

264-458

4/29/2010

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460



APR 29 2010

OFFICE OF
PREVENTION, PESTICIDES
AND TOXIC SUBSTANCES

Larry R. Hodges, Ph.D
Bayer CropScience
2 T.W. Alexander Drive
P.O. Box 12014
Research Triangle Park, NC 27709

Dear Mr. Hodges:

Subject: Amendment to add hops though drip irrigation systems/chemigation to label
Mocap EC Nematicide-Insecticide
EPA Registration No. 264-458
Your Submission Dated: May 4, 2009

The labeling referred to above submitted in connection with the Federal Insecticide,
Fungicide and Rodenticide Act, as amended is acceptable with the following comments:

- On page 4, under the "Storage and Disposal" section, revise the subheading "STORAGE" to read "PESTICIDE STORAGE."
- On page 7, under the "Hops" crop section, under "Application Directions" for Producing Hops, delete the "surface-placed" chemigation method so that the directions read: "Apply Mocap EC Nematicide-Insectide to prewetted hop yards though subsurface drip irrigation (SDI) systems with..." due to aquatic exposure and runoff concerns with surface-placed irrigation in the ecological risk assessment.
- On page 7, under "Restrictions for Hops" revise the second bullet to read "Do not apply more than 2 Quarts MOCAP EC Nematicide-Insectide (3 lbs active ingredient) per acre per year."

A stamped copy of the labeling is enclosed for your records. Please submit one final printed copy of the labeling before releasing the product for shipment. If you have any questions regarding this label, please contact Autumn Metzger at (703) 305-5314 or metzger.autumn@epa.gov.

Sincerely,

Venus Eagle
Product Manager 01
Insecticide-Rodenticide Branch
Registration Division (7505P)

ACCEPTED
With COMMENTS
In EPA Letter Dated:

2014

RESTRICTED USE PESTICIDE

APR 29 2010

DUE TO ACUTE ORAL, DERMAL, AND INHALATION TOXICITY
For retail sale to and use only by Certified Applicators or persons under the direct supervision of a Certified Applicator, and only for those uses covered by the Certified Applicator's certification.
Under the Federal Insecticide, Fungicide and Rodenticide Act, As amended, for the pesticide Registered under EPA Reg. No:

264-458

MOCAP[®] EC Nematicide-Insecticide

ACTIVE INGREDIENTS: Ethoprop: (O-Ethyl S, S-Dipropyl Phosphorodithioate) 69.6%
INERT INGREDIENTS: 30.4%
100.0%

(Contains 6 pounds active ingredient per gallon) Contains Petroleum distillates

EPA Reg. No. 264-458

EPA Est. No. 264-TN-1



KEEP OUT OF REACH OF CHILDREN
DANGER POISON
PELIGRO



PRECAUCION AL USUARIO: Si usted no lee ingles, no use este producto hasta que le etiqueta haya sido explicado ampliamente.
TRANSLATION TO THE USER: If you cannot read English, do not use this product until the label has been fully explained to you.

For MEDICAL And TRANSPORTATION Emergencies ONLY Call 24 Hours A Day 1-800-334-7577

For PRODUCT USE Information Call 1-866-99BAYER (1-866-992-2937)

FIRST AID

Ethoprop is an organophosphate.

IF SWALLOWED:	<ul style="list-style-type: none"> Immediately call a poison control center or doctor for treatment advice. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give any liquid to the person. Do not give anything by mouth to an unconscious person.
IF INHALED:	<ul style="list-style-type: none"> Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. Call a poison control center or doctor for further treatment advice.
IF ON SKIN OR CLOTHING:	<ul style="list-style-type: none"> Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.
IF IN EYES:	<ul style="list-style-type: none"> 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. Call a poison control center or doctor for treatment advice.

For MEDICAL Emergencies Call 24 Hours A Day 1-800-334-7577.

Have the product container or label with you when calling a poison control center or doctor or going for treatment.

