plant Activator can be tank mixed with other fungicides and bactericides such as copper products if disease is present. If disease is present in the production area, another registered product labeled for that disease needs to be applied at the same timing as the Actigard 50WG Plant Activator application (can tank mix if applying Actigard 50WG Plant Activator as a foliar spray). Banded applications can be made early when plants are small (7" proportional band) as long as coverage is adequate. Refer to **Section 4.4.5**

Resistance Management:
- Refer to **Section 3.2**.

Precautions:
- Actigard 50WG Plant Activator needs to be applied to healthy, actively growing plants.
- Actigard 50WG Plant Activator must not be applied to plants that are stressed due to drought, excessive moisture, or herbicide injury, etc.

USE RESTRICTIONS
1) Refer to **Section 6.1** for additional product use restrictions. 2) **Maximum Single Application Rate:** 2 oz/A/application **a. DO NOT** exceed 0.063 lb ai/A/application of acibenzolar-S-methyl-containing products. 3) **Minimum Application Interval:** 7 days 4) **Maximum Annual Applications:** 4 applications at 2.0 oz rate or 8 applications at 0.5 oz rate. 5) **Maximum Annual Rate:** 8 oz/A/year **a. DO NOT** exceed 0.25 lb ai/A/year of acibenzolar-S-methyl-containing products. 6) **Pre-Harvest Interval (PHI):** 0 days

7.4 Leafy Vegetables Crop Group 4, except spinach

Crops (Including all cultivars, varieties, and/or hybrids of these)	
Amaranth (Chinese spinach)	Endive (escarole)
Arugula (roquette)	Fennel, Florence
Cardoon	Lettuce, head
Celery	Lettuce, leaf
Celery, Chinese	Orach
Celtuce	Parsley
Chervil	Purslane, garden
Chrysanthemum, edible-leaved	Purslane, winter
Chrysanthemum, garland	Radicchio (red chicory)
Corn salad	Rhubarb
Cress, garden	Swiss chard
Cress, upland	
Dandelion	
Dock (sorrel)	

Target Pest	Rate (oz/A)	Application Timing	Use Directions
Downy Mildew (*Bremia lactucae*)	0.75 – 1	Apply preventively on a 7- to 10-day schedule. Begin applications after thinning.	Apply by ground, drip irrigation, overhead irrigation, or air. If downy mildew is present in the production area, the first application needs to be made in tank mixture with another registered downy mildew fungicide. Once activated, the supplemental applications of Actigard 50WG Plant Activator may be applied alone. Banded applications can be made early when plants are small (7-inch proportional band) as long as coverage is adequate.

Resistance Management:
- Refer to **Section 3.2**.

Precautions:
- Actigard 50WG Plant Activator needs to be applied to healthy, actively growing plants.
- Actigard 50WG Plant Activator must not be applied to plants that are stressed due to drought, excessive moisture, cold weather, or herbicide injury, etc.
- Applying Actigard 50WG Plant Activator when extended cold or cold and cloudy conditions are expected may cause crop injury to occur.

USE RESTRICTIONS
1) Refer to **Section 6.1** for additional product use restrictions. 2) **Maximum Single Application Rate:** 1 oz/A/application a. **DO NOT** exceed 0.031 lb ai/A/application of acibenzolar-S-methyl-containing products. 3) **Minimum Application Interval:** 7 days 4) **Maximum Annual Applications:** 9 applications at 1.0 oz rate or 12 applications at 0.75 oz rate. 5) **Maximum Annual Rate:** 9.5 oz/A/year a. **DO NOT** exceed 0.3 lb ai/A/year of acibenzolar-S-methyl-containing products. 6) **DO NOT** make more than 4 consecutive applications per crop as it may result in crop injury. 7) **DO NOT** use more than one application of Actigard 50WG Plant Activator on head lettuce intended for bag purposes (delayed harvest) due to potential fringe burn. 8) **DO NOT** apply prior to thinning or within 5 days of transplanting. 9) **Pre-Harvest Interval (PHI):** 7 days

