

2025-1102
2026-07-02

MYCOTAL
Biological Insecticide

GROUP	UNF	INSECTICIDE
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LIVE ORGANISM
Water Dispersible Granule (WG)

For suppression of whiteflies, thrips and aphids on various greenhouse vegetable and ornamental crops, mealybugs on greenhouse ornamentals, thrips on greenhouse strawberry, and cannabis aphid and root aphid on cannabis and industrial hemp grown in greenhouses or other enclosed growing structures.

COMMERCIAL

READ THE LABEL BEFORE USING

KEEP OUT OF REACH OF CHILDREN

ACTIVE INGREDIENT: *Akanthomyces muscarius* strain Ve6 (1×10^{10} spores/g)
Warning, contains the allergens milk and soy

REGISTRATION NO. 33959 PEST CONTROL PRODUCT ACT

CAUTION – EYE IRRITANT
POTENTIAL SENSITIZER

Koppert Canada Limited
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Niagara-on-the-Lake, Ontario
L0S1J0
1-800-567-4195
info@koppert.ca
www.koppert.ca

NET 0.5 kg – 5 kg

Product number: xxxxx
Lot no./production date/expiry date: See packaging (10 and 11/17 as YYMMDD)

PRECAUTIONS:

KEEP OUT OF REACH OF CHILDREN. PREVENT ACCESS BY UNAUTHORIZED PERSONNEL. May cause sensitization. Avoid contact with skin and clothing. Avoid inhaling or breathing dusts and spray mist. May irritate eyes. Avoid contact with eyes. DO NOT eat, drink or smoke/vape while using this product. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum/tobacco, smoking/vaping, or using the toilet.

Personal Protective Equipment (PPE)

Wear waterproof gloves, a long-sleeved shirt, long pants, eye protection (goggles or face shield), a NIOSH-approved particulate filtering facepiece respirator with any N, R, or P filter, socks and shoes when handling, mixing and loading or applying the product and during all clean-up and repair activities. For above waist height (including overhead) handheld application, wear head protection when applying. If the product comes in contact with clothing/PPE, remove all contaminated clothing/PPE, wash with soap and water and dress in clean clothing. Wash the outside of gloves with soap and water before removing. Launder contaminated clothing/PPE regularly and separately from other laundry.

FIRST AID

IF SWALLOWED: Call a poison control centre or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control centre or doctor. Do not give anything by mouth to an unconscious person.

IF ON SKIN OR CLOTHING: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15- 20 minutes. Call a poison control centre or doctor for treatment advice.

IF INHALED: Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control centre or doctor for further treatment advice.

IF IN EYES: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control centre or doctor for treatment advice.

Take container, label or product name and Pest Control Product Registration Number with you when seeking medical attention.

TOXICOLOGICAL INFORMATION

Treat symptomatically.

ENVIRONMENTAL PRECAUTIONS

The potential effects of this product on some non-target beneficial insects and pollinators that may be used in greenhouse Integrated Pest Management Programs (IPM) are not known. May be harmful to beneficial insects.. Avoid direct contact with beneficial insects when using spray applications. This product may be harmful to bees exposed to direct treatment, or drift. Avoid applying this product while bees are actively foraging. Spray in late afternoon or evening and keep structures closed for 12 hours after application to avoid exposure to foraging bees or other pollinators.

DIRECTIONS FOR USE

For specific authorized crop/pest combinations and application rates, see the tables below.

- DO NOT contaminate irrigation or drinking water supplies or aquatic habitats by cleaning of equipment, disposal of wash water or disposal of wastes.
- DO NOT allow effluent or runoff from greenhouses containing this product to enter lakes, streams, ponds or other waters.

Restricted-Entry Interval (REI): DO NOT enter or allow worker entry into treated areas for 4 hours or until sprays have dried, unless wearing waterproof gloves, long-sleeved shirt, long pants and socks and closed shoes.

Preharvest interval: The harvest of greenhouse food crops and cannabis is permitted on the day of application.

Rates

Crops	Pests (suppression)	Application Rates	Spray Volume
Greenhouse Vegetables: tomato pepper cucumber eggplant	Whiteflies	1-2 g/L	Up to 2000 L/ha
	Thrips Aphids	2-4 g/L	Up to 2000 L/ha
Greenhouse ornamentals	Whiteflies	1-2 g/L	Up to 1000 L/ha
	Thrips Aphids Mealybugs	2-4 g/L	Up to 1000 L/ha
Greenhouse strawberry	Thrips	2-4 g/L	Up to 1000 L/ha
Greenhouse lettuce	Aphids	2-4 g/L	Up to 700 L/ha
Cannabis and industrial hemp grown in greenhouses or other enclosed growing structures	Cannabis aphid (do not spray past the vegetative stage)	1-2 g/L	Up to 600 L/ha
	Root aphids (by rooting media drench)	1-2 g/L	400 L/ha

- Apply in the late afternoon or early evening and keep structures closed for 12h after application to maintain high humidity, avoid high temperatures and direct sunlight and avoid direct exposure on foraging pollinators.
- Apply at first pest emergence. Do not wait until pest pressure is high. Use higher rates for higher pest pressure.
- Development stages of the harmful organism concerned: Nymphs/larvae and adults, all year round. May be applied throughout the crop cycle except on cannabis. Do not apply past the vegetative stage on cannabis except for root aphids.
- **Application frequency:** Start treatment at first pest emergence. Repeat applications until pest is controlled. Apply at a 3-7 day interval. On cannabis or hemp, apply at a 5 day interval.