NOTE TO PHYSICIAN: This product is a cholinesterase inhibitor. Severe symptoms and signs include diarrhea, pinpoint and non-reactive pupils, respiratory difficulty, pulmonary edema, cyanosis, loss of sphincter control, convulsions, and coma. Support respiration as needed. Measures should include removal of secretions, maintenance of a patent airway, and if necessary, artificial ventilation. If cyanosis is absent, give ATROPINE 2-4 mg intravenously (0.05 mg/kg for children). Repeat atropine at 5-10 minute intervals until atropinization occurs (dry, flushed skin, tachycardia, pupillary dilatation), and maintain for 48 hours. If cyanotic, give initial atropine intramuscularly and start measures to improve ventilation.

Start 2-PAM (PROTOPAM, Ayerst) at the same time. Give 1-2 grams PROTOPAM (20-40 mg/kg for children) in 100cc saline over 15-30 minutes. If pulmonary edema is present, give intravenously slowly as a 5% solution in water over a period of at least 5 minutes. A second dose may be given after one hour if muscle weakness persists. Additional doses may be given cautiously for persistent muscle weakness. May be given by intramuscular or subcutaneous routes if intravenous administration is not feasible.

In case of skin contact, wash patient with soap and water followed by wash with 95% ethyl alcohol. Keep patient under constant observation for 24-36 hours. Symptoms may persist for one month.

The use of theophylline, morphine, barbiturates, phenothiazines, reserpine, and succinyl choline is contraindicated.

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PRECAUTIONARY STATEMENTS

HAZARD TO HUMANS AND DOMESTIC ANIMALS

DANGER

Fatal if swallowed, inhaled or absorbed through skin. Rapidly absorbed through skin. Corrosive. Causes irreversible eye damage. Do not get into eyes, on skin, or on clothing. Do not breathe spray mist. Do not contaminate feed or food.

SYMPTOMS OF POISONING: Nausea, vomiting, abdominal cramps, diarrhea, excessive salivation, headache, dizziness, weakness, blurring or dimness of vision, excessive tearing, loss of muscular coordination, slurring of speech, twitching of muscles (especially of tongue and eyelids), mental confusion, disorientation, drowsiness, difficulty in breathing (chest tightness), runny nose.

PHYSICAL OR CHEMICAL HAZARDS

Do not use or store near heat or open flame.

Do not store in or around the home.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Some materials that are chemical-resistant to this product are barrier laminant, butyl rubber (>14 mils), nitrile rubber (>14 mils) or viton (>14 mils). If you want more options, follow the instructions for category F on an EPA chemical-resistant category selection chart.

Mixers, loaders, applicators, and other handlers using engineering controls must wear:

- long-sleeve shirt and long pants, and
- shoes plus socks.

In addition, mixers and loaders must wear chemical-resistant gloves and a chemical-resistant apron.

See engineering controls for additional requirements.

Handlers engaged in those activities for which use of an engineering control is not possible, such as cleaning up a spill or leak and cleaning or repairing contaminated equipment, must wear:

- coveralls over long-sleeve shirt and long pants,
- chemical-resistant gloves,
- protective eyewear,
- chemical-resistant footwear plus socks,
- chemical-resistant apron if exposed to the concentrate,
- chemical-resistant headgear for overhead exposure, and
- a respirator with an organic-vapor removing cartridge with a prefilter (MSHA/NIOSH approved number prefix TC 23C), or a canister approved for pesticides (MSHA/NIOSH approval number prefix TC-14G), or NIOSH-approved respirator with an organic vapor (OV) cartridge or canister with any N,R,P or HE-filter.

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them. Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

ENGINEERING CONTROLS

Mixers and loaders must use a mechanical transfer system that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(d)(4)] for providing dermal and inhalation protection. The system must be capable of removing the pesticide from the shipping container and transferring it into mixing tanks and/or application equipment. At any disconnect point, the system must be equipped with a dry disconnect or dry couple shut-off device that is warranted by the manufacturer to minimize drippage to not more than 2 mL (0.068 oz.) per disconnect point.

In addition, mixers and loaders must:

- wear the personal protective equipment required in the PPE section of this labeling for mixer/loaders,
- wear protective eyewear if the system operates under pressure,
- be provided with, must have immediately available for use, and must wear in case of an emergency, such as a broken package or spill, the PPE specified in the PPE section of this labeling for handlers engaged in those activities for which use of an engineering control is not possible.

