

Met52[®] OD

bioinsecticide



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MAPP 17367

PCS No. 05859

Met52[®] OD (Oil dispersion) is for the reduction of thrips and/or whiteflies and/or mites in strawberry, fruiting vegetables (cucurbitaceae and solanaceae), ornamental crops (protected) and thrips in allium crops (unprotected): a liquid (oil dispersion) product containing 11% *Metarhizium anisopliae* var. *anisopliae* strain F52: 104.83 g/L (a minimum of 2×10^{12} cfu/L).

This booklet is part of the authorised Product Label.

IMPORTANT INFORMATION Field of use: ONLY AS AN AGRICULTURAL/HORTICULTURAL INSECTICIDE User: Professional	Maximum individual dose: litre of product/ha	Maximum total dose	Maximum number of treatments (per crop)	Latest time of application	Minimum interval between applications (days)
	Crops/situations				
Aubergine (protected), courgette and summer squash (protected), cucumber (protected), melon (protected), pepper and chilli (protected), strawberry (protected), tomato (protected), winter squash and pumpkin (protected)	1.25	10.0 L/ha	8	4 hours before harvest	3
Nursery fruit trees (protected), ornamental plant production (protected)	1.25	10.0 L/ha	8	-	3
Bulb onion, garlic, leek, salad onion, shallot	1.25	7.5 L/ha	6	4 hours before harvest	7

Batch Code/Expiry Date:

Other specific restrictions: Maximum of 24 treatments per glasshouse structure per year.
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.

Contents:
1L bottle

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RISK AND SAFETY INFORMATION

Contains *Metarhizium anisopliae* var. *anisopliae* strain F52. Micro-organisms may have the potential to provoke sensitising reactions.

Keep out of reach of children
Do not breathe spray
Wear protective gloves/protective clothing
Wear respiratory protection

To avoid risk to human health and the environment, comply with the instructions for use. MAPP No. 17367, PCS No. 05859

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

SAFETY PRECAUTIONS

Operator protection

(UK only) 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 concentrate or applying the product. *Disposable filtering facepiece respirator to at least EN149 FFP3 or equivalent.

(UK only) However, engineering controls may replace personal protective equipment if a COSHH assessment shows they provide an equal or higher standard of protection.

- AVOID CONTACT WITH SKIN AND EYES.
- IF YOU FEEL UNWELL, seek medical advice immediately (show the label where possible).
- WASH HANDS AND EXPOSED SKIN before meals and after work.

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 AWAY FROM FOOD, DRINK AND ANIMAL FEEDING STUFFS.
- Keep in a cool, dry, well-ventilated place.
- Protect from direct sunlight.
- Do not store above 20°C. Do not freeze.
- Met52[®] OD is a biological product and has a guaranteed shelf-life of 12 months at around 4°C and of 12 months at ambient temperature.
- The product should preferably be stored at around 4 °C to retain maximum viability.
- Once open, use entire contents.
- WASH OUT CONTAINER THOROUGHLY and dispose of container safely.
- CLEAN ALL EQUIPMENT after use.

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

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.

Met52® OD is a microbial based pest control product containing the entomopathogenic fungi *Metarhizium anisopliae* var. *anisopliae* strain F52, a naturally occurring insect parasitic fungus that is not genetically modified.

Once in contact with the cuticle of the target insect, spores of *Metarhizium anisopliae* germinate, penetrate through the cuticle and grow within the insect. New spores are then formed from the hyphae that may emerge from the dead target insect.

Restrictions or warnings

Spores of *Metarhizium anisopliae* var. *anisopliae* strain F52 can reasonably be active at temperatures between 15-32°C, and have optimal activity between 25-30°C. Outside the temperature range of 15-32°C, activity may be reduced but spores remain viable, unless temperatures rise above 40°C when spore viability will decline rapidly.

