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SPECIMEN

Nemasys[®] L

Advanced Biocontrol for Black Vine Weevil

STORE IN REFRIGERATOR 41°F (5°C)

DO NOT FREEZE

DO NOT LEAVE IN BRIGHT SUNLIGHT

USE BEFORE EXPIRATION DATE

READ INSTRUCTIONS BEFORE USE

FOR PROFESSIONAL USE ONLY

Keep Out of Reach of Children

This product does not require a hazard warning in accordance with GHS criteria.

Contents: _____ million beneficial nematodes (*Steinernema kraussei*)

BASF Corporation
26 Davis Drive, Research Triangle Park, NC 27709

Nemasys® L is a naturally occurring, insect parasitic nematode (*Steinernema kraussei*) that seeks out the pupa and larval stages of black vine weevil (*Otiorhynchus sulcatus*) present in soil or media in container-grown crops. These beneficial nematodes enter the body of immature insects and release symbiotic bacteria, which kill the pests.

Nemasys L can be used in a rotational program with many conventional insecticides to reduce pest resistance.

Packaging – **Nemasys L** is available in trays of 50 million and 250 million nematodes.

Precautions

This product contains living organisms that require special handling and application procedures.

- **Nemasys L** will not control black vine weevil adults.
- **Nemasys L** persists for approximately four weeks, larvae emerging from eggs laid after this time may be poorly controlled.
- **DO NOT SUBDIVIDE.** Once opened, use the entire tray immediately.
- Use cool water for mixing and keep tank out of direct sunlight.
- **DO NOT STORE MIXED SUSPENSIONS.** Use nematode suspensions immediately after they have been mixed.
- Remove filters that are 50 mesh or finer from application equipment and nozzles.
- **DO NOT** exceed 300 PSI pump pressure.
- **DO NOT** use in application systems where nozzle aperture is smaller than 0.5 mm.
- Agitate nematodes constantly during agitation.
- **DO NOT SPOT TREAT.** Treat the entire crop at the appropriate rate.

Directions For Use

Nemasys L can be applied by using common application equipment, including tank sprayers, backpack sprayers, and irrigation injection systems.

- Fill spray vessel or stock tank with half of the required amount of cool, clean water.
- Start agitation and add the required number of **Nemasys L** trays.
- Continue agitation while mixing and filling spray tank to the required spray volume.
- Maintain sufficient agitation during application to ensure uniform dispersion of nematodes in the spray mix.

Application Methods

- Treatment should be applied in spring and autumn when black vine weevil larvae are present.

- Apply to moist soil when soil temperatures are between 41°-86°F (5°-30°C) at application and for at least 2 weeks after application. If soil temperatures are higher than 86°F (30°C), irrigate with at least 0.1 inch (0.3 cm) of water before applying **Nemasys L**.
- Application before/during/after rain is highly desirable.
- Ensure soil is moist before application and for at least 2 weeks after.
- Irrigate treated area with at least 0.1 inch (0.3 cm) of water following the application of **Nemasys L** within 30 minutes under hot, dry conditions and within 2 hours under cool, wet conditions.
- Routinely treat new material coming onto nursery that may contain black vine weevil larvae.
- Irrigate immediately to wash nematodes off foliage. **DO NOT** irrigate to cause runoff from tops of pots.

Recommended Rates

One tray of 50 million nematodes treats 1,075 ft² (100 m²).
One tray of 250 million nematodes treats 5,500 ft² (500 m²).

Drench Application

Preferred method, especially where crop canopy is dense. Make up **Nemasys L** to give a final dilution of 1 tray (50 million) in 100 gallons (380 liters) of water, or 1 tray (250 million) in 500 gallons (1,900 liters) of water. Apply at 90 gallons (340 liters) per 1,000 ft² (100 m²). The table below gives volumes of diluted **Nemasys L** required for different pot sizes.

