



syngenta

Reg No. L6512 Act No. 36 of 1947

A water dispersible granular agricultural remedy which stimulates the natural defense mechanisms of various plants into providing protection against damage caused by undesired microbes as indicated.

Active Ingredients:
acibenzolar-S-methyl
(benzothiadiazole)..... 500 g/kg



WARNING

Hazard statements:

Causes skin irritation. May cause an allergic skin reaction. Causes serious eye irritation. May cause respiratory irritation. Very toxic to aquatic life with long-lasting effects.

Precautionary statements:

Prevention: Avoid breathing dust. Wash skin thoroughly after handling. Wear protective gloves/eye protection/face protection. **Response:** If inhaled, remove person to fresh air and keep comfortable for breathing. Call a POISON CENTRE/doctor if you feel unwell. If skin irritation or rash occurs, get medical advice/attention. Collect spillage

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UN 3077

Registration holder
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1. WARNINGS:

Hazard statements: Causes skin irritation. May cause an allergic skin reaction. Causes serious eye irritation. May cause respiratory irritation. Very toxic to aquatic life with long-lasting effects.

Withholding period: Minimum number of days between last application and harvest.

TOMATOES..... 3 days
MANGOES..... 21 days

- Dust may irritate skin and eyes.
- Harmful if swallowed, inhaled, or absorbed through the skin.
- Toxic to fish and other aquatic organisms.
- Store in original tightly closed containers away from sun and damp in a well-ventilated area. Avoid temperatures below 10°C and above 35°C.
- Store away from food and feed.
- Keep out of reach of children, uninformed persons and animals.
- **Re-entry:** Do not enter treated area until spray deposit has dried unless wearing protective clothing.

NOTE: Compliance with these withholding periods will ensure that residues do not exceed local maximum residue limits (MRL), but the import tolerances of other countries might possibly be exceeded. If the crop to be treated is intended for export, consult the relevant importer or exporting body regarding the use of this product, MRL's and recommended withholding periods.

Although this remedy has been extensively tested under a large variety of conditions, the registration holder does not warrant that it will be efficacious under all conditions because the action and effect thereof may be affected by factors such as abnormal soil, climatic and storage conditions, quality of dilution water, compatibility with other substances not indicated on the label and the occurrence of resistance of the disease against the remedy concerned, as well as by the method, time and accuracy of application. The registration holder furthermore does not accept responsibility for damage to crops, vegetation and the environment, or harm to people

or animal or for lack of performance of the remedy concerned due to failure of the user to follow the label instructions or to the occurrence of conditions, which could not have been foreseen in terms of the registration. Consult the supplier in the event of any uncertainty.

2. PRECAUTIONS:

Precautionary statements: Prevention: Avoid breathing dust. Wash skin thoroughly after handling. Wear protective gloves/eye protection/face protection. **Response:** If inhaled, remove person to fresh air and keep comfortable for breathing. Call a POISON CENTRE/doctor if you feel unwell. If skin irritation or rash occurs, get medical advice/attention. Collect spillage.

- Do not inhale product dust or spray mist.
- Avoid contact with skin, eyes and clothing with granules or spray mist.
- Wear rubber gloves and a face shield when handling granules.
- Wash contaminated clothing after use.
- Wash hands and entire body with soap and water after use.
- Wash contaminated clothing after use.
- Do not eat, drink, or smoke while mixing or applying the product, wash hands and face before doing so.
- If any indisposition occurs, stop working, follow first aid measures and call a doctor.
- Avoid drift of spray mist onto other crops, pastures, rivers, dams, boreholes and areas not under treatment.
- Clean applicator after use. Dispose of rinsate where it will not contaminate crops, pastures, rivers, dams and boreholes.
- Prevent contamination of food, feed, drinking water and eating utensils.
- Do not use empty container for any other purpose.

3. RELEVANT SUBSTANCES:

Chemical name	
acibenzolar-S-methyl	
Classification	Concentration (% w/w)
Skin Irrit. 2; H315	≥ 50 - < 70

Chemical name	
acibenzolar-S-methyl cont.	
Classification	Concentration (% w/w)
Eye Irrit. 2; H319 Skin Sens. 1; H317 STOT SE 3; H335 (Respiratory system) Aquatic Acute 1; H400 Aquatic Chronic 1; H410 M-Factor (Acute aquatic toxicity): 1 M-Factor (Chronic aquatic toxicity): 1	≥ 50 - < 70
Chemical name	
reaction product of naphthalene, butanol, sulfonated and neutralized by caustic soda	
Classification	Concentration (% w/w)
Acute Tox. 4; H302 Acute Tox. 4; H332 Eye Dam. 1; H318 STOT SE 3; H335 (Respiratory system)	≥ 1 - < 3
Chemical name	
disodium maleate	
Classification	Concentration (% w/w)
Acute Tox. 4; H302 Skin Irrit. 2; H315 Eye Irrit. 2; H319 Skin Sens. 1; H317 STOT SE 3; H335 (Respiratory system)	≥ 0,1 - < 1

