# **AMYLO-X**° WG

GROUP BM 02 FUNGICIDE

#### MAPP 17978 / PCS 06311

A water dispersible granule (WG) containing 250 g/kg (5 x 10<sup>13</sup> CFU/kg) Bacillus amyloliquefaciens subsp. plantarum strain D747 for the control of powdery mildew and other fungal plant diseases on a range of crops grown under permanent protection with full enclosure.

#### **AMYLO-X WG**

Water dispersible granules (WG) containing 250 g/kg (5  $\times$  10 $^{13}$  CFU/kg) Bacillus amyloliquefaciens subsp. plantarum strain D747

Dispose of contents/container to a licensed hazardous waste disposal contractor or collection site except for empty, triple rinsed clean containers which can be disposed of as non-hazardous waste.

Bacillus amyloliquefaciens subsp. plantarum strain D747 may have the potential to provoke sensitising reactions. To avoid risks to human health and the environment, comply with the instructions for use.

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#### IMPORTANT INFORMATION

FOR USE ONLY AS A PROFESSIONAL HORTICULTURAL FUNGICIDE

Crops: Crops grown under permanent protection with full enclosure of leafy vegetables, strawberries, cane fruit and bush/small fruit and fruiting vegetables.

Maximum individual dose: 2.5 kg product /ha Maximum number of applications:

Minimum interval between treatments: 7 days
Latest time of application: BBCH 89 for strawberries, cane
fruit and bush/small fruit and fruiting vegetables. BBCH 79 for leafy vegetables.

For fungi (mushrooms): 1 application at set up of cultivation with a maximum application rate of 15 g per 100 kg compost. Other specific restrictions:

- Treatment must only be made under 'permanent protection' situations which provide full enclosure (including continuous top and side barriers down to below ground level) and which are present and maintained over a number of years.
- 2) Reasonable precautions must be taken to prevent access of birds, wild mammals and honey bees to treated crops.
- 3) To minimise airborne environmental exposure, vents, doors and other openings must be closed during and after application until the applied product has fully settled.

READ THE LABEL BEFORE USE. USING THIS PRODUCT IN A MANNER THAT IS INCONSISTENT WITH THE LABEL MAY BE AN OFFENCE. FOLLOW THE CODE OF PRACTICE FOR USING PLANT PROTECTION PRODUCTS.

#### **FUNGICIDE**



Net content

1kg

#### **READ CAREFULLY BEFORE USE**

Production date / Batch number: see packaging

> For advice on medical emergencies fires, spillages or chemical hazards ONLY - phone Carechem 24 EU: +44 (0)1235 239670

For technical and non-emergency calls phone +44 (0)845 373 0305

Authorisation Holder: Mitsui AgriScience International S.A./B.V.

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THE (COSHH) CONTROL OF SUBSTANCES HAZARDOUS TO HEALTH REGULATIONS MAY APPLY TO THE USE OF THIS PRODUCT AT WORK - UK only.

#### SAFETY PRECAUTIONS

#### Operator protection Engineering control of operator exposure

in addition to the following personal protective equipment.

Operators must wear suitable protective clothing (coveralls), suitable protective gloves and suitable respiratory protective equipment i.e. minimum requirement a disposable filtering facepiece respirator to EN149, FFP3 or equivalent when handling the formulated

must be used where reasonably practicable

product and during application. WHEN USING, DO NOT EAT, DRINK OR SMOKE. Do not re-enter the treated area until the spray

has dried

#### **Environmental protection**

DO NOT CONTAMINATE SURFACE WATER OR DITCHES with chemical or used container. Do not clean application equipment near surface water. Avoid contamination via drains from farmyards and roads.

#### Storage and disposal

RINSE CONTAINER THOROUGHLY by using an integrated pressure device or manually rinsing three times. Add washings to sprayer at time of filling and dispose of safely DO NOT RE-USE EMPTY CONTAINER for any purpose. KEEP AWAY FROM FOOD, DRINK AND

ANIMAL FEEDING STUFFS KEEP OUT OF THE REACH OF CHILDREN.

#### CONDITIONS OF SUPPLY

The Seller warrants that the goods shall at the time of delivery to the Buyer conform to the Seller's standard specification but all other conditions and standard specification but all other conditions and warranties, whether express or implied by statute or custom of the trade or otherwise and whether as to condition, quality, performance, merchantability, fitness for any purpose or otherwise, are expressly excluded and, subject as aforesaid, the Seller shall be under no liability whatsoever, in contract or in tort, for or in respect of any loss or damage whatsoever resulting from or arising out of the goods or supply or use thereof, whether caused by the negligence of or use thereof, whether caused by the negligence of the Seller or otherwise. The Seller shall be under no liability in respect of the warranty given above unless the Buyer allows the Seller reasonable opportunity of inspecting the goods where practicable. A consumer's statutory rights are not affected.