Applicators using motorized ground equipment must use an enclosed cab that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(d)(5)] for dermal protection. In addition, applicators must:

- wear the personal protective equipment required in the PPE section of this labeling for applicators
- *either* wear the type of respirator specified in the PPE section of this labeling *or* use an enclosed cab that is declared in writing by the manufacturer or by a government agency to provide at least as much respiratory protection as the type of respirator specified in the PPE section of this labeling,
- be provided with, must have immediately available for use, and must wear in case of an emergency when they must exit the cab, the PPE specified in the PPE section of this labeling for handlers engaged in those activities for which use of an

- engineering control is not possible,
- take off any PPE that was worn in the treated area before reentering the cab, and
- store all such PPE in a chemical-resistant container, such as a plastic bag, to prevent contamination of the inside of the cab.

User Safety Recommendations

Users should wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.

Users should remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.

Users should remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

ENVIRONMENTAL HAZARDS

This product is toxic to aquatic organisms (fish and invertebrates) and wildlife and extremely toxic to birds. Birds in treated areas may be killed. For terrestrial uses, do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Runoff from treated areas may be hazardous to aquatic organisms in neighboring areas. For specific No-Spray Zone requirements, see the Spray Zone Application Restrictions. Cover, incorporate or disc product that is spilled either during loading or application to the soil surface. Do not contaminate water when disposing of equipment wash waters.

This product is toxic to bees exposed to direct treatment. Do not apply this product while bees are actively visiting the treatment area.

DIRECTIONS FOR USE

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling.
Read entire label before using this product.

For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

RESTRICTIONS

- Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application.
- Do not allow this product to drift.
- Not for Residential use.
- Do not store or use in or around the home.
- Do not apply by air.
- Do not apply more than one application per crop season.
- Application must be incorporated into the soil.
- This product is not registered in Nassau & Suffolk Counties of New York State. State law prohibits distribution, sale, or use of the product in these counties.

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. This standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE), notification to workers, and restricted-entry intervals. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow workers to enter treated areas during the restricted entry interval (REI) of 48 hours. The 48 hour REI is increased to 72 hours in outdoor areas where average rainfall is less than 25 inches a year.

EXCEPTION: If the product is soil injected or soil incorporated, the Worker Protection Standard, under certain circumstances, allows workers to enter the treated area if there will be no contact with anything that has been treated.

PPE required for early re-entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water, is:

- coveralls over long-sleeved shirt and long pants,
- chemical-resistant gloves,
- chemical-resistant footwear plus socks, and
- protective eyewear.

Notify workers of the application by warning them orally and by posting warning signs at entrances to treated areas.

STORAGE AND DISPOSAL

Do not contaminate water, food, or feed by storage or disposal.

STORAGE

Do not store in or around the home.

PESTICIDE DISPOSAL

Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

CONTAINER DISPOSAL

Non-refillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

RETURNABLE -- REFILLABLE CONTAINERS

Refillable container. Refill this container with MOCAP® EC Nematicide-Insecticide only. Do not reuse this container for any other purpose. After use, return the container to the point of purchase or designated locations. Prior to refilling, inspect thoroughly for damage such as cracks, punctures, abrasions and damaged or worn out threads on closure devices. Do not refill or transport damaged or leaking containers. Check for leaks after refilling and before transportation. For information on the disposal of unused, unwanted product, contact Bayer CropScience at 1-866-992-2937. For information on cleanup of spills, contact Bayer CropScience at 1-800-334-7577. If the container is not being refilled, return it to the point of purchase.

SPRAY ZONE APPLICATION RESTRICTIONS

Do not apply this product within 140 feet of inland freshwater habitats. Along the Atlantic seaboard, do not apply within 800 feet of brackish water habitats. Under no circumstances is this product to be applied within 140 feet of people or these surface water bodies.

Do not allow spray to drift from the application site and contact people, structures people occupy at any time and the associated property, parks and recreation areas, nontarget crops, aquatic and wetland areas, woodlands, pastures, rangelands, or animals.

For ground boom applications, apply with nozzle height no more than 4 feet above the ground and only when winds speed is 10 mph or less at the application site as measured by an anemometer. Use medium or coarser spray as described according to ASAE 572 definition for standard nozzles or VMD for spinning atomizer nozzles.

