

GROUP 21 FUNGICIDE

PULL HERE TO OPEN ►



Blockade[®]
50WG

Plant Activator

Active Ingredient:

1,2,3-benzothiadiazole-7-thiocarboxylic acid-
S-methyl-ester (CAS No. 135158-54-2)* 50.0%

Other Ingredients: 50.0%

Total: 100.0%

*Acibenzolar-S-methyl (ISO common name)

Blockade 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

Product of Switzerland

SCP 922B-L2H 0108

254508

8 x 1 ounce

packets

®

syngenta[®]

8 ounces Net Weight

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

FIRST AID (*continued*)

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

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

Personal Protective Equipment (PPE)

Some of the materials that are chemically resistant to this product are listed below. If you want more options follow the instructions for Category A on an EPA chemical-resistance category selection chart.

Applicators and other handlers must wear:

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

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

Engineering Control Statements

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

User Safety Recommendations

Users should:

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

Environmental Hazards

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

Physical or Chemical Hazards

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

CONDITIONS OF SALE AND LIMITATION OF WARRANTY AND LIABILITY

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

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

SYNGENTA warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated in the Directions for Use, subject to the inherent risks referred to above, when used in accordance with directions under normal use conditions. To the extent permitted by applicable law: (1) this warranty does not extend to the use of the product contrary to label instructions or under conditions not reasonably foreseeable to or beyond the control of Seller or SYNGENTA, and, (2) Buyer and User assume the risk of any such use. TO THE EXTENT PERMITTED

BY APPLICABLE LAW, SYNGENTA MAKES NO WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE NOR ANY OTHER EXPRESS OR IMPLIED WARRANTY EXCEPT AS WARRANTED BY THIS LABEL.

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

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

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For

any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE) and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

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

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

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

GENERAL INFORMATION

Blockade 50WG is a selective, non-pesticidal systemic compound used for the control of downy mildew of leafy vegetables, and downy mildew and white rust of spinach. Blockade 50WG is an inducer of host plant resistance. Blockade 50WG exhibits a unique mode of action which mimics the natural systemic activated resistance (SAR) response found in most plant species. Blockade 50WG has no direct activity against target pathogens.

For best performance, always follow these directions:

- Blockade 50WG should be applied to plant foliage preventively, before disease is observed in the field.
- Blockade 50WG moves systemically within the plant; however uniform spray coverage is essential for best performance. Apply Blockade 50WG by ground or aerial application in sufficient water to ensure uniform coverage. See instructions with each crop for specific recommendations.
- A Blockade 50WG application mimics the SAR response in plants. Maximum disease control is normally obtained 4 days after a Blockade 50WG application.

Blockade 50WG provides protection against certain diseases in the crops listed on this label. Blockade 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.

Resistance Management

GROUP	21	FUNGICIDE
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Blockade 50WG exhibits a mode of action unique from currently available fungicides and bactericides. Since Blockade 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.

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

APPLICATION INSTRUCTIONS

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

Ground Application

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.

Equip sprayers with nozzles that provide accurate and uniform application. Be certain that nozzles are the same size and uniformly spaced across the boom. Always calibrate sprayer before use.

Use a pump with capacity to: (1) maintain adequate psi at nozzles, and (2) provide sufficient agitation in the tank to keep mixture in uniform 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.

Use screens 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.

Aerial Application

Apply Blockade 50WG in water, using a minimal spray volume of 10 gallons per acre by air. Avoid application under conditions where uniform coverage cannot be obtained or where excessive spray drift may occur.

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.

MIXING PROCEDURES

Prepare no more spray mixture than is needed for the immediate spray operation. Thoroughly clean spray equipment before using this product to prevent possible crop injury, mixing or nozzle clogging problems from spray tank contamination. 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. Flush the spray equipment thoroughly following each use and apply the rinsate to a previously treated area.

Blockade 50WG Alone: Add 1/2 of the required amount of water to the mix tank. With the agitator running, add the Blockade 50WG to the tank. Continue agitation while adding the remainder of the water. Begin application of the solution after the Blockade 50WG has completely dispersed into the mix water. Maintain agitation until all of the mixture has been applied.