7.5 Low Growing Berry, Crop Subgroup 13-07G

Crops (Including all cultivars, varieties, and/or hybrids of these)			
Bearberry Bilberry Blueberry, Lowbush	Cloudberry Cranberry Lingonberry		Muntries Partridgeberry Strawberry
Target Pest	**Rate (oz/A)**	**Application Timing**	**Use Directions**
Suppression Only: Angular Leaf Spot (*Xanthomonas fragariae*)	0.5 - 0.75	Begin applications when disease appears, and continue on a 7- to 14-day interval.	Apply by ground or air. Scout fields regularly for angular leaf spot after plant establishment. Banded applications can be made early when plants are small (7" proportional band) as long as coverage is adequate.
Resistance Management: • Refer to **Section 3.2**.			
Precautions: • Actigard 50WG Plant Activator needs to be applied to healthy, actively growing plants. • Actigard 50WG Plant Activator must not be applied to plants that are stressed due to drought, excessive moisture, cold weather, or herbicide injury, etc. • Avoid spray overlap as injury may occur.			
USE RESTRICTIONS			
1) Refer to **Section 6.1 for additional product use restrictions.** 2) **Maximum Single Application Rate:** 0.75 oz/A/application a. **DO NOT** exceed 0.023 lb ai/A/application of acibenzolar-S-methyl-containing products. 3) **Minimum Application Interval:** 7 days 4) **Maximum Annual Applications:** 8 applications at 0.75 oz rate or 12 applications at 0.5 oz rate. 5) **Maximum Annual Rate:** 6 oz/A/year a. **DO NOT** exceed 0.188 lb ai/A/year of acibenzolar-S-methyl-containing products. 6) **DO NOT** apply within 5 days of transplanting. 7) **Pre-Harvest Interval (PHI):** 0 days			

7.6 Onion, Bulb, Crop Subgroup 3-07A

Crops (Including all cultivars, varieties, and/or hybrids of these)		
Bulb daylily Bulb fritillaria Bulb garlic Bulb lily	Bulb shallot Chinese bulb onion Great-headed bulb garlic	Pearl onion Potato bulb onion Serpent bulb garlic

Target Pest	Rate (oz/A)	Application Timing	Use Directions
Suppression Only: Downy Mildew (*Peronospora destructor*) Iris Yellow Spot (*Iris yellow spot virus)* Leaf Blight (*Xanthomonas axonopodis* pv. *allii)*	0.75 - 1	Apply preventively on a 7- to 10-day schedule. Begin applications after thinning or after the 3-4 leaf stage. **For iris yellow spot virus,** begin at 4 to 6 weeks pre-bulb initiation and continue on a 7- to 10-day interval. **For Xanthomonas leaf blight,** begin applications 2-4 weeks pre-bulb initiation and continue on a 7- to 10-day interval.	Apply by ground, drip irrigation, overhead irrigation, or air. Banded applications can be made early when plants are small (7" proportional band) as long as coverage is adequate. A minimum of 5 gal/A needs to be used for aerial applications. **For yellow spot virus,** use Actigard 50WG Plant Activator in conjunction with a thrips control program. **For Xanthomonas leaf blight**, after the final Actigard 50WG Plant Activator application, use a specified copper-based bactericide program to finish the season.

Resistance Management:
- Refer to **Section 3.2**.

Precautions:
- Actigard 50WG Plant Activator must not be applied to plants that are stressed due to drought, excessive moisture, cold weather, or herbicide injury, etc.
- Actigard 50WG Plant Activator needs to be applied to healthy, actively growing plants.
- Avoid spray overlap as injury may occur.

USE RESTRICTIONS

1) Refer to **Section 6.1** for additional product use restrictions.
2) **Maximum Single Application Rate:** 1 oz/A/application
   a. **DO NOT** exceed 0.031 lb ai/A/application of acibenzolar-S-methyl-containing products.
3) **Minimum Application Interval:** 7 days
4) **Maximum Annual Applications:** 4 applications at 1.0 oz rate or 5 applications at 0.75 oz rate.
5) **Maximum Annual Rate:** 4 oz/A/year
   a. **DO NOT** exceed 0.125 lb ai/A/year of acibenzolar-S-methyl-containing products
6) **DO NOT** apply prior to thinning or within 5 days of transplanting.
7) **Pre-Harvest Interval (PHI):** 7 days

