

COPY



Water dispersible granules.

Bion® 50 WG is a plant activator with systemic properties for the protection of tobacco plants against *Pseudomonas syringae pv. tabaci* (wild-fire and angular leaf spot), *Thanatephorus cucumeris* (Rhizoctonia leaf spot) and *Cercospora nicotianae* (frog eye).



L164408 ZIMB/03Q_PPE 40T0781

Bion® 50WG

syngenta®

Reg. No.:
99-B-68-1

60 g

MAXIMUM AREA
90mm x



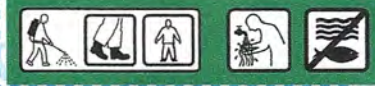
HARMFUL IF SWALLOWED

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Composition m/m

Acibenzolar-S-methyl 50%
Inert Ingredients 50%

Registered by:
Syngenta Agro Services
P.O. Box 1088, Harare
Suite Za, Julia's Parade
Sam Levy's Village
Borrowdale,
Tel.: 0772 402 477



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S-PAC

DESCRIPTION:
LBL LFT S BOOKLET 4 TO 20 PG 134x43 MM

SCALE:
1:1

ISSUE NO:
SYN001

ISSUE DATE:
14.11.2011

353551



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Version 15 - This version replaces all previous versions.

Revision Date 25.04.2012

Print Date 25.04.2012

SECTION 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING**1.1 Product identifier**Product name : **BION 50 WG**

Design code : A9180A

1.2 Relevant identified uses of the substance or mixture and uses advised against

Use : Fungicide

1.3 Details of the supplier of the safety data sheetCompany : Syngenta Crop Protection AG
Postfach
CH-4002 Basel
Switzerland

Telephone : +41 61 323 11 11

Telefax : +41 61 323 12 12

E-mail address : sds.ch@syngenta.com

1.4 Emergency telephone number**Emergency tele-
phone number** : +44 1484 538444**SECTION 2. HAZARDS IDENTIFICATION****2.1 Classification of the substance or mixture**

Classification according to Regulation (EU) 1272/2008

Skin irritation	Category 2	H315
Eye irritation	Category 2	H319
Skin sensitization	Sub-category 1A	H317
Chronic aquatic toxicity	Category 2	H411

For the full text of the H-Statements mentioned in this Section, see Section 16.

Classification according to EU Directives 67/548/EEC or 1999/45/EC

Xi, Irritant
N, Dangerous for the environment
R36/38: Irritating to eyes and skin.
R43: May cause sensitization by skin contact.
R51/53: Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

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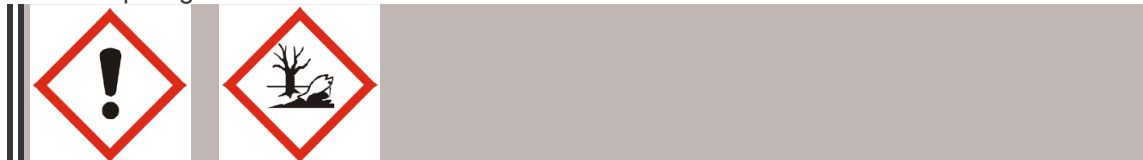
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2.2 Label elements

Labelling: Regulation (EC) No. 1272/2008

Hazard pictograms



Signal word	:	Warning	
Hazard statements	:	H315	Causes skin irritation.
		H317	May cause an allergic skin reaction.
		H319	Causes serious eye irritation.
		H411	Toxic to aquatic life with long lasting effects.
Precautionary statements	:	P102	Keep out of reach of children.
		P270	Do not eat, drink or smoke when using this product.
		P280	Wear protective gloves/ eye protection/ face protection.
		P302 + P352	IF ON SKIN: Wash with plenty of soap and water.
		P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
		P391	Collect spillage.
	P501	Dispose of contents/ container to an approved waste disposal plant.	
Supplemental information	:	EUH401	To avoid risks to human health and the environment, comply with the instructions for use. Contains acibenzolar-S-methyl. May produce an allergic reaction.