Blockade 50WG + Tank Mixtures: Blockade 50WG is compatible with most insecticide and fungicide products. However, the physical compatibility of Blockade 50WG with tank mix partners should be tested before use. To determine the physical compatibility of Blockade 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.

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 Blockade 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 Blockade 50WG in tank mixtures, all products in water-soluble packaging should be added to the tank before any other tank mix partner, including Blockade 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 Blockade 50WG in a tank mixture, observe all directions for use which appear on the tank mix product label. No label dosage rate should be exceeded, and the most restrictive label precautions and limitations should be followed. This product should not be mixed with any product which prohibits such mixing. Tank mixtures or other applications of products referenced on this label are permitted only in those states in which the referenced products are registered.

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

RECOMMENDED FOLIAR APPLICATIONS

Crop	Pest	Rate per Application
Lettuce (Head and Leaf)	Downy Mildew (<i>Bremia lactucae</i>)	³ / ₄ -1 oz./A

Remarks: Apply preventively on a 7 to 10-day schedule. Begin applications after thinning. Do not make more than 4 applications per crop.

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

Restrictions: (1) Blockade 50WG should be applied to healthy, actively growing plants. Do not apply Blockade 50WG to plants that are stressed due to drought, excessive moisture, cold weather, or herbicide injury, etc. Do not apply when extended cold or cold and cloudy conditions are

expected. (2) Do not apply prior to thinning or within 5 days of transplanting. (3) Allow 7 days between the last application and harvest. (4) Do not apply more than 4 oz. of Blockade 50WG per acre per season.

Crop	Pest	Rate per Application
Spinach	Downy Mildew (<i>Peronospora effusa</i>) White Rust (<i>Albugo occidentalis</i>)	3/4 oz./A

Remarks: 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.

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

Restrictions: (1) Blockade 50WG should be applied to healthy, actively growing plants. Do not apply Blockade

50WG to plants that are stressed due to drought, excessive moisture, cold weather, or herbicide injury, etc. Do not apply when extended cold or cold and cloudy conditions are expected. (2) Do not apply Blockade 50WG to young seedlings. (3) Allow 7 days between the last application and harvest. (4) Do not apply more than 2¹/₄ oz. of Blockade 50WG per acre per season.

ROTATIONAL (PLANTBACK) RESTRICTION

Do not plant any crop within 30 days after the last application of Blockade 50WG, except for the crops listed below:

- tobacco
- leafy vegetables including cole (brassica) crops
- fruiting vegetables

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 Environ-

mental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance in proper disposal methods.

Container Disposal

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

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

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

Blockade[®], Ridomil Gold[®], the Syngenta logo and the CP FRAME are trademarks of a Syngenta Group Company

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

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

**SCP 922B-L2H 0108
254508**

GROUP 21 FUNGICIDE

 **Blockade**[®]
50WG

Plant Activator

Active Ingredient:

1,2,3-benzothiadiazole-7-thiocarboxylic acid-
S-methyl-ester (CAS No. 135158-54-2)* 50.0%

Other Ingredients: 50.0%

Total: 100.0%

*Acibenzolar-S-methyl (ISO common name)

Blockade 50WG is a water-dispersible granule.

See additional storage and disposal, and 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 infor-
mation about this standard.

EPA Reg. No. 100-922

EPA Est. 67545-AZ-1

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Syngenta Group Company

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Manufactured for:
Syngenta Crop
Protection, Inc.

SCP 922B-L2H 0108
254508

P.O. Box 18300
Greensboro, NC 27419-8300

8 x 1 ounce packets

www.syngenta-us.com

8 ounces

Net Weight

syngenta[®]

KEEP OUT OF REACH OF CHILDREN.

CAUTION

Precautionary Statements

Hazards to Humans and Domestic Animals

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

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**.

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

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.

Storage and Disposal

Pesticide Storage: Store in a cool, dry place.

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

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