7.7 Pepper (Sweet and other Fruiting Vegetable), Excluding Tomato

Crops (Including all cultivars, varieties, and/or hybrids of these)			
Eggplant Groundcherry Pepino **Pepper** Banana		Bell pepper Cubanelle Lamuyo Pimento Pepper (Non-bell/Chili/Hot)	
Target Pest	**Rate (oz/A)**	**Application Timing**	**Use Directions**
Bacterial Spot *(Xanthomonas* spp.*)*	0.33 – 0.75 **<u>Hot Peppers Only:</u>** 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).	Apply 0.75 oz/A of Actigard 50WG Plant Activator within one week of transplanting. Apply 0.5 oz/A seven (7) days after the first spray. Apply 0.33 oz/A every 7 days until plants begin to bloom.	Apply by ground, drip irrigation, overhead irrigation, or air. Banded applications can be made early when plants are small (7" proportional band) as long as coverage is adequate.

Resistance Management:
- Refer to **Section 3.2**.

Precautions:
- Actigard 50WG Plant Activator needs to be applied to healthy, actively growing plants.
- Actigard 50WG Plant Activator must not be applied to plants that are stressed due to drought, excessive moisture, cold weather, or herbicide injury, etc.
- Applying Actigard 50WG Plant Activator once plants begin to bloom or when plants are stressed may cause crop injury.
- Under certain conditions, this product, when used on fruiting vegetables or hot peppers, may lead to reductions in yield. Syngenta advises that the user and/or grower test this product in order to determine its suitability for its intended use in fruiting vegetables or 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 fruiting vegetables or hot peppers following use of Actigard 50WG Plant Activator. The decision to use or not use Actigard 50WG Plant Activator in fruiting vegetables or 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.

USE RESTRICTIONS

1) Refer to **Section 6.1** for additional product use restrictions.
2) **Maximum Single Application Rate:** 0.75 oz/A/application
   a. **DO NOT** exceed 0.023 lb ai/A/application of acibenzolar-S-methyl-containing products.
3) **Minimum Application Interval:** 7 days
4) **Maximum Annual Applications:** 8
5) **Maximum Annual Rate:** 6 oz/A/year
   a. **DO NOT** exceed 0.1875 lb ai/A/year of acibenzolar-S-methyl-containing products.
6) **Pre-Harvest Interval (PHI):** 14 days

7.8 Pome Fruit Crop Group 11-10

Crops (Including all cultivars, varieties, and/or hybrids of these)		
Apple	Mayhaw	Quince
Azarole	Medlar	Quince, Chinese
Crabapple	**Pear**	Quince, Japanese
Loquat	Pear, Asian	Tejocote

Target Pest	Rate (oz/A)	Application Timing	Use Directions
Suppression Only: Fire Blight *(Erwinia amylovora)*	**Foliar Application:** 0.5 – 3.2	Apply 2-3 applications between 20% bloom and petal fall depending on the environmental conditions. Additional applications may be made during subsequent infection periods.	**Suppression:** Apply Actigard 50WG Plant Activator in a tank mix or rotation with antibiotic products. Apply 0.5 – 3.2 oz/A in a tank mix with a fire blight treatment (generally an antibiotic) that is standard in your area.
	Paint Application 1 oz/1 quart of 1% penetrant		**Paint application:** Mix 1 oz Actigard in 1 quart of 1% Pentrabark or similar penetrant. For canker cut-outs or grafts, 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. Applications may also be applied to the central leader in young trees. Paint applied to the roots, buds, or other sensitive tissue may result in damage.
	Soil Application: 0.0012 – 0.035/tree	Begin at green tip.	**Drench Application:** Apply as a drench (8-16 fl oz of solution) around the base of the tree – within the first 4-6 inches around the tree. Lower rates are advised for younger trees while higher rates for trees over 4 years old. Refer to **(Section 7.2)** to determine amount of Actigard 50WG Plant Activator in solution needed. **Chemigation Application:**

			Actigard 50WG Plant Activator may be applied via drip irrigation or via micro- sprinkler irrigation.