Pest controlled

Met52® OD is intended for control of the economically important pests; thrips, whitefly and mite, on commercially important crops cucurbits, solanaceae, strawberry, alliums, ornamentals, in protected and field situations.

- Western flower thrips in protected situation on cucumber, courgette, summer squash, melon, winter squash, pumpkin, aubergine, pepper, chili, tomato, strawberry, at maximum 1.25 L/ha and with maximum eight treatments per crop.
- Two-spotted spider mite in protected situation on cucumber, courgette, summer squash, melon, winter squash, pumpkin, aubergine, pepper, chili, tomato, strawberry, at maximum 1.25 L/ha and with maximum eight treatments per crop.
- Glasshouse whitefly in protected situation cucumber, courgette, summer squash, melon, winter squash, pumpkin, aubergine, pepper, chili, tomato, nursery fruit trees and ornamental plant production at maximum 1.25 L/ha and with maximum eight treatments per crop.

For ornamentals, in view of the large number of species and cultivars grown it is recommended to test Met52® OD on a small number of plants to confirm plant safety before spraying the crop.

- Onion thrips in field situation on leek, onion, spring onion, garlic and shallot at maximum 1.25 L/ha and with maximum six treatments per crop.

This product is intended for control of all life stages of thrips, whiteflies and mites.

The number of treatments must target the specific pest generation, with 1-4 applications per generation.

The maximum number of treatments is eight per crop.

To cover use in multicropping environments it is advised to apply products with a different mode of action to successive pest generations, with a maximum of 24 applications per glasshouse structure per year.

Crops specific information

Met52® OD can be used at all crop growth stages.

Cucurbitaceae and solanaceae: water volume of 300-1500 L/ha.

Strawberry: water volume of 300-1600 L/ha.

Ornamentals: water volume of 250-1500 L/ha.

Alliums: water volume of 200-1500 L/ha.

Mixing and spraying

Pouring and rinsing from commercial packaging

- Shake the bottle vigorously for approximately 1 minute.
- Empty out approximately 1/3 of the bottle into a 2 or 3 L clean container.
- Shake vigorously the other two thirds of bottle for another minute.
- Open bottle and turn it upside down to allow all of liquid to be emptied into the 2 or 3 L container.
- Make sure all of the liquid and spores are empty from the bottom of the bottle by rinsing and shaking the bottle with around 250 mL of water.
- Empty the remaining contents into the 2 or 3 L container.
- Once open, use entire contents.

Preparation of solution

- Fill the spray tank with the required amount of water.
- Rinse the product contents from the 2 or 3 L container into the spray tank and agitate well.
- Spray immediately after preparation.
- Do not prepare solution and leave standing. Protect prepared solution from direct sunlight.

Equipment

- Mixing equipment must be clean and free of pesticide residues.
- All application equipment must be thoroughly cleaned with water prior to storage or use on another crop.

Method of application

- Thorough coverage of all foliage is essential for effective disease control.
- Apply with spray equipment commonly used for ground and aerial applications; and sprinkle/irrigation systems commonly used e.g. hose-end, pressurized, greenhouse and handheld sprayers.

Compatibility

Met52® OD should not be mixed with other plant protection products. The effect of fungicides applied either before or after Met52® OD on the effectiveness of Met52® OD has not been established.

The product has been tested on a range of beneficial arthropods, and bumblebees: no adverse effects have been seen in greenhouse conditions.

Please note Met52® OD may be harmful to natural enemies. Consult your supplier of natural enemies on the use of Met52® OD in combination with the use of natural enemies.

Met52® OD has been tested on a wide range of crops and conditions without causing crop damage. When used as recommended no unacceptable crop effects are expected.

Resistance

Met52® 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.

Company advisory information

Safety data sheet available on request or scan the code below or use the link: www.fargro.co.uk/?qr=MET52OD.



While every care is taken Novozymes France will accept no liability for lack of product effectiveness if the label instructions are not followed.

SPECIMEN
2017 TO DATE