



# Nemasys® C

Biocontrol agent for various insect larvae including codling moth, oriental moth, navel orangeworm, and 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 Keep Out of Reach of Children

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

Contents: \_\_\_\_\_ infective juveniles of *Steinernema* carpocapsae

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

# What is Nemasys® C?

**Nemasys C** from BASF is a tool for controlling codling moth, navel orangeworm, and oriental fruit moths in fruit, nut, and vine trees. **Nemasys C** is a naturally occurring, insect-parasitic nematode that seeks out, enters, and controls target pests. **Nemasys C** contains the beneficial nematode, *Steinernema carpocapsae*, in a water dispersible matrix.

#### What is Nemasys C effective on?

Nemasys C is the perfect rotational partner for IPM programs that manage codling moth (*Cydia pomonella*), oriental fruit moth (*Grapholita molesta*), and other Lepidoptera pests. Nemasys C is also effective on many borers and root weevils including peachtree borer, cranberry girdler, and strawberry root weevil. Nemasys C may be used for indoor and outdoor uses.

# How much Nemasys C is needed?

BASF recommends using **Nemasys C** at a rate of 750 million to 2 billion nematodes per treated acre depending on the target pest. For codling moth and oriental fruit moth, make sure the application of **Nemasys C** is made during the overwintering larval stage of the pest.

Always follow dilution, application and irrigation recommendations carefully for optimal results. Beneficial nematodes are living organisms and must be kept refrigerated until ready to use.

Crop	Target Pests	Nematodes per acre	Acres treated per 3 billion tray
Cranberries	cranberry girdler	2 billion	1.5
Fruit trees	codling moth, oriental fruit moth	750 million to 1 billion	3 to 4
	peachtree borer	1.5 billion	2
Hops	black vine weevil	1 billion	3
Strawberries (in pots)	strawberry root weevil	2 billion	1.5
Pistachios, almonds, and other tree nuts	navel orangeworm	750 million	4

#### **Directions For Use**

#### **Use Recommendations and Precautions**

- Avoid applications in direct sunlight; evening or cloudy-day application is recommended for optimal results
- Water, soil, and air temperature must be 50-86°F
- If soil temperature is higher than 86°F, irrigate with water to reduce temperature before applying Nemasys C
- DO NOT use heavily chlorinated water
- Apply with an adjuvant to ensure optimal dispersal
- Agitate nematodes constantly during application; DO
  NOT use a propeller agitator above 160 rpm
- DO NOT use product if past expiration date or stored incorrectly
- Once opened, use each entire tray immediately
- DO NOT sub-divide or store open trays or mixed suspensions

#### **Application**

#### Mixing and Dilution

- Fill the spray tank half full of clean, cool water and start the agitator. DO NOT use heavily chlorinated water.
- In a bucket containing no less than 5.0 gallons of water, add the entire contents of the Nemasys C tray.
- 3. Allow the contents to hydrate for approximately 5 minutes and stir thoroughly to disperse product.
- 4. Empty the bucket into the spray tank and fill the remainder of the spray tank with water.
- 5. Apply nematodes immediately to the whole crop at the appropriate rate.

#### **Equipment**

#### **Surface and Airblast Sprayers**

- 1. Use a minimum rate of 100-gallons of water per acre
- 2. For best results, immediately irrigate treated acre before and after applying **Nemasys C** when conditions are hot and dry; in cooler conditions, irrigate within 2 hours before and after application
- 3. Remove all in-line and nozzle filters of 50 mesh or less; **DO NOT** exceed a 300-psi pump pressure

# Chemigation

- 1. Pre-mix **Nemasys C** in a sufficient amount of water to uniformly inject the entire irrigation system
- Inject nematodes during the second watering and add to a clean feeder tank; suspension must be continuously agitated during injection to prevent nematodes from settling

- After injection, rinse feeder tank with clean water and inject into system to purge nematodes from irrigation system
- 4. For best results, immediately irrigate treated acre before and after applying Nemasys® C when conditions are hot and dry; in cooler conditions, irrigate within 2 hours before and after application

# Shank, cultivator or spoke-wheel applicator

Apply product in 100 gallons of water per acre

- Shank: Apply as a trickle behind each shank at a 2to 4-inch depth followed by a press wheel to cover opening; double shanks should be placed at 6 to 8 inches apart and centered on hill
- Cultivator: Apply as a spray immediately in front of a rolling cultivator; incorporate at a 2- to 4-inch depth
- Spoke Wheel: Double spoke-wheels should be placed at 6 to 8 inches apart and centered on hill; inject at a 2- to 4-inch depth

#### **Aerial Application**

- 1. Minimum water volume rate is 12 gallons per acre
- 2. Apply product close to soil surface to reduce drift
- 3. Sprinkler systems must be operating during application to irrigate product into the soil
- 4. For best results, immediately irrigate treated acre before and after applying **Nemasys C** when conditions are hot and dry; in cooler conditions, irrigate within 2 hours before and after application

# Compatibility

**Nemasys C** has been tested against and is tank-mix compatible with most chemicals, biologicals, and fertilizers.

Please visit

https://betterplants.basf.us/products/nemasys-beneficial-nematodes.html for the latest compatibility results.

# **Storage and Disposal**

**Storage:** Remove from shipping package and use immediately or store in refrigerator. Ensure good air circulation around each **Nemasys C** tray. Segregate from foods and animal feeds. Keep away from heat. Protect from direct sunlight. Store protected against freezing. Storage temperature: 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: 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 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. **EXCLUSIVE REMEDY AND BASF'S EXCLUSIVE** LIABILITY, WHETHER IN CONTRACT, NEGLIGENCE. STRICT LIABILITY. OR OTHERWISE. SHALL BE LIMITED TO REPAYMENT OF THE PURCHASE PRICE OF THE PRODUCT, BASE AND THE **FOR** SELLER DISCLAIM ANY LIABILITY CONSEQUENTIAL, EXEMPLARY. SPECIAL 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.

Nemasys is a registered trademark of BASF.

© 2019 BASF Corporation All rights reserved.

NEMASYS C SPEC LABEL 2019-06

BASF Corporation 26 Davis Drive Research Triangle Park, NC 27709