The applicator also must use all other measures necessary to control drift.

APPLICATION RESTRICTIONS

- For application only by motorized ground boom equipment and through irrigation systems if specified in crop-specific use directions. Do not apply with liquid backpack sprayers, low-pressure handwand liquid equipment, sprinkler cans or hand-held measuring containers, or by hand-dipping of seedlings.
- For use on ornamentals: only preplant broadcast application to soil for field nursery stock, which may only be mechanically transplanted into the treated area, and not until 72 hours after treatment.
- This product is to be soil incorporated to a depth of at least 2 to 4 inches, during or immediately following application by mechanical means, including by rotary tiller, rotary hoe, springtooth harrow, or by double-discing.
- Calibrate and adjust application equipment to insure proper rate and accurate placement. Clean application equipment thoroughly after use. For any leftover material, see instruction for "Storage and Disposal" on this label.
- Apply this product only as specified on this label.
- Do not apply in Long Island, New York.

ROTATIONAL CROP RESTRICTIONS

- Do not plant leafy vegetables within 30 days of last application
- Do not plant small grains within 8 months of last application
- Except for potatoes and sweet potatoes, do not rotate to any root or tuber crops within 12 months of last application

PLANT RESPONSE PRECAUTIONS

- To avoid possible injury to cabbage, do not use as a seed furrow treatment or allow spray to contact the seed.

MIXING, LOADING, AND HANDLING INSTRUCTIONS

- MOCAP EC Nematicide-Insecticide spray mixture may affect some plastic materials after prolonged use. Inspect spray tubing hoses and gaskets frequently, particularly black-colored materials. Replace any material which is softened or swollen. Polyethylene, polypropylene, nylon, and teflon materials are satisfactory. Polyvinyl chloride (PVC) materials are not satisfactory.
- Add the specified amount of MOCAP EC Nematicide-Insecticide to the water in the spray tank and mix well. Agitate frequently during use.

- If MOCAP EC Nematicide-Insecticide is to be tank mixed with liquid fertilizers, test for physical compatibility prior to mixing. To test for compatibility, use a small container and mix a small amount (0.5 to 1 qt) of spray, combining all ingredients in the same ratio as the anticipated use. If any indications of physical incompatibility develop, do not use this mixture for spraying. Indications of incompatibility usually will appear within 5-15 minutes after mixing.

INCORPORATION STATEMENT

Follow any specific soil incorporation instructions given under the crop headings.

GROUND APPLICATION

Use enough water in the sprayer to thoroughly and evenly cover the area to be treated.

CONVERSION TABLE FOR BANDED APPLICATIONS

ROW SPACING (INCHES)	FLUID OUNCES PER 1000 ROW FEET													
	1.4	1.7	2.0	2.4	2.9	3.3	3.9	4.4	5.0	5.1	5.3	5.9	6.8	6.9
	USE RATES AS QUARTS PER ACRE													
20	1.1	1.4	1.6	2.0	2.4	2.7	3.2	3.6	4.1	4.2	4.3	4.8	5.6	5.6
24	1.0	1.2	1.4	1.6	2.0	2.2	2.6	3.0	3.4	3.5	3.6	4.0	4.6	4.7
28	0.8	1.0	1.2	1.4	1.7	1.9	2.3	2.6	2.9	3.0	3.1	3.4	4.0	4.0
32	0.7	0.9	1.0	1.2	1.5	1.7	1.9	2.2	2.6	2.6	2.7	3.0	3.5	3.5
36	0.6	0.8	0.9	1.1	1.3	1.5	1.8	2.0	2.3	2.3	2.4	2.7	3.1	3.1
40	0.6	0.7	0.8	1.0	1.2	1.3	1.6	1.8	2.0	2.1	2.2	2.4	2.8	2.8
44	0.5	0.6	0.7	0.9	1.1	1.2	1.4	1.6	1.9	1.9	2.0	2.2	2.5	2.6
48	0.5	0.6	0.7	0.8	1.0	1.1	1.3	1.5	1.7	1.7	1.8	2.0	2.3	2.3

