

BOTANIGARD® OD

PCS 06787

GROUP UNF INSECTICIDE

For the control of whitefly on various crops.

This product is an oil dispersion containing 113 g/L
Beauveria bassiana GHA present as 2.2×10^{10} CFU/L.

Botanigard OD

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UFI: VW20-J050-800P-J5UP

DANGER

MAY BE FATAL IF SWALLOWED AND ENTERS AIRWAYS.

**MAY CAUSE AN ALLERGIC SKIN REACTION.
MAY CAUSE ALLERGY OR ASTHMA
SYMPTOMS OR BREATHING
DIFFICULTIES IF INHALED.**

Avoid breathing dust/fume/gas/
mist/vapours/spray.

Wear protective gloves/protective
clothing/ eye protection/ face protection.
Wear respiratory protection.

IF SWALLOWED: Immediately call a POISON
CENTRE or doctor/physician.

IF INHALED: Remove person to fresh air and keep
comfortable for breathing.

If experiencing respiratory symptoms: Call a POISON CENTRE/doctor/physician.
Dispose of contents/container to a licensed hazardous waste disposal contractor or
collection site except for empty, triple rinsed, clean container which can be disposed of
as non-hazardous waste.

**Contains *Beauveria bassiana* strain GHA TGA1 (63428-82-0). May produce an
allergic reaction.**

**To avoid risks to human health and the environment,
comply with the instructions for use.**

PCS 06787

INSECTICIDE

Net content

4L

**READ CAREFULLY
BEFORE USE**

**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

Production date /
Batch number:
see packaging

Authorisation Holder:
Mycotech Europe Ltd,
c/o Certis Belchim BV,
Suite 5, 3 Riverside,
Granta Park, Great Abington,
Cambs CB21 6AD

® Registered trademark of
LAM INTERNATIONAL CORP.

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Email: info.uk@certisbelchim.com | www.certisbelchim.co.uk



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IMPORTANT INFORMATION

FOR USE ONLY AS A PROFESSIONAL HORTICULTURAL INSECTICIDE

Crops: Grown under permanent protection with full enclosure.

Strawberries, Aubergines, Courgettes, Cucumbers and Melons, Sweet Peppers, Ornamentals, Roses, Tree Nursery and Perennials.

Maximum individual dose	Maximum number of treatments	Maximum total dose	Latest time of application
Refer to the leaflet attached to the product pack for full details.			

Other Specific Restrictions

- 1) 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) May be harmful to natural enemies. Consult your supplier of natural enemies on the use of BOTANIGARD OD in combination with the use of natural enemies.
- 3) May be harmful to pollinators. Consult your supplier of pollinators on the use of BOTANIGARD OD in combination with the use of pollinators.
- 4) Reasonable precautions must be taken to prevent access of birds, wild mammals and honey bees to treated crops.
- 5) 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.

SAFETY PRECAUTIONS

Operator protection

Engineering control of operator exposure must be used where reasonably practicable in addition to the following personal protective equipment: WEAR SUITABLE PROTECTIVE CLOTHING (COVERALLS), SUITABLE PROTECTIVE GLOVES AND SUITABLE RESPIRATORY PROTECTIVE EQUIPMENT* when handling the product or applying the product. *Disposable filtering facepiece respirator to at least EN149 FFP3 or equivalent.

Environmental protection

Do not contaminate water with the product or its container. Do not clean application equipment near surface water. Avoid contamination via drains from farmyards and roads.

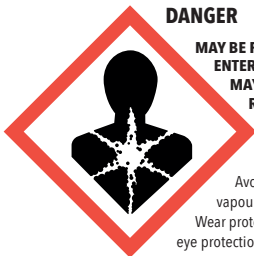


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Contains Beauveria bassiana strain GHA TGAI (63428-82-0). May produce an allergic reaction.

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PCS 06787

DIRECTIONS FOR USE

IMPORTANT: This information is approved as part of the Product Label. All instructions within this section must be read carefully in order to obtain safe and successful use of this product.