Hazardous components which must be listed on the label:

- acibenzolar-S-methyl

Labelling: EU Directives 67/548/EEC or 1999/45/EC

Symbol(s)



R-phrases(s)	:	R36/38	Irritating to eyes and skin.
		R43	May cause sensitization by skin contact.
		R51/53	Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

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S-phrases(s)	: S 2	Keep out of the reach of children.
	S13	Keep away from food, drink and animal feedingstuffs.
	S20/21	When using do not eat, drink or smoke.
	S35	This material and its container must be disposed of in a safe way.
	S36/37	Wear suitable protective clothing and gloves.
Additional Labelling	S57	Use appropriate container to avoid environmental contamination.
	:	To avoid risks to man and the environment, comply with the instructions for use. Contains acibenzolar-S-methyl. May produce an allergic reaction.

Hazardous components which must be listed on the label:

- acibenzolar-S-methyl

2.3 Other hazards

None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

3.2 Mixtures

Hazardous components

Chemical Name	CAS-No. EC-No. Registration number	Classification (67/548/EEC)	Classification (REGULATION (EC) No 1272/2008)	Concentration
acibenzolar-S-methyl	135158-54-2	Xi, N R36/37/38 R43 R50/53	Eye Irrit.2; H319 STOT SE3; H335 Skin Irrit.2; H315 Skin Sens.1; H317 Aquatic Acute1; H400 Aquatic Chronic1; H410	50 % W/W
silica	91053-39-3 68855-54-9 61790-53-2 7631-86-9 293-303-4	-	-	10 - 20 % W/W
sodium dibutyl-naphthalene-sulphonate	25417-20-3 246-960-6	Xn R20/22 R36/38 R52/53	Acute Tox.4; H302 Acute Tox.4; H312 Skin Irrit.2; H315 Eye Irrit.2; H319 Aquatic Chronic3; H412	1 - 10 % W/W

Substances for which there are Community workplace exposure limits.

For the full text of the R-phrases mentioned in this Section, see Section 16.

For the full text of the H-Statements mentioned in this Section, see Section 16.

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SECTION 4. FIRST AID MEASURES**4.1 Description of first aid measures**

- General advice : Have the product container, label or Material Safety Data Sheet with you when calling the Syngenta emergency number, a poison control center or physician, or going for treatment.
- Inhalation : Move the victim to fresh air.
If breathing is irregular or stopped, administer artificial respiration.
Keep patient warm and at rest.
Call a physician or poison control centre immediately.
- Skin contact : Take off all contaminated clothing immediately.
Wash off immediately with plenty of water.
If skin irritation persists, call a physician.
Wash contaminated clothing before re-use.
- Eye contact : Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.
Remove contact lenses.
Immediate medical attention is required.
- Ingestion : If swallowed, seek medical advice immediately and show this container or label.
Do NOT induce vomiting.

4.2 Most important symptoms and effects, both acute and delayed

- Symptoms : No information available.

4.3 Indication of any immediate medical attention and special treatment needed

- Medical advice : There is no specific antidote available.
Treat symptomatically.

SECTION 5. FIREFIGHTING MEASURES**5.1 Extinguishing media**

Extinguishing media - small fires
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Extinguishing media - large fires
Alcohol-resistant foam
or
Water spray

Do not use a solid water stream as it may scatter and spread fire.

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5.2 Special hazards arising from the substance or mixture

Fire will spread by burning with a visible flame.

As the product contains combustible organic components, fire will produce dense black smoke containing hazardous products of combustion (see section 10).

Exposure to decomposition products may be a hazard to health.

5.3 Advice for firefighters

Wear full protective clothing and self-contained breathing apparatus.

Do not allow run-off from fire fighting to enter drains or water courses. Cool closed containers exposed to fire with water spray.