REFER TO APPLICATION DIRECTIONS FOR SPECIFIC USE RATES FOR EACH CROP

CONVERSION TABLE FOR BANDED APPLICATIONS

HIGHER RATES AND WIDER ROW SPACINGS

ROW SPACING (INCHES)	FLUID OUNCES PER 1000 ROW FEET						
	5.0	6.8	10.3	11.8	13.7	17.2	20.6
	USE RATES AS QUARTS PER ACRE						
36	2.3	3.1	4.7	5.3	6.2	7.8	
48	1.7	2.3	3.5	4.0	4.7	5.9	7.0
60	1.4	1.9	2.8	3.2	3.7	4.7	5.6
72	1.1	1.5	2.3	2.7	3.1	3.9	4.7
84	1.0	1.3	2.0	2.3	2.7	3.3	4.0

REFER TO APPLICATION DIRECTIONS FOR SPECIFIC USE RATES FOR EACH CROP


SPECIFIC USE DIRECTIONS

Use MOCAP EC Brand Nematicide-Insecticide only in accordance with label directions, warnings, and cautions. Control often lasts more than six weeks varying with growing conditions, rate of use and pests. **Restriction:** Do not use on any crop not listed on this label or supplemental labeling, as any residues remaining may be illegal or harmful.

Where a range of rates is specified, use the higher rate if pest infestations are expected to be severe. To determine your infestation level, consult local or state recommendations for sampling methods and economic thresholds. Where both banded and broadcast applications are allowed, refer to the specific crop directions for the proper use of each application method. For per acre use rates when banding, refer to the use rate chart, *Conversion Table for Banded Applications*, in the Ground Application section above.

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CABBAGE

		RATE OF MOCAP EC Nematicide- Insecticide	
APPLICATION TIMING	PESTS CONTROLLED	<u>BANDED</u> FL.OZ./ 1000 ROW FEET	APPLICATION DIRECTIONS
at planting	Nematodes Garden Symphylans	 2.4	For at-planting application to seeded crops, apply in 12 to 15 inch band on the row (36-inch row spacing) and incorporate 2 to 4 inches deep with mechanical equipment during or immediately following treatment. Do not use as a seed furrow treatment or allow spray to contact the seed or phytotoxicity may occur.

RESTRICTIONS FOR CABBAGE

- Make only 1 application of this product per growing season.
- For use in California only.

HOPS

APPLICATION TIMING	PEST CONTROLLED	RATE (QUARTS PER ACRE)	APPLICATION DIRECTIONS
BABY HOPS Post plant, pre-emergence	Symphyllans Prionus (long-horned beetle)	2 (on treated area)	Mix MOCAP EC Nematicide-Insecticide with sufficient water and broadcast apply immediately ahead of equipment such as a double disc or rotary cultivator to thoroughly incorporate MOCAP EC Nematicide-Insecticide solution into the top 2 to 4 inches of soil. Alternate Method: Mix MOCAP EC Nematicide-Insecticide with sufficient water and broadcast or band apply solution. Immediately apply 1 to 2 inches of overhead irrigation water to incorporate MOCAP EC Nematicide-Insecticide into soil. If band applying, apply in band at least 2 feet wide over row.
BABY HOPS Pre-plant broadcast and incorporated	Symphyllans Prionus (long-horned beetle)	2 (on treated area)	Mix MOCAP EC Nematicide-Insecticide with sufficient water and broadcast apply immediately ahead of equipment such as a double disc or rotary cultivator to thoroughly incorporate MOCAP EC Nematicide-Insecticide solution into the top 2 to 4 inches of soil. Wait a minimum of 3 days before planting the baby hops.
PRODUCING HOPS Apply in the spring after pruning, but before stringing or after harvest	Symphyllans Prionus (long-horned beetle)	2 (on treated area)	Mix MOCAP EC Nematicide-Insecticide with sufficient water and broadcast apply immediately ahead of equipment such as a double disc or rotary cultivator to thoroughly incorporate MOCAP EC Nematicide-Insecticide solution into the top 2 to 4 inches of soil. Alternate Method: Mix MOCAP EC Nematicide-Insecticide with sufficient water and broadcast or band apply solution. Immediately apply 1 to 2 inches of overhead irrigation water to incorporate MOCAP EC Nematicide-Insecticide into soil. If band applying, apply in band at least 2 feet wide over row. Chemigation Method: Apply Mocap EC Nematicide-Insecticide to prewetted hop yards through surface-placed or subsurface drip irrigation (SDI) systems with pressure compensating emitters only. The Emission Uniformity (EU) of the drip irrigation system must be at 85 percent or greater (refer to USDA-NRCS Practice Standard Code 441). Do not apply through any other type of irrigation system. Follow chemigation with enough irrigation to move MOCAP EC Nematicide-Insecticide into the top 2-4 inches of soil.