GENERAL INFORMATION

BOTANIGARD OD is a microbiological insecticide based on the entomopathogenic fungus *Beauveria bassiana*. The product is formulated as a wettable powder and contains 2.2×10^{10} CFU/L (CFU = Colony forming units).

BOTANIGARD OD will contribute to glasshouse whitefly control as part of an IPM programme.

Please note BOTANIGARD OD may be harmful to natural enemies. Consult your supplier of natural enemies on the use of BOTANIGARD OD in combination with the use of natural enemies.

BOTANIGARD OD may have adverse effects on bumble bees. Please seek further advice on the use of this product with pollinators.

MODE OF ACTION

Beauveria bassiana is a fungus found naturally in soils and occurs as a disease, white muscadine in insects. When spores of this fungus come in contact with the cuticle of susceptible insects, they germinate and grow directly through the cuticle to the inner body of their host. Here the fungus proliferates throughout the insect's body, producing toxins and draining the insect of nutrients, eventually killing it.

APPLICATION

Crop Specific Information

Crop	Target*	Maximum individual dose (L product/ha)	Maximum total dose (L product/ha)	Maximum number of application	Interval between applications (days)	Water volume (L/ha)
Strawberry	Whitefly	1.5	18	12 per crop cycle	5-7	600-1200
Courgette, Cucumber, Melon	Whitefly	1.8	18	10 per crop cycle	5-7	500-1500
Aubergine	Whitefly	1.8	45	25 per crop cycle	5-7	500-1500
Sweet peppers	Whitefly	1.8	10.8	6 per crop cycle	5-7	500-1500
Ornamentals (except roses)	Whitefly	1.5	37.5	25 per year	5-7	500-1200
Roses	Whitefly	1.8	45	25 per year	5-7	500-1500
Tree Nursery and Perennials	Whitefly	1.25	12.5	10 per year	5-7	500-1000

*Glasshouse whitefly *Trialeurodes vaporariorum*, Bemisia argentifolii

Application timing

For glasshouse pests, it is important that BOTANIGARD OD is applied as soon as the insect pests are detected. Applications every 5-7 days are recommended. The rate at which *Beauveria* spores kill their host is dependent on temperature and relative humidity.

Beauveria bassiana spores are inactivated by sunlight, therefore applications should be carried out in the evening.

Spraying Technique

BOTANIGARD OD works by contact only, therefore to work effectively it is important to get good crop coverage. The foliage should be sprayed until the plants are wet thoroughly, but not to run-off.

Continuous agitation should be maintained throughout the spraying operation. Equipment that gets the material to the undersides of the leaves will result in prolonged activity, as spores are inactivated by sunlight.

Mixing

Fill sprayer with half the required volume of water (using mains water) and commence agitation. Add measured quantity of BOTANIGARD OD and complete filling of sprayer with water to the required volume. Ensure product is thoroughly mixed before application.

STORAGE

Store in a cool dry place. Avoid storage below freezing temperatures or above 30°C. BOTANIGARD OD stability decreases with time at elevated temperatures above 30°C. Tightly reclose the container of unused product. Do not contaminate unused product with water.

COMPATIBILITY

Contact Certis Belchim for more information.

Fungicide Compatibility

Use of certain fungicides may have a detrimental effect on the performance of BOTANIGARD OD. Contact Certis Belchim for more information.

PHYTOXICITY

Trials show that BOTANIGARD OD is crop safe and phytotoxicity is not to be expected, however it has not been tested on all plant varieties. The agent can give visible residue. Damage when applied to young fruit or vegetables is not excluded. Test BOTANIGARD OD on a small number of plants to check for potential damage before applying to a larger number of plants.

RESISTANCE

BOTANIGARD OD has not been reported to have any insect resistance. However, it is good practice to use such products as components of Integrated Pest Management systems, alternating with other control measures. This is particularly important for sequential crops.

Company Advisory Information

This section is not part of the Product Label under Regulation 1107/2009. It provides additional advice on product use at the discretion of the applicant.

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 warranties, whether express or implied by statute or custom or 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 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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