SECTION 6. ACCIDENTAL RELEASE MEASURES**6.1 Personal precautions, protective equipment and emergency procedures**

Refer to protective measures listed in sections 7 and 8.
Avoid dust formation.

6.2 Environmental precautions

Do not flush into surface water or sanitary sewer system.

6.3 Methods and materials for containment and cleaning up

Contain spillage, pick up with an electrically protected vacuum cleaner or by wet-brushing and transfer to a container for disposal according to local regulations (see section 13).

Do not create a powder cloud by using a brush or compressed air. Clean contaminated surface thoroughly.

If the product contaminates rivers and lakes or drains inform respective authorities.

6.4 Reference to other sections

Refer to protective measures listed in sections 7 and 8.
Refer to disposal considerations listed in section 13.

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SECTION 7. HANDLING AND STORAGE

7.1 Precautions for safe handling

This material is capable of forming flammable dust clouds in air, which, if ignited, can produce a dust cloud explosion. Flames, hot surfaces, mechanical sparks and electrostatic discharges can serve as ignition sources for this material. Electrical equipment should be compatible with the flammability characteristics of this material. The flammability characteristics will be made worse if the material contains traces of flammable solvents or is handled in the presence of flammable solvents.

This material can become readily charged in most operations.

Avoid contact with skin and eyes.

When using do not eat, drink or smoke.

For personal protection see section 8.

7.2 Conditions for safe storage, including any incompatibilities

Keep containers tightly closed in a dry, cool and well-ventilated place.

Keep out of the reach of children.

Keep away from food, drink and animal feedingstuffs.

- : Physically and chemically stable for at least 2 years when stored in the original unopened sales container at ambient temperatures.

7.3 Specific end uses

Registered Crop Protection products: For proper and safe use of this product, please refer to the approval conditions laid down on the product label.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Components	Exposure limit(s)	Type of exposure limit	Source
acibenzolar-S-methyl	10 mg/m ³	8 h TWA	SYNGENTA
silica	4 mg/m ³ 4 mg/m ³ 10 mg/m ³ 3,000 ppm 1.2 mg/m ³ (Respirable dust)	8 h TWA 8 h TWA 8 h TWA IDLH 8 h TWA	DFG SUVA ACGIH NIOSH UK HSE

The following recommendations for exposure controls/personal protection are intended for the manufacture, formulation and packaging of the product.

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8.2 Exposure controls

- Engineering measures : Containment and/or segregation is the most reliable technical protection measure if exposure cannot be eliminated.
The extent of these protection measures depends on the actual risks in use.
If airborne dust is generated, use local exhaust ventilation controls.
Assess exposure and use any additional measures to keep airborne levels below any relevant exposure limit.
Where necessary, seek additional occupational hygiene advice.
- Protective measures : The use of technical measures should always have priority over the use of personal protective equipment.
When selecting personal protective equipment, seek appropriate professional advice.
Personal protective equipment should be certified to appropriate standards.
- Respiratory protection : No personal respiratory protective equipment normally required.
A particulate filter respirator may be necessary until effective technical measures are installed.
- Hand protection : Chemical resistant gloves should be used.
Gloves should be certified to an appropriate standard.
Gloves should have a minimum breakthrough time that is appropriate to the duration of exposure.
The breakthrough time of gloves varies according to the thickness, material and manufacturer.
Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough.
Suitable material
Nitrile rubber
- Eye protection : If eye contact is possible, use tight-fitting chemical safety goggles.
- Skin and body protection : Assess the exposure and select chemical resistant clothing based on the potential for contact and the permeation / penetration characteristics of the clothing material.
Wash with soap and water after removing protective clothing.
Decontaminate clothing before re-use, or use disposable equipment (suits, aprons, sleeves, boots, etc.)
Wear as appropriate:
Dust impervious protective suit