Preparation of solution

- Use freshly prepared spray solution every time.
- Mix Mycotal with water at 15°C - 20°C (59°F - 68°F) at a ratio of 500 grams to 3-4 litres of water in a bucket and stir into a slurry. Keep agitating and keep protected from heat and direct sunlight.
- Fill the spray tank with the remaining required water volume (see table). Add the Mycotal slurry mix into the spray tank when half full and fill up the pray tank to the desired end volume. Agitate well.
- In case of adjuvant use or any tank mix with a compatible product, always add it at the end, in a fully filled up tank.
- Mix thoroughly during the application. **Spray immediately after preparation;** do not store any slurry or solution.
- Do not mix Mycotal with other products, unless indicated as compatible (see section on compatibility below).

Application

Mycotal is a curative product and should only be applied as described on this label. Mycotal can be sprayed with normal spraying equipment. Keep stirring spray solution during the treatment. Apply Mycotal upon the very first pest emergence on all plants. Mycotal can grow at a wide range of temperatures from 5 °C, with an optimal between 15-25 °C. Direct the spray onto the underside of the leaves and growing points and target the locations in the crop where the pest is situated. A compatible adjuvant can be used for improved crop coverage. Ask your consultant/distributor for advice.

Spray application

- Mycotal can be used with high or low volume spray equipment (non-thermal).
- Apply in late afternoon or early evening.
- Thorough leaf (undersurface) coverage is essential for the best results. Spray to wet but avoid runoff. Use sufficient spray volume for complete coverage of the plants, up to the indicated maximum.
- DO NOT enter or allow worker entry into treated areas for 4 hours or until sprays have dried, unless wearing waterproof gloves, long-sleeved shirt, long pants and socks and shoes.

Drench application (Cannabis - root aphids)

- Use a pump sprayer set for 20 psi.
- Injection/drench application into rooting medium (blocks).
- Ensure thorough wetting of the rooting medium without leaching.

Phytotoxicity

Mycotal is regarded as safe for plants, but it has not been field tested on all plant varieties and cultivars. When using Mycotal for the first time, test on a limited scale and observe for phytotoxicity or other unintended side effects for 5 to 7 days before making large scale applications. Use caution when applying on open blooms.

COMPATIBILITY

This product may be tank mixed with registered pest control products, whose labels also allow tank mixing, provided the entirety of both labels, including Directions For Use, Precautions, Restrictions, Environmental Precautions, and Spray Buffer Zones are followed for each product. In cases where these requirements differ between the tank mix partner labels, the most restrictive label must be followed. Do not tank mix products containing the same active ingredient unless specifically listed on this label.

In some cases, tank mixing pest control products can result in reduced pesticide efficacy or increased host crop injury. The user should contact Koppert Canada Limited at 1-800-567-4195 for information before applying any tank mix that is not specifically recommended on this label.

Chemical Pesticides / Fertilizers

Do not use any product containing the following active ingredients in conjunction with Mycotal: captan, chlorothalonil, fludioxonil, sulfur, or thiram.

Do not tank mix Mycotal with other products unless it is indicated as compatible (see the Koppert side effects list on the website or consult Koppert Canada Ltd.)

Biocontrol agents

Mycotal can be used in combination with many beneficial insects. Before coapplying Mycotal with natural enemies, consult Koppert Canada Ltd.

Pollinators and Beneficial Insects

The potential effects of this product on some non-target beneficial insects and pollinators that may be used in greenhouse Integrated Pest Management Programs (IPM) are not known. May be harmful to beneficial insects. Avoid direct contact with beneficial insects when using spray applications. This product may be harmful to bees exposed to direct treatment, or drift. Avoid applying this product while bees are actively foraging. Ask your Koppert Canada Ltd. representative or check the Koppert website on side effects for a list of compatible beneficial insects. Consult Koppert when adding Mycotal to an IPM program for the first time.

General information

Mycotal is a biological insecticide based on live spores of the entomopathogenic fungus *Akanthomyces muscarius* strain Ve6 (formerly named *Lecanicillium muscarium* Ve6). Mycotal works against sucking insects, such as whiteflies, thrips, aphids and mealybugs in a wide range of crops.

Mode of Action

Mycotal works through contact and kills the target after 7-10 days under the right environmental conditions. After spraying, the spores germinate and grow hyphae that penetrate the pest's body cavity. Once inside, they proliferate, damage tissue and kill the target. If conditions allow, the fungus grows through the insect cuticle and produces spores on the outside of the cadaver, which may spread the infection to other vulnerable pests. Results: infected pests shrivel or develop a powdery layer of mycelium and spores (conidia) on their cuticles.

STORAGE

Store refrigerated at 4°C. Do not freeze. Keep product in original container during storage and keep container lid tightly closed when not in use. Store this product away from food and feed. This product should be used within 6 months of the date of manufacture.

DISPOSAL

1. Triple- or pressure-rinse the empty container. Add the rinsings to the spray mixture in the tank.
2. Follow provincial instruction for any required additional cleaning of the container prior to its disposal.
3. Make the empty container unsuitable for further use.
4. Dispose of the container in accordance with provincial requirements.
5. For information on disposal of unused, unwanted product, contact the manufacturer or the provincial regulatory agency. Contact the manufacturer and the provincial regulatory agency in case of a spill, and for clean-up of spills.

NOTICE TO USER

This pest control product is to be used only in accordance with the directions on the label. It is an offence under the *Pest Control Products Act* to use this product in a way that is inconsistent with the directions on the label.