Resistance Management:
- Refer to **Section 3.2**.

USE RESTRICTIONS

1) Refer to **Section 6.1** for additional product use restrictions.
2) **Maximum Single Application Rate:** 3.2 oz/A/application
   a. **DO NOT** exceed 0.1 lb ai/A/application of acibenzolar-S-methyl-containing products.
3) **Minimum Application Interval:** 7 days
4) **Maximum Annual Applications:** 4 applications at 3.2 oz rate or 25 at 0.5 oz rate.
5) **Maximum Annual Rate:** 12.8 oz/A/year
   a. **DO NOT** exceed 0.4 lb ai/A/year of acibenzolar-S-methyl-containing products
6) **Pre-Harvest Interval (PHI)**
   a. **Soil Applications:** 0 days
   b. **Paint Applications:** 60 days
   c. **Foliar Applications:** 60 days

7.9 Spinach

Crops (Including all cultivars, varieties, and/or hybrids of these)			
Spinach			
Target Pest	**Rate (oz/A)**	**Application Timing**	**Use Directions**
Downy Mildew (*Peronospora effusa*) White Rust (*Albugo occidentalis*)	0.5 – 0.75	Apply preventively on a 7- to 10-day schedule. Begin applications at first to second true leaf or after thinning.	Apply by ground, drip irrigation, overhead irrigation, or air. If disease is present in the production area, use another registered fungicide at the same timing as the Actigard 50WG Plant Activator application (can tank mix if applying Actigard 50WG Plant Activator as a foliar spray). Banded applications can be made early when plants are small (proportional band) as long as coverage is adequate.

Resistance Management:
- Refer to **Section 3.2**.

Precautions:
- Actigard 50WG Plant Activator needs to be applied to healthy, actively growing plants.
- Actigard 50WG Plant Activator must 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.
- Applying Actigard 50WG Plant Activator to young seedlings may cause crop injury to occur.

USE RESTRICTIONS

1) Refer to **Section 6.1** for additional product use restrictions.
2) **Maximum Single Application Rate:** 0.75 oz/A/application
   a. **DO NOT** exceed 0.023 lb ai/A/application of acibenzolar-S-methyl-containing products.
3) **Minimum Application Interval:** 7 days
4) **Maximum Annual Applications:** 12 applications at 0.5 oz rate or 18 applications at 0.5 oz rate.
5) **Maximum Annual Rate:** 9.5 oz/A/year
   a. **DO NOT** exceed 0.3 lb ai/A/year of acibenzolar-S-methyl-containing products.
6) **DO NOT** make more than 3 consecutive applications per crop as it may result in crop injury.
7) **Pre-Harvest Interval (PHI):** 7 days

7.10 Tobacco

Crops (Including all cultivars, varieties, and/or hybrids of these)			
Burley and Binder Flue-Cured and Dark			
Target Pest	**Rate (oz/A)**	**Application Timing**	**Use Directions**
Blue Mold (*Peronospora tabacina*)	0.5	Apply on a preventive schedule when blue mold threatens. **Burley and Binder:** Make up to 3 applications on a 10-day schedule. **Flue-Cured and Dark:** Make up to 3 applications on a 10-day schedule.	Apply by ground or air. Applications of Actigard 50WG Plant Activator may result in leaf yellowing. This cosmetic yellowing normally disappears after the final application. **Burley and Binder:** Begin applications when plants are an average of 18 inches tall. Another registered blue mold product needs to be used prior to 18 inches for early season control and after the final application if conditions are conducive for disease. **Flue-Cured and Dark:** Begin applications when plants are an average of 12 inches tall. Another registered blue mold product needs to be used prior to 12 inches for early season control and after the final application if conditions are conducive for disease.

Resistance Management:
- Refer to **Section 3.2**.

Precautions:
- Actigard 50WG Plant Activator needs to be applied to healthy, actively growing plants.
- Actigard 50WG Plant Activator must not be applied to plants that are stressed due to drought, excessive moisture, cold weather, or herbicide injury, etc.
- Avoid spray overlap because injury may result.