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

- Physical state : solid
Form : granules
Colour : light brown to dark brown
Odour : no data available
Odour Threshold : no data available
pH : 7 - 11 at 1 % w/v
Melting point/range : no data available

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Boiling point/boiling range	: no data available
Flash point	: no data available
Evaporation rate	: no data available
Flammability (solid, gas)	: not highly flammable
Lower explosion limit	: no data available
Upper explosion limit	: no data available
Vapour pressure	: no data available
Relative vapour density	: no data available
Density	: no data available
Solubility in other solvents	: no data available
Partition coefficient: n-octanol/water	: no data available
Autoignition temperature	: no data available
Thermal decomposition	: no data available
Viscosity, dynamic	: no data available
Viscosity, kinematic	: no data available
Explosive properties	: Not explosive
Oxidizing properties	: not oxidizing

9.2 Other information

Minimum ignition temperature	: 400 °C
Dust explosion class	: Forms flammable dust clouds.
Minimum ignition energy	: 0.1 - 0.3 J
Bulk density	: 0.49 g/cm ³
Miscibility	: not miscible
Surface tension	: 57.8 mN/m at 20 °C
Burning number	: 5 at 100 °C

SECTION 10. STABILITY AND REACTIVITY**10.1 Reactivity**

No information available.

10.2 Chemical stability

No information available.

10.3 Possibility of hazardous reactionsNone known.
Hazardous polymerisation does not occur.**10.4 Conditions to avoid**

No information available.

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10.5 Incompatible materials

No information available.

10.6 Hazardous decomposition products

Combustion or thermal decomposition will evolve toxic and irritant vapors.

SECTION 11. TOXICOLOGICAL INFORMATION**11.1 Information on toxicological effects**

Acute oral toxicity : LD50 male and female rat, > 5,000 mg/kg

Acute inhalation toxicity : LC50 male and female rat, > 2.79 mg/l , 4 h

Acute dermal toxicity : LD50 male and female rabbit, > 2,000 mg/kg

Skin corrosion/irritation
acibenzolar-S-methyl : rabbit : Non-irritatingSerious eye damage/eye
irritation : rabbit: Non-irritating**Respiratory or skin sensitization : Maximisation Test guinea pig: A skin sensitizer in animal tests.**Germ cell mutagenicity
acibenzolar-S-methyl : Did not show mutagenic effects in animal experiments.Carcinogenicity
acibenzolar-S-methyl : Did not show carcinogenic effects in animal experiments.Teratogenicity
acibenzolar-S-methyl : Did not show teratogenic effects in animal experiments.Reproductive toxicity
acibenzolar-S-methyl : Did not show reproductive toxicity effects in animal experiments.STOT - repeated exposure
acibenzolar-S-methyl : No adverse effect has been observed in chronic toxicity tests.**SECTION 12. ECOLOGICAL INFORMATION****12.1 Toxicity**

Toxicity to fish : LC50 Oncorhynchus mykiss (rainbow trout), 1.3 mg/l , 96 h

Toxicity to aquatic invertebrates : EC50 Daphnia magna (Water flea), 2.8 mg/l , 48 h

Toxicity to aquatic plants : EbC50 Pseudokirchneriella subcapitata (green algae), 1.6 mg/l , 72 h

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: ErC50 Pseudokirchneriella subcapitata (green algae), 4.8 mg/l , 72 h

12.2 Persistence and degradability

Biodegradability

acibenzolar-S-methyl : **Not readily biodegradable.**

Stability in water

acibenzolar-S-methyl : **Not persistent in water.****12.3 Bioaccumulative potential**

acibenzolar-S-methyl : Does not bioaccumulate.

12.4 Mobility in soil

acibenzolar-S-methyl : Acibenzolar-s-methyl has low to slight mobility in soil.

12.5 Results of PBT and vPvB assessment

acibenzolar-S-methyl : This substance is not considered to be persistent, bioaccumulating nor toxic (PBT).
This substance is not considered to be very persistent nor very bioaccumulating (vPvB).

