# IVIET



### Approval holder

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Production batch identification number:

### Marketing company

Fargro Ltd.

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## MAPP 15168 PCS 04811

Met52 granular bioinsecticide is for controlling black vine weevil (Otiorhynchus spp.) larvae in soft fruit and ornamental crops (protected and unprotected): a granular product containing 2% w/w Metarhizium anisopliae var. anisopliae strain F52 (a minimum of 9 x 10<sup>11</sup> cfu/kg).

Read the back label before using

**Net contents** 1kg

UNITED **KINGDOM IRFLAND** 

# bioinsecticide

### RISK AND SAFETY INFORMATION

Contains Metarhizium anisopliae var. anisopliae strain F52. Microorganisms may have the potential to provoke sensitising reactions.

- Keep out of reach of children
- Keep away from food, drink and animal feeding stuffs
- Avoid contact with skin
- Wear suitable gloves
- If swallowed, seek medical advice immediately and show this container or label
- Use appropriate containment to avoid environmental contamination
- This material and its container must be disposed of in a safe way

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

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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.

### IMPORTANT INFORMATION

Can be used on both protected and field crops

FOR USE ONLY AS AN AGRICULTURAL/HORTICULTURAL INSECTICIDE

Professional use only

### Cron.

- Ornamental plant production
- BlackberryBlackcurrantBlueberryGooseberry
- Raspberry Strawberry
- Redcurrant Whitecurrant

### Maximum individual dose:

0.5 kg/m<sup>3</sup> of growing media/soil; 122 kg/ha for open ground usage

Latest time of application: Pre-planting

Other specific restrictions: Nil

Control of larvae is likely to be greatest in peat-based growing media. **Qualified Minor Use:** Limited data support effectiveness in soil and only reduction of larvae may be achieved, particularly in heavier soil types. The commercial risk of using this product under this Qualified Minor use is borne entirely by the grower.

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**

UK National Poisons Information Service (24h/24): +44 (0)844 892 0111

### OPERATOR PROTECTION:

- 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
- However, engineering controls may replace personal protective equipment if a COSHH assessment shows they
  provide an equal or higher standard of protection UK only
- 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 (avoid contamination via drains from farmyards and roads).

### STORAGE AND DISPOSAL:

- KEEP IN ORIGINAL CONTAINER, tightly closed, in a safe place
- Met52® granular is a biological product and has a guaranteed shelf-life of 1 year at room temperature.
   The product should preferably be stored at 4 to 5°C to retain maximum viability
- DO NOT RE-USE CONTAINER FOR ANY OTHER PURPOSE
- WASH OUT CONTAINER THOROUGHLY, and dispose of safely
- CLEAN ALL EOUIPMENT after use

**RESTRICTIONS AND WARNINGS:** Use all contents immediately. Do not freeze. Consult processor before using on crops grown for processing.

### **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 granular is a microbial based pest control product containing the entomopathogenic fungus *Metarhizium* anisopliae var. anisopliae strain F52, a naturally occurring insect parasitic fungus that is not genetically modified. This product is intended for control of black vine weevil, *Othiorhyncus sulcatus* (larval stages only). Black vine weevil is a common and noxious polyphagous pest of soft fruit and ornamentals.

Met52 granular contains 2% active substance, intended for incorporation into crop growing media and soil in protected and unprotected situations. Met52 granular can be used at all crop growth stages from propagation to final potting.

When plants are potted into larger containers, the fresh growing media in which they are being potted should also be treated to maintain good control. Larvae within the original root-ball may not be controlled by application at re-potting.

**PEST CONTROL:** Black vine weevil (BVW), *Otion ynchus sulcatus* (Coleoptera: Curculionidae) are important and widespread pests of ornamental nursery stock and soft fruit. Adults damage the above ground parts of plants typically eausing ootching of leaves. Larvae feed on roots reducing number and quality of roots, which in turn reduces plant vigour and health and can cause plant death, particularly in dry or hot environmental conditions.

CROP RECOMMENDATIONS: Met52 granular is for use on soft fruit and ornamental plants (covering flowers/ foliage, woody ornamentals and bulb production) as listed on label. Met52 granular is effective against all larval stages of black vine weeyil when applied shortly before egg-laying occurs.

**APPLICATION RATE & FREQUENCY:** Met52 granular is to be incorporated into soil or growing media at a rate of 0.5 kg/m³. It is essential to incorporate thoroughly into the growing media and once incorporated, treated media should be used within 30 days. To obtain good control of black vine weevil larvae in small containers it is particularly important to ensure even mixing of the correct dose into the substrate. When applying to field-grown crops, broadcast at a rate of 122 kg/ha in spring immediately prior to planting and thoroughly incorporate into the top 5 cm of soil. Do not apply to established crops or before planting crops in autumn.

**BEST CONDITIONS FOR Met52 GRANULAR BIOINSECTICIDE:** Met52 granular works well when the temperature is between 15 and 30°C and conditions are not excessively wet. Outside this temperature range, activity may be reduced but spores remain viable, unless temperatures rise above 40°C when spore viability may decline rapidly.

**SOIL TYPE:** Control of larvae is likely to be greatest in peat-based growing media. Qualified Minor Use: Limited data support effectiveness in soil and only reduction of larvae may be achieved, particularly in heavier soil types.

**MIXING:** Mixing equipment must be clean and free of pesticide residues. Thoroughly mix the product into the growing media or soil.

**COMPATIBILITY:** Met52 granular should not be mixed with other pesticides. The effect of fungicides applied either before or after Met52 granular on the effectiveness of Met52 granular has not been established. The effect of Met52 on insects and mites used in biological control programmes has not been established and safety cannot be assumed. Met52 granular has been used on a wide range of crops under a range of conditions and no phytotoxicity has been observed.

**RESISTANCE:** Met52 granular 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.