

MYCOTAL®
MAPP No. 16644

Contains: 1 x 10E10 CFU/g *Lecanicillium muscarium* Ve-6
Water Dispersible Granule (WG)

IMPORTANT INFORMATION

FOR USE ONLY AS A HORTICULTURAL INSECTICIDE

USER: Professional

For control of whitefly on protected crops of tomato, cucumber, pepper and chilli, ornamental plant production, aubergine, runner bean, broad bean, French bean, lettuce, squash, gherkin, melon, pumpkin and courgette

Qualified Recommendation for Minor Use: for the moderate control of glasshouse whitefly in protected strawberry

Maximum individual dose: 2 kg product per hectare

Maximum number of applications: 8 per crop

Other specific restrictions:

1. Maximum concentration must not exceed 1 g product per litre of water
2. A minimum interval of 7 days must be observed between applications
3. 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 have been maintained over a number of years
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 applications until the applied product has fully settled

READ ALL OTHER SAFETY PRECAUTIONS AND DIRECTIONS FOR USE BEFORE USE

EXTENSION OF AUTHORISATION: Protected crops of bilberry, blackcurrant, blueberry, cranberry, gooseberry, redcurrant, ribes hybrids, table grapes, wine grapes, blackberry, loganberry, raspberry, rubus hybrids and herbs.

This extension of the authorised use provides for the use of Mycotal® in respect of crops and situations other than those included on the product label (above). Neither the efficacy or the phytotoxicity of the product for which this extension of authorisation has been granted have been assessed and, as such, the user bears the risk in respect of failures concerning its efficacy and phytotoxicity.

SAFETY PRECAUTIONS

Contains *Lecanicillium muscarium* Ve-6: Micro-organisms may have the potential to provoke sensitising reactions

Operator Protection:

WASH HANDS AND EXPOSED SKIN before meals and after work

DO NOT BREATHE DUST

WEAR SUITABLE PROTECTIVE CLOTHING (COVERALLS), SUITABLE PROTECTIVE GLOVES AND SUITABLE RESPIRATORY EQUIPMENT* when handling 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

Storage and Disposal:

KEEP OUT OF THE REACH OF CHILDREN

KEEP IN ORIGINAL CONTAINER tightly closed, in a safe place

DO NOT REMOVE INNER LINER FROM CONTAINER

EMPTY CONTAINER COMPLETELY and dispose of safely

To avoid risks to man and environment, comply with the instructions for use.

STORAGE:

Keep refrigerated at 2-6°C

Do not keep in domestic refrigerators

Do not freeze

Manufactured for: Koppert UK Ltd, 8 Tudor Rose Court, 53 Hollands Road, Haverhill, Suffolk, CB9 8PJ, Tel: 01440 704488

Mycotal® is a registered trademark of Koppert BV

BATCH No: see top

USE BY: see top

NET CONTENT: 500 g

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.

Mycotal® contains the spores of a specific strain of the entomopathogenic fungus *Lecanicillium muscarium* which is highly infective to whitefly. The use of the adjuvant Addit (Approved Adjuvant No. A0693) is recommended with Mycotal®.

MODE OF ACTION: Mycotal® is effective by direct contact, and under the right environmental conditions, kills glasshouse whitefly after 7-10 days. Applications should target larvae and pupae, as there is no activity against eggs. Repeat applications (up to 4) may be necessary, at the specified interval, to treat new larvae as they emerge, and break the pest lifecycle. After spraying, the spores germinate and grow, producing hyphae that penetrate the body cavity, where they proliferate, destroying the tissues. The fungus then grows through the insect cuticle and produces spores on the outside of the cadaver, which may spread the infection to other whitefly.

ENVIRONMENTAL CONDITIONS: The successful performance of Mycotal® is dependent on the suitability of temperature, relative humidity conditions within the crop cover, and timing of application, and requires the following minimum conditions:

Relative humidity: 70% (when used with Addit)
Temperature: 18°C (maximum temperature 30°C)

APPLICATION: Dose Rate: 1 g/l

Mix required amount of Mycotal® with enough water (at 15-20°C) to stir it into a slurry. Fill spray tank with required amount of water. Empty slurry into spray tank and agitate well. Add a concentration of 0.25% Addit (0.125% for strawberry) to the spray solution and mix thoroughly. Apply immediately after preparation with high volume spraying equipment, to provide more water for germination and growth of the spores as well as increasing local humidity. Spray during the late afternoon and early evening, directing the spray onto the undersides of the leaves and to the growing points. Good coverage is essential for the best results. Use 500 l/ha spray suspension for each metre of canopy height. Keep the spray liquid well-agitated.

TIMING AND NUMBER OF APPLICATIONS: Mycotal® must be used early in the crop when pest numbers are low. For effective control, up to 4 applications per whitefly outbreak may be made, at 7-10 day intervals, with a maximum of 8 applications per crop.

RESISTANCE MANAGEMENT: Resistance to *Lecanicillium muscarium* is not currently known to occur. To minimise the risk of resistance developing, it is good practice to use a range of IPM techniques as part of a planned programme. Blocks of treatments should be alternated with product and techniques with different modes of activity. No more than 4 consecutive applications of Mycotal® should be made. It is not advisable to use Mycotal® continually in successive crops within a structure.

COMPATIBILITY: The effects of other pesticides on Mycotal®, when used on the same crop, have not been fully determined. However selective use of chemical control agents with Mycotal® may be possible provided that products are not tank mixed with Mycotal®, and that fungicides are only used up to three days before, or more than three days after, an application of Mycotal®.

Do not use any product containing the following active ingredients in conjunction with Mycotal®: captan, chlorothalonil, fenarimol, dichlofluanid, imazalil, maneb, prochloraz, quinomethionate or thiram.

Limited evidence suggests that Mycotal® has negligible effects on commercially available natural enemies (predators/parasites) and may be used in conjunction with them with some margin of safety. Before using Mycotal® with a particular biological control agent for the first time, growers should consult Koppert UK Ltd. When using a product on a crop for the first time, always test a small area for compatibility prior to treating the whole crop.

The (COSHH) Control of Substances Hazardous to Health Regulations may apply to the use of this product at work.

Approval holder and marketing company: KOPPERT BV, PO Box 155, 2650 AD Berkel en Rodenrijs, The Netherlands.

KOPPERT BV guarantees that Mycotal® is fit for purpose and conforms to the specifications stated on this label. KOPPERT BV gives no warranty, express or implied, including the warranties of commercially acceptable quality



and/or fitness for any particular purpose concerning this material, other than those which are stated on this label, and will not be liable for any direct or indirect damage which results from incorrect use of the product or non-compliance with the directions of this label.