12.6 Other adverse effects

None known.

SECTION 13. DISPOSAL CONSIDERATIONS**13.1 Waste treatment methods**

Product : Do not contaminate ponds, waterways or ditches with chemical or used container.
Do not dispose of waste into sewer.
Where possible recycling is preferred to disposal or incineration.
If recycling is not practicable, dispose of in compliance with local regulations.

Contaminated packaging : Empty remaining contents.
Triple rinse containers.
Empty containers should be taken to an approved waste handling site for recycling or disposal.
Do not re-use empty containers.

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SECTION 14. TRANSPORT INFORMATION

Land transport (ADR/RID)

14.1 UN number:	UN 3077
14.2 UN proper shipping name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (ACIBENZOLAR-S-METHYL)
14.3 Transport hazard class(es):	9
14.4 Packing group:	III
Labels:	9
14.5 Environmental hazards :	Environmentally hazardous

Sea transport(IMDG)

14.1 UN number:	UN 3077
14.2 UN proper shipping name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (ACIBENZOLAR-S-METHYL)
14.3 Transport hazard class(es):	9
14.4 Packing group:	III
Labels:	9
14.5 Environmental hazards :	Marine pollutant

Air transport (IATA-DGR)

14.1 UN number:	UN 3077
14.2 UN proper shipping name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (ACIBENZOLAR-S-METHYL)
14.3 Transport hazard class(es):	9
14.4 Packing group:	III
Labels:	9

14.6 Special precautions for user

none

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

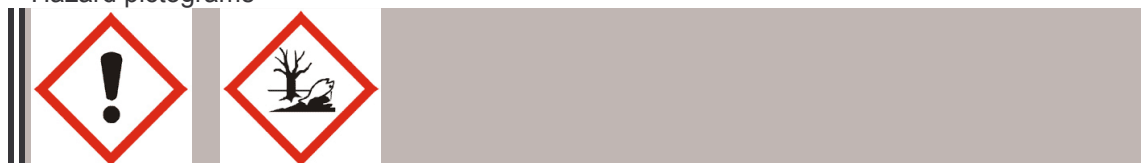
not applicable

SECTION 15. REGULATORY INFORMATION

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

GHS-Labelling

Hazard pictograms



Signal word : **Warning**

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Hazard statements	: H315 H317 H319 H411	Causes skin irritation. May cause an allergic skin reaction. Causes serious eye irritation. Toxic to aquatic life with long lasting effects.
Precautionary statements	: P102 P270 P280 P302 + P352 P305 + P351 + P338 P391 P501	Keep out of reach of children. Do not eat, drink or smoke when using this product. Wear protective gloves/ eye protection/ face protection. IF ON SKIN: Wash with plenty of soap and water. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Collect spillage. Dispose of contents/ container to an approved waste disposal plant.
Supplemental information	: EUH401	To avoid risks to human health and the environment, comply with the instructions for use. Contains acibenzolar-S-methyl. May produce an allergic reaction.
Remarks	: Classified using all GHS hazard classes and categories. Where the GHS contains options, the most conservative option has been chosen. Regional or national implementations of GHS may not implement all hazard classes and categories.	

Hazardous components which must be listed on the label:

- acibenzolar-S-methyl

15.2 Chemical Safety Assessment

A Chemical Safety Assessment is not required for this substance.

SECTION 16. OTHER INFORMATION

Further information

Full text of R-phrases referred to under sections 2 and 3:

R20/22	Harmful by inhalation and if swallowed.
R36/37/38	Irritating to eyes, respiratory system and skin.
R36/38	Irritating to eyes and skin.
R43	May cause sensitization by skin contact.
R50/53	Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R52/53	Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

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Full text of H-Statements referred to under sections 2 and 3.

H302	Harmful if swallowed.
H312	Harmful in contact with skin.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

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