RESTRICTIONS FOR HOPS

- Make only 1 MOCAP EC Nematicide-Insecticide application per growing season (either preplant, post plant, pre-emergence or after harvest).
- Do not apply more than 2 Quarts MOCAP EC Nematicide-Insecticide per acre per season.
- Do not harvest within 90 days after application.
- Drift: Do not apply when wind speed favors drift beyond the area intended for treatment.
- Soil Conditions: Sufficient soil moisture must be present at application for symphyllans to be active in the top 4 to 6 inches of the soil profile. Volatilization may happen in very dry soils. Do not apply to dry soils. To minimize the potential for run-off, do not apply MOCAP EC Nematicide-Insecticide to saturated soils.
- Chemigation: Apply Mocap EC Nematicide-Insecticide to prewetted hop yards through surface-placed or subsurface drip irrigation (SDI) systems with pressure compensating emitters only. Do not apply through any other type of irrigation system. Follow chemigation with enough irrigation to move MOCAP EC Nematicide-Insecticide into the top 2-4 inches of soil.
- Wear Personal Protective Equipment (PPE) listed for applicators and other handlers when making adjustments or repairs on the chemigation system when MOCAP EC Nematicide-Insecticide is in the irrigation water.

MINT

APPLICATION TIMING	PEST CONTROLLED	RATE (QUARTS PER ACRE)	GALLONS WATER PER ACRE	APPLICATION DIRECTIONS
<u>New Mint:</u> Apply preplant	Symphylans	2	20 - 30	Spray with ground equipment, broadcast, over the field. Do not apply by air or through any type of irrigation equipment. This product is to be soil incorporated to a depth of at least 2 to 4 inches, during or immediately following application by mechanical means, including by rotary tiller, rotary hoe, springtooth harrow, or by double discing, or by immediate application of 1 to 2 inches of overhead irrigation. Repeat irrigation before soil dries.
	Nematodes	4		
<u>Mint</u> Apply after last harvest of the growing season	Symphylans	2		
	Mint Root Borer	.		
	Nematodes	4		

RESTRICTIONS FOR MINT

- Make only 1 MOCAP EC Nematicide-Insecticide application per growing season (either preplant, or after last harvest of the growing season).
- Do not apply by air or through any type of irrigation equipment.
- Use 20 to 30 gallons of water per acre for thorough coverage.
- Do not harvest within 225 days of application

PRECAUTIONS FOR MINT

- Application of MOCAP EC Nematicide Insecticide to actively growing foliage may result in a phytotoxic response due to solvent burn.

POTATOES
(West of the Mississippi River)