4. RESISTANCE MANAGEMENT:

BION is a plant activator which induces the plant's own resistance against bacteria and fungi. Due to its particular mode of action, **BION** has to be applied before infection takes place as the plant needs time for its natural defense mechanisms to be activated. **BION** is taken up rapidly and effectively through the plant stems and leaves and is translocated acropetally and basipetally within the plant tissue. **BION** stimulates plants to become more resistant against:

- Bacterial black spot (*Xanthomonas campestris* pv. *mangiferaeindicae*) in mango's and,
- bacterial speck (*Pseudomonas syringae* pv. *tomato*) and bacterial spot (*Xanthomonas campestris* pv. *vesicatoria*) in tomatoes.

5. DIRECTIONS FOR USE: Use only as indicated.

5.1 General Recommendations

MANGOES AND TOMATOES

- Apply **BION** in combination with suitable copper compounds.
- **BION** must be applied before plant tissue becomes infected.
- Follow good agricultural practices at all times.

5.2 Compatibility

The compatibility of **BION** with other products may be

influenced by the formulation of the products involved as well as the quality of the dilution water. Since the formulation of other products may change without the knowledge of Syngenta and the quality of water may vary from farm to farm, a physical compatibility test should always be carried out prior to application.

5.3 Mixing Instructions

- Ensure application equipment is clean and not contaminated.
- Flush the sprayer with clean water after application or at the end of the day by spraying the rinsate at a dilution rate of at least 1:10 (spray mixture: water) on the crop.
- If **BION** is tank mixed with other products, add the products to the water in the spray tank in the following order: first **BION**, second mixing partners.
- If mixing partners are packed in water soluble bags, first add the water soluble bags and then **BION**.

Air assisted recycling sprayers

- Fill the spray tank one-third with water.
- Continuously agitate.
- Remove the filter on the top of the tank. Pour the required quantity of product directly into the tank and continue to agitate the mixture.
- Continue agitating and fill the tank with water.

Important

- Do not first prepare **BION** as slurry in a bucket.
- When filling the spray tank the filling hose should always be above water level in order to prevent the solution being sucked back.

Ensure thorough agitation of the mixture in the tank during mixing and spraying. Replace cover after mixing.

5.3 Application Techniques

Ground application

BION may be applied with conventional spray equipment. Calibrate the apparatus before application to ensure that the correct dosage is applied. The distribution of the spray volume must be uniform throughout the target area.

6. APPLICATION RATES:

BION should form part of the disease management program. For protection against bacterial black spot of mangoes and bacterial speck and spot of tomatoes, apply **BION** in combination with suitable copper* compounds. **BION** will stimulate the plants natural defense mechanisms and the copper will reduce the inoculum levels by its direct action against the pathogens.

MANGOES

Pest	Dosage
Bacterial black spot (<i>X. campestris</i>)	Low - medium coverspray 12.5 g/100 ℓ water PLUS copper*
Remarks	
<ul style="list-style-type: none"> • Always ensure complete coverage of the leaves and 	

MANGOES cont.

fruit with the spray mixture.

- On bearing trees apply the first application at bud break (candle flame stage) and the second application at fruit set and thereafter at a maximum of 28-day-intervals throughout the season.
- Six (6) applications per season are recommended.

TOMATOES

Pest	Dosage
Bacterial speck (<i>P. syringae</i>)	High volume (250 - 1 500 ℓ spray mixture/ ha)
Bacterial spot (<i>X. campestris</i>)	7.5 g/100 ℓ water PLUS copper*
Remarks <ul style="list-style-type: none">• Always ensure complete coverage of the leaves and fruit with the spray mixture.• Increase spray volume as the plants increase in size.• Apply the first application 7 - 10 days after transplant and repeat at 21 day intervals throughout the season.• Six (6) applications per season are recommended.	

BION® is the registered trade mark of a Syngenta Group Company.

Comments

- * Copper must be used at the registered dosage rate.
- * Follow the recommendations on the particular copper labels.
- * Not for use on the mango cultivar Hayden.

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