USE RESTRICTIONS

1) Refer to **Section 6.1** for additional product use restrictions.
2) **Maximum Single Application Rate:** 0.5 oz/A/application
   a. **DO NOT** exceed 0.016 lb ai/A/application of acibenzolar-S-methyl-containing products.
3) **Minimum Application Interval:** 10 days
4) **Maximum Annual Applications:** 3
5) **Maximum Annual Rate:** 1.5 oz/A/year
   a. DO NOT exceed 0.0468 lb ai/A/year of acibenzolar-S-methyl-containing products.
6) **DO NOT** apply Actigard 50WG Plant Activator to tobacco in plant beds or in greenhouses/plant houses.
7) **DO NOT** apply Actigard 50WG Plant Activator with foliar fertilizers and crop oils.
8) **Pre-Harvest Interval (PHI):** 21 days

7.11 Tomato

Crops (Including all cultivars, varieties, and/or hybrids of these)			
Tomato			
Target Pest	**Rate (oz/A)**	**Application Timing**	**Use Directions**
Bacterial Spot (*Xanthomonas* spp.) Bacterial Speck (*Pseudomonas syringae* pv. *tomato)*	0.33 – 0.75	Begin applications within one week of transplanting or emergence.	Apply by ground or air. 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 in **For Ground Applications** section. If disease is present in the production area, another registered product for that disease needs to be applied at the same timing as the Actigard 50WG Plant Activator application (can tank mix if applying Actigard 50WG Plant Activator as a foliar spray). Banded applications can be made early when plants are small (7" proportional band) as long as coverage is adequate.

For Ground Applications: Begin season with low water volumes. As plant canopy increases, the Actigard 50WG Plant Activator rate needs to 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 Plant Activator 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 gal/A is assumed for fully grown tomato plants).

Amount of Actigard 50WG Plant Activator (oz/A)	**Gal/A**	**Weeks Following Transplanting**
0.33	30-50	0-2
0.50	60-70	3-4
0.75	70-100	5-8

Resistance Management:
- Refer to **Section 3.2**.

Precautions:
- Actigard 50WG Plant Activator needs to be applied to healthy, actively growing plants.
- Actigard 50WG Plant Activator must not be applied to plants that are stressed due to drought, excessive moisture, cold weather, or herbicide injury, etc.
- Under certain conditions, this product, when used on tomatoes, may lead to reductions in yield. Syngenta advises 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 Plant Activator. The decision to use or not use Actigard 50WG Plant Activator 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.

USE RESTRICTIONS
1) Refer to **Section 6.1** for additional product use restrictions. 2) **Maximum Single Application Rate:** 0.75 oz/A/application a. **DO NOT** exceed 0.023 lb ai/A/application of acibenzolar-S-methyl-containing products. 3) **Minimum Application Interval:** 7 days 4) **Maximum Annual Applications:** 8 applications at 0.75 oz rate or 18 applications at 0.33 oz rate. 5) **Maximum Annual Rate:** 6 oz/A/year a. **DO NOT** exceed 0.1875 lb ai/A/year of acibenzolar-S-methyl-containing products. 6) **Pre-Harvest Interval (PHI):** 14 days

7.12 Tomatoes and Peppers Mechanical drip System for transplant production

Crops (Including all cultivars, varieties, and/or hybrids of these)			
Peppers Tomatoes			
Target Pest	**Rate (Micrograms/Cell)**	**Application Timing**	**Use Directions**
Bacterial Spot (*Xanthomonas* spp.) Bacterial Speck (*Pseudomonas syringae* pv. *tomato)*	12.5 – 50	Apply at the time of sowing after the seed is placed in each cell. It may be applied before or after it is covered with soil media but must be applied before any water is applied for germination.	Apply using a mechanical drip system (e.g., the PHYTO-DRIP application system) specifically designed to apply a droplet of the correct Actigard 50WG Plant Activator concentration directly to each cell in a tray. The precise rate is determined based on crop, variety, disease pressure, and crop safety. Transplant trays must not be watered with an amount that results in water running out of the bottom of the tray. Use the table below to determine the amount of Actigard 50WG Plant Activator to put into 25, 50, 75, or 100 L of water.