		RATE OF MOCAP EC Nematicide-Insecticide		
APPLICATION TIMING	PESTS CONTROLLED	BANDED FL.OZ./1000 ROW FEET	BROADCAST GALLONS PER ACRE	APPLICATION DIRECTIONS
West of the Mississippi River prior to planting or at planting or prior to crop emergence	Symphylans Wireworms	4.4	2/3 - 1 (Maximum 6 lb ai/A)	BAND: Uniformly distribute spray in a 12 inch band over the row (36-inch row spacing), either behind the planter shoe next to the closing disk or immediately in front of the planter shoe. Mix with the top 2 to 4 inches of soil during or immediately following treatment.
	Nematodes (excluding Northern root knot, Columbia root knot, and stubby root nematodes in the Pacific Northwest; suppression of stubby root nematode in areas outside the Pacific Northwest)	4.4	1 - 2 (Maximum 12 lb ai/A)	IMPORTANT: Certain early-season environmental conditions and agronomic practices may impose stresses on the potato seed piece resulting in delayed emergence. Under these conditions, the application of MOCAP EC Nematicide-Insecticide as a concentrated band directly in the furrow may increase the potential for delayed emergence. To minimize the contribution of MOCAP EC Nematicide-Insecticide to this effect, apply so as to distribute the product in the soil surrounding the seed piece rather than direct application into the seed furrow. For moderate* to heavy* infestations of wireworms or nematodes use the broadcast application instead of band or sidedress. Wireworm infestations will be especially heavy* in potatoes planted following wireworm host crops such as (but not limited to) sod, grass for seed, pasture, cereal, corn, hay, alfalfa, beans, onions, potatoes, new ground, fallow ground (weedy or cultivated), or ground not farmed for a year or more. BROADCAST: Apply uniformly and immediately incorporate 2 to 4 inches deep using suitable tillage equipment. Apply within 2 weeks before planting until prior to crop emergence.
	Northern root knot nematode in the Pacific Northwest	N/A	1 to 2 (1 1/2 to 2 in the Columbia River Basin) (Maximum 12 lb ai/A)	BROADCAST ONLY: Apply uniformly and immediately incorporate 2 to 4 inches (4 to 8 inches in the Columbia River Basin) deep using suitable tillage equipment. Apply within 2 weeks before planting until prior to crop emergence. Under severe* infestation or long growing season conditions, MOCAP EC Nematicide-Insecticide may not adequately protect tuber quality.

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POTATOES
(West of the Mississippi River - Continued)

APPLICATION TIMING	PESTS CONTROLLED	RATE OF MOCAP EC Nematicide-Insecticide		APPLICATION DIRECTIONS
		<u>BANDED</u> FL.OZ./ 1000 ROW FEET	<u>BROADCAST</u> GALLONS PER ACRE	
West of the Mississippi River prior to planting or at planting or prior to crop emergence	Suppression of Columbia root knot and stubby root nematodes in the Pacific Northwest	N/A	2 (Maximum 12 lb ai/A)	BROADCAST ONLY: Apply uniformly and immediately incorporate 4 to 8 inches deep using suitable tillage equipment. Best results are obtained with deep (6-8 inches), even incorporation. Apply within 2 weeks before planting. Generally, MOCAP EC Nematicide-Insecticide should be applied following fall or spring application of a registered fumigant nematocide. In the Columbia River Basin it is strongly recommended that MOCAP EC Nematicide-Insecticide be applied following fall or spring application of a registered fumigant nematocide. Under severe* infestation or long growing season conditions, MOCAP EC Nematicide-Insecticide may not adequately protect tuber quality.

RESTRICTIONS FOR POTATOES (West of the Mississippi River)

- Make only 1 application of this product per growing season.
- Do not make aerial applications.
- Do not exceed 2 gallons of MOCAP EC Nematicide-Insecticide (12 pounds of active ingredient) per acre per crop for nematodes and 1 gallon (6 pounds of active ingredient) per acre per crop for the other listed pests.
- Do not apply MOCAP EC Nematicide-Insecticide once plants have begun to emerge.
- The Pacific Northwest potato growing region is considered to include the states of Washington, Oregon, and Idaho. The Columbia River Basin is considered to include Umatilla and Morrow Counties of Oregon and Grant, Adams, Franklin, Benton, Yakima, and Walla Walla Counties of Washington.

PRECAUTIONS FOR POTATOES (West of the Mississippi River)

- Use the broadcast application instead of band for control of moderate* to heavy* infestations of wireworms or nematodes.

*To determine your infestation level, consult local or state recommendations for sampling methods and economic thresholds.

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POTATOES
(East of the Mississippi River)