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### **DIRECTIONS FOR USE**

### **GENERAL INFORMATION**

AMYLO-X is a broad-spectrum preventive bio fungicide for control or suppression of fungal plant diseases. The active ingredient of AMYLO-X, Bacillus amyloliquefaciens subsp. plantarum D747, is a naturally occurring strain of the beneficial soil bacterium B. amyloliquefaciens, which colonises leaves, roots and other plant surfaces, killing pathogenic organisms by means of antibiosis and release of lytic enzymes. Moreover, B. amyloliquefaciens quickly colonises plant surfaces preventing establishment of diseases such as fungi.

AMYLO-X is applied as a foliar spray using air assisted or hydraulic pressure sprayer.

+∩ 2.5 kg/h diluted in 200 to 1500 litres of water/ ha, depending on the crop and its development stage.

#### CROPS, APPLICATION RATES AND **APPLICATION TIMING**

### Leafy Vegetables

Lettuce, Endive, Cress, Land cress, Lamb's Lettuce, Rocket, Red Mustard, Spinach, Spinach Beet, Watercress and Chicory (witloof) 1.5 - 2.5 kg/ha in a water volume of 200 - 1000 L/ha. Number of applications: max 6

Diseases controlled: Sclerotinia spp. and Botrytis cinerea. Timing: apply at the beginning or prior to infection or from 4 true leaf stage to lettuce hearts have reached typical size

### Strawberries, Cane fruit and Bush/small fruit

Strawberry, Blackberry, Loganberry and Rubus hybrid, Raspberry, Blueberry, Gooseberry, Blackcurrant and Redcurrant 1.5 – 2.5 kg/ha in a water volume of 500 - 1000 L/ha

Number of applications: max 6

Diseases controlled: Botrytis cinerea and powdery mildew (Podosphaera aphanus).

Timing: apply at the beginning or prior to infection or from the beginning of leaf development up to (BBCH 89) harvest.

### Fruiting Vegetables

Tomato, Pepper, Chilli, Aubergines, Courgette and Summer Squash, Cucumber, Melon, Winter Squash, Pumpkin and Watermelon 1.5 < 2.5 kg/ha in a water volume of 500 – 1000 L/ha. Number of applications: max 6
Diseases controlled: Botrytis cinerea and powdery mildew (Levelillula taurica) for Tomato, Pepper, Chilli and Aubergine and Botrytis cinerea only for all other crops listed.
Timing: apply at the beginning or prior to infection or from the beginning of leaf development up to (BBCH 89) harvest.

### Fungi

Including Mushrooms. 15 g/100 kg compost.

Number of applications: 1

Diseases controlled: Trichoderma aggressivum

Timing: once at set up of cultivation, spray onto growth substrate.

To access the Safety Data Sheet for this product scan the QR code or use the weblink below: WEBLINK to specific data sheet on manufacturer's website:

https://certisbelchim.co.uk/pdf/MSDS/ Amylo-X\_WG\_MSDS.pdf



Alternatively, contact your supplier

## PREPARATION OF THE SPRAY SOLUTION

AMYLO-X WG may be applied with conventional sprayers, boom sprayers, power sprayers or knapsack sprayers. To ensure homogenous dispersion of the product in the tank-mix, half-fill the tank with water, add the required amount of the product and fill the tank under continuous agitation. Do not use highly alkaline or highly acidic water to mix sprays. Use a buffering agent if necessary to maintain neutrality (pH 6 to 8) of water in the tank. Maintain agitation during application. Apply immediately after mixing; do not allow spray mix to stand overnight

### COMPATIBILITY

AMYLO-X WG can be applied alone or in combination and/or rotation with chemical fungicides. Do not mix with products which could alter the spores' viability. It is always advisable to verify the compatibility or the potential phytotoxicity caused by a mixture with an untested product, since the possible incompatibility may depend on factors outside the control of the manufacturer, such as crop stage, climatic conditions, the used water volumes, etc.

### STORAGE AND DISPOSAL

Store in a cool and dry place; high humidity and temperatures over 30°C decrease the activity of the product. The product is stable at room temperature (21-24°C) for 2 years. The disposal of product has to be performed in accordance with all applicable national and local environmental regulations. Completely empty the container into application equipment. Clean container promptly after emptying by triple rinsing. Dispose of empty container according to local regulations, alternatively contact a licensed disposal contractor. Avoid contamination of the environment from empty containers. Do not re-use or refill empty container.

### CLEANING OF THE SPRAY EQUIPMENT

Rinse the application equipment thoroughly with water. Distribute washings over the treated area or leave unsprayed area in the crop for applying washings. After use, clean the tank with clean water. Special cleaning agents are not required.

### WARNING

The product is intended for professional horticultural usage ONLY. The responsibility of using the product remains with the end user. All directions of use should be adhered to in order to ensure safe use of the product, including the safety of treated crops, persons and protection of the environment. Follow all directions for use in order to avoid risks for human health and the environment.

### RESISTANCE

The development of resistance to the active Bacillus amyloliquefaciens subsp. plantarum strain D747 can be considered a low risk, but cannot be excluded. To minimise the risk of resistance developing in the future it is good practice to use products with a range of active ingredients as part of a planned programme including IPM techniques. It is not advisable to use AMYLO-X WG continually in sequential crops grown in the same physical structure.