L of water in tank	mL of solution per cell	Active Ingredient Rate in Micrograms per Cell	Oz Actigard 50WG Plant Activator to add
25	0.3	12.5	0.073
50	0.3	12.5	0.147
75	0.3	12.5	0.220
100	0.3	12.5	0.294
25	0.3	50	0.294
50	0.3	50	0.587
75	0.3	50	0.881
100	0.3	50	1.175

Resistance Management:
- Refer to **Section 3.2**.

Precautions:
- Apply at specified rates that are deemed efficacious and safe on pepper and tomatoes. It is highly advised to use seed that is suited for transplant production. When treating new varieties, confirm safety by treating a few trays and evaluating growth and development of the transplants. Good seed quality is important.

- Growth medium used for germinating seed, fertilizer or nutrient added, water source and water properties, transplant material structures, prevailing conditions of temperature and humidity in transplant seedling production may impact the performance of Actigard 50 WG. Prior to using Actigard 50WG Plant Activator via a mechanical drip system make sure that these conditions and procedures are compatible.
- Local soil, greenhouse and environmental conditions can affect the degree and longevity of the effect of Actigard 50WG Plant Activator.
- **[Optional Language:** Syngenta advises if a mechanical drip is used that no further Actigard 50WG Plant Activator applications be made until the crop is in the field.]
- **[Optional Language:** After application of Actigard 50WG Plant Activator via a mechanical drip system at the time of sowing do not make another application of Actigard 50WG Plant Activator or acibenzolar-S-methyl-containing product until the plants have been transplanted to the field.]

USE RESTRICTIONS

1) Refer to **Section 6.1** for additional product use restrictions.
2) **Maximum Single Application Rate:** 50 Micrograms/Cell/Application

8.0 STORAGE AND DISPOSAL

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.

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 ¼ 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.

9.0 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.

10.0 APPENDIX

10.1 Actigard 50WG Plant Activator Conversion Table

Conversion Table For Actigard 50 WG Plant Activator	
Ounces	**lb ai/Acre**
0.073	0.002
0.147	0.005
0.22	0.007
0.294	0.009
0.33	0.010
0.5	0.016
0.587	0.018
0.75	0.023
0.881	0.028
1.0	0.031
1.5	0.0468
2.0	0.063
3.0	0.094
3.2	0.100
4.0	0.125
5.0	0.156
6.0	0.188
7.0	0.219
8.0	0.25
9.5	0.30
12.8	0.40
16.0	0.50

10.2 [Optional Table] Actigard 50WG Plant Activator Use Summary Table

Crop	Maximum Rate per Application (lb ai/A)	Maximum Amount Acibenzolar-S-Methyl per year (lb ai/A/year)	Minimum Application Interval (days)	Maximum Number of Applications	Pre-Harvest Interval - PHI (days)
Brassica (Cole) Leafy Vegetables Crop Group 5	0.031	0.125	7	4	7
Citrus Fruit Crop Group 10-10 Orange, Lemon, Lime	0.1	0.4	30	4	0
Cucurbit Vegetables Crop Group 9 Cantaloupe, Squash, Zucchini	0.063	0.25	7	4	0
Lettuce (Head and Leaf)	0.031	0.3	7	9	7
Low Growing Berry, Crop Subgroup 13-07G Cranberry, Strawberry	0.023	0.188	7	8	0
Onion, Bulb, Crop Subgroup 3-07A	0.031	0.125	7	4	7
Pepper (Sweet and other Fruiting Vegetable), Excluding Tomato Bell Pepper, Eggplant	0.023	0.1875	7	8	7
Pome Fruit Crop Group 11-10 Apple, pear	0.1	0.4	7	4	0 (soil) 60 (foliar)
Spinach	0.023	0.0703	7	12	7
Tobacco	0.016	0.0468	10	3	21

Tomato	0.023	0.1875	7	8	14

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

Actigard 50WG Plant Activator 922 MAS 0915 AMEND-C 0119 – ep – 6/17/2019
000100.00922.20190125C.ACTIGARD_50WG.AMEND.JAN2019