		RATE OF MOCAP EC Nematicide-Insecticide		
APPLICATION TIMING	PESTS CONTROLLED	BANDED FL.OZ./1000 ROW FEET	BROADCAST GALLONS PER ACRE	APPLICATION DIRECTIONS
East of the Mississippi River prior to planting or at planting or prior to crop emergence	Symphylans Wireworms	4.4	2/3 – 1 (Maximum 6 lb ai/A)	BAND: Uniformly distribute spray in a 12 inch band over the row (36-inch row spacing), either behind the planter shoe next to the closing disk or immediately in front of the planter shoe. Mix with the top 2 to 4 inches of soil during or immediately following treatment.
	Nematodes (suppression of stubby root)	4.4	1 – 1 1/2 (Maximum 9 lb ai/A)	IMPORTANT: Certain early-season environmental conditions and agronomic practices may impose stresses on the potato seed piece resulting in delayed emergence. Under these conditions, the application of MOCAP EC Nematicide-Insecticide as a concentrated band directly in the furrow may increase the potential for delayed emergence. To minimize the contribution of MOCAP EC Nematicide-Insecticide to this effect, apply so as to distribute the product in the soil surrounding the seed piece rather than direct application into the seed furrow. For moderate* to heavy* infestations of wireworms or nematodes use the broadcast application instead of band or sidedress. Wireworm infestations will be especially heavy* in potatoes planted following wireworm host crops such as (but not limited to) sod, grass for seed, pasture, cereal, corn, hay, alfalfa, beans, onions, potatoes, new ground, fallow ground (weedy or cultivated), or ground not farmed for a year or more. BROADCAST: Apply uniformly and immediately incorporate 2 to 4 inches deep using suitable tillage equipment. Apply within 2 weeks before planting until prior to crop emergence.

RESTRICTIONS FOR POTATOES (East of the Mississippi River)

- Make only 1 application of this product per growing season.
- Do not make aerial applications.
- Do not exceed 1 ½ gallons of MOCAP EC Nematicide-Insecticide (9 pounds of active ingredient) per acre per crop for nematodes and 1 gallon (6 pounds of active ingredient) per acre per crop for the other listed pests.
- Do not apply MOCAP EC Nematicide-Insecticide once plants have begun to emerge.

PRECAUTIONS FOR POTATOES (East of the Mississippi River)

- Use the broadcast application instead of band for control of moderate* to heavy* infestations of wireworms or nematodes.

*To determine your infestation level, consult local or state recommendations for sampling methods and economic thresholds.

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SWEET POTATOES

		RATE OF MOCAP EC Nematicide-Insecticide	
APPLICATION TIMING	PESTS CONTROLLED	BANDED FL.OZ./1000 ROW FEET	APPLICATION DIRECTIONS
2 to 3 weeks before planting	Nematodes Wireworms White grubs Banded cucumber beetle Flea beetle larvae (palestriped and sweet potato flea beetles)	5.1 to 6.9	BAND: Apply in a band 12 to 15 inches wide on the row (minimum 42-inch row spacing) and incorporate 2 to 4 inches deep during or immediately following treatment. Good results have been obtained by opening the row, applying in a 12 to 15 inch band on the row, bedding over and dragging.

RESTRICTIONS FOR SWEET POTATOES

- Make only 1 application of this product per growing season.

ORNAMENTALS

For use on ornamental plants such as Azalea, Boxwood, Caladium, Camellia, Cape Jasmine, Gardenia, Holly, and Yew.

If plants other than those mentioned on this label require treatment, treat only a few plants until effects can be determined. Some plants or varieties may show temporary growth retardation after treatment. Do not allow MOCAP EC Nematicide-Insecticide to contact the foliage of any plants, as severe injury may result.

PEST	TREATMENT TYPE	APPLICATION DIRECTIONS
Nematodes Symphylans	field nursery stock only	PREPLANT BROADCAST ONLY: Apply 2 quarts of MOCAP EC Nematicide-Insecticide per acre as a uniform broadcast on top of the soil and immediately incorporate to a depth of 2-4 inches. Nursery stock may be transplanted into the treated area after 72 hours. To determine your infestation level, consult local or state recommendations for sampling methods and economic thresholds. Workers involved in transplant operation must wear protective clothing including high top boots, gloves, and chemical resistant apron.

RESTRICTIONS FOR ORNAMENTALS

- Make only 1 application of this product per growing season.
- For use on ornamentals: only preplant broadcast application to soil for field nursery stock, which may only be mechanically transplanted into the treated area, and not until 72 hours after treatment.
- For use in California, Oregon and Washington only.

IMPORTANT: READ BEFORE USE

Read the entire Directions for Use, Conditions, Disclaimer of Warranties and Limitations of Liability before using this product. If terms are not acceptable, return the unopened product container at once.

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