

GROUP 21 FUNGICIDE

PULL HERE TO OPEN 

 **Bion[®] 50WG**

syngenta[®]

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

Bion 50WG is a water-dispersible granule.

**KEEP OUT OF REACH
OF CHILDREN.**

CAUTION

See additional precautionary statements
and directions for use inside booklet.

EPA Reg. No. 100-922

EPA Est. 67545-AZ-1

SCP 922C-L1 0213 4026436

7.5 ounces Net Contents



FIRST AID	
If on skin or clothing	<ul style="list-style-type: none"> • Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15-20 minutes. • Call a poison control center or doctor for treatment advice.
If in eyes	<ul style="list-style-type: none"> • Hold eye open and rinse slowly and gently with water for 15-20 minutes. • Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. • Call a poison control center or doctor for treatment advice.
If inhaled	<ul style="list-style-type: none"> • Move person to fresh air. • If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. • Call a poison control center or doctor for further treatment advice.

continued...

FIRST AID (*continued*)

**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

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.

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

continued...

PRECAUTIONARY STATEMENTS *(continued)*

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 Control Statements

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

User Safety Recommendations

Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.
- Remove clothing/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 wash water or rinsate.

Physical or Chemical Hazards

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

CONDITIONS OF SALE AND LIMITATION OF WARRANTY AND LIABILITY

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

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

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AGRICULTURAL USE REQUIREMENTS (continued)

Do not enter or allow worker entry into treated areas during the restricted-entry interval (REI) of 12 hours.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water is:

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

GENERAL INFORMATION

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

diseases. Bion 50WG is an inducer of host plant resistance. Bion 50WG exhibits a unique mode of action which mimics the natural systemic activated resistance (SAR) response found in most plant species. Bion 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.

GENERAL USE INSTRUCTIONS

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

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Resistance Management

Bion 50WG exhibits a mode of action uniquely different from currently available fungicides and bactericides. Since Bion 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 Bion 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 PROCEDURES

Mixing Instructions

- Bion 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.

Bion 50WG Alone (no tank mix)

- Add 1/2 of the required amount of water to the spray or mixing tank.
- With the agitator running, add the Bion 50WG to the tank.

- Continue agitation while adding the remainder of the water.
- Begin application of the spray solution after Bion 50WG has completely dispersed into the mix water.
- Maintain agitation until all of the mixture has been sprayed.

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

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

Mixing in the Spray Tank

- Add 1/2 of the required amount of water to the mix tank.
- Start the agitator running before adding any tank mix partners.
- In general, tank mix partners should be added in this order: products packaged in water-soluble packaging, wettable powders, wettable granules (dry flowables) such as Bion 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 Bion 50WG in tank mixtures, all products in water-soluble packaging should be added to the tank before any other tank mix partner, including Bion 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 Bion 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.

Mixing instructions for use with a Mechanical Drip System

When using a mechanical drip system to apply Bion 50WG to transplant tray cells follow the directions of the drip system manufacturer for loading and mixing in addition to the instructions above.

APPLICATION INSTRUCTIONS

Mechanical Drip System for Transplant Production

Application of Bion 50WG into seeded transplant trays:

Bion 50WG 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 Bion 50WG in water or water mixed with other products registered to be applied using this method.

Bion 50WG 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 Bion 50WG. For calibration of the drip system consult with Syngenta or the equipment manufacturer.

The Bion 50WG application solution should 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 should be low enough to prevent the application solution from splashing out of the cell to which it is applied during the application process.

**DIRECTIONS FOR USE FOR
MECHANICAL DRIP SYSTEM
FOR TRANSPLANT
PRODUCTION**

Crop	Pest	Active Ingredient Rate in Micrograms per Cell
Tomatoes and Peppers	Bacterial Spot (<i>Xanthomonas</i> spp.) Bacterial Speck (<i>Pseudomonas syringae</i> pv. <i>tomato</i>)	12.5 – 50

Remarks

Apply Bion 50WG using a mechanical drip system (e.g., the PHYTO-DRIP application system) specifically designed to apply a droplet of the correct Bion 50WG concentration directly to each cell in a tray. Bion 50WG must be applied 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. 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 following table to determine the amount of Bion 50WG 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 Micro-grams per Cell	oz 50WG 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

PRECAUTIONS

- Apply at recommended rates that are deemed efficacious and safe on pepper and tomatoes. It is highly recommended 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 Bion 50 WG. Prior to using Bion 50WG 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 Bion 50WG.

STORAGE AND DISPOSAL

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

Pesticide Storage

Store in a cool, dry place.

Pesticide Disposal

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

Container Handling

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. Fill the container $\frac{1}{4}$ 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, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

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.

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Ridomil Gold®, the ALLIANCE FRAME 
the SYNGENTA Logo 
and the PURPOSE ICON 
are Trademarks of a
Syngenta Group Company

PHYTO-DRIP® is a registered trademark of
Precision Drip B.V.

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

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

SCP 922C-L1 0213
4026436

GROUP 21 FUNGICIDE



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

Bion 50WG is a water-dispersible granule.

KEEP OUT OF REACH OF CHILDREN.

CAUTION

See directions for use in attached booklet.

AGRICULTURAL USE REQUIREMENTS

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

EPA Reg. No. 100-922 EPA Est. 67545-AZ-1

SCP 922C-L1 0213 4026436

7.5 ounces Net Contents **syngenta**®

BAR CODE # IS
(01) 0 07 02941 53768
LAST DIGIT IS CHECK DIGIT
UCC/EAN 128

FIRST AID: If on skin or clothing: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for 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.

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, and Storage and Disposal sections in attached booklet.

Pesticide Storage: Store in a cool, dry place.

Container Handling: Non-refillable container. Do not reuse or refill this container. Offer for recycling if available. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. 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 sanitary landfill, by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

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