Pot Diameter (inches)	Drench per pot (ounces)	No. of pot treated (50 mil. nematodes)	No. of pot treated (250 mil. nematodes)
4	1.0	12,800	64,000
6	2.3	5,565	27,825
8	4.0	3,200	16,000
10	6.3	2,030	10,160
12	9.0	1,420	7,110

Spray Application

Make up **Nemasys L** to give a final dilution of 1 tray (50 million) in 25 gallons (95 L) of water, or 1 tray (250 million) in 125 gallons (470 L) of water. Apply immediately at 22.5 gallons (85 L) 1,000 ft² (100 m²).

Strawberry Application

Prepare a dilution of 1 tray (50 million) in 55 gallons (200 L) of water, or 1 tray (250 million) in 265 gallons (1000 L) water. Apply immediately at 3-3.5 ounces per plant. Drench each plant individually directing the application around the plant base, avoiding runoff. One 50 million tray will treat 2,000 plants, one 250 million tray will treat 10,000 plants.

Backpack Sprayer

Make up stock solution: in a clean graduated bucket, suspend 1 tray (50 million) in 3 gallons (11 L) of water, or 1 tray (250 million) in 5 gallons (20 L) of water. Agitate stock solution and treat as follows:

Tray Size	Drench	Spray Application	Apply Immediately at
50 million	4 fl oz solution/gal. water	16 fl oz solution/gal. water	9 gal per 100ft ² (35 L per 10m ²)
250 million	2.20 fl oz solution/gal. water	8.35 fl oz solution/gal. water	2.5 gal per 100ft ² (10 L per 10m ²)

Storage and Disposal

Storage: Remove from shipping package and use immediately or store in refrigerator. Ensure good air circulation around each tray. Keep away from heat. Protect from direct sunlight. Store protected against freezing. Storage temperature: 5°C (41°F).

Waste Disposal of Substance: Must be disposed of or incinerated in accordance with local regulations.

Container Disposal: Contaminated packaging should be emptied as far as possible and disposed of in the same manner as the substance/product.

Accidental Release Measures: Segregate from foods and animal feeds. Do not discharge into the subsoil/soil. Do not discharge into drains/surface waters/groundwater. For small amounts: Contain with dust binding material and dispose of. For large amounts: Sweep/shovel up. Dispose of absorbed material in accordance with regulations. Collect waste in suitable containers, which can be labeled and sealed. Clean contaminated floors and objects thoroughly with water and detergents, observing environmental regulations.

**EMERGENCY CONTACT: CHEMTREC 1-800-424-9300
BASF Corporation 1-800-832-HELP (4357)**

State Right To Know Description and CAS # / TRSN

Calcium silicate / 10101-39-0; Proprietary acrylic polymer / TRSN 161090809-5126

Conditions of Sale and Warranty

The **Directions For Use** of this product reflect the opinion of experts based on field use and tests. The directions are believed to be reliable and must be followed carefully. However, it is impossible to eliminate all risks inherently associated with the use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as weather conditions, presence of other materials, or use of the product in a manner inconsistent with its labeling, all of which are beyond the control of BASF CORPORATION ("BASF") or the Seller. All such risks shall be assumed by the Buyer. BASF warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes referred to in the **Directions For Use**, subject to the inherent risks, referred to above. **BASF MAKES NO OTHER EXPRESS OR IMPLIED WARRANTY OF FITNESS OR MERCHANTABILITY OR ANY OTHER EXPRESS OR IMPLIED WARRANTY. BUYER'S EXCLUSIVE REMEDY AND BASF'S EXCLUSIVE LIABILITY, WHETHER IN CONTRACT, TORT, NEGLIGENCE, STRICT LIABILITY, OR OTHERWISE, SHALL BE LIMITED TO REPAYMENT OF THE PURCHASE PRICE OF THE PRODUCT. BASF AND THE SELLER DISCLAIM ANY LIABILITY FOR CONSEQUENTIAL, EXEMPLARY, SPECIAL OR INDIRECT DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT.** BASF and the Seller offer this product, and the Buyer and User accept it, subject to the foregoing **Conditions of Sale and Warranty** which may be varied only by agreement in writing signed by a duly authorized representative of BASF.

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