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264-465

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

AUG 31 1995

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Mr. James Barron
Associate Registration Manager
Rhone-Poulenc AG Company
2 T. W. Alexander Drive
P.O. Box 12014
Research Triangle Park, NC 27709

Dear Mr. Barron:

Subject: Deletion of Sod Farms and of All Turf Uses Except Golf Course Turf

Addition of Split Applications, Subsurface (Slit) Application for Golf Course Turf, and Revisions For Certain Agricultural Crops

Mocap 10% Granular Nematicide-Insecticide
EPA Registration No. 264-465
Your Amended Labeling Submitted April 13, 1995
Federal Register Notices Dated June 15, 1994,
March 29, 1995 and April 19, 1995

The amended labeling referred to above, submitted in connection with registration under FIFRA, is acceptable, provided that you:

Submit one copy of your final printed labeling incorporating the following corrections before you release the product for shipment.

1. Reinstate the statement limiting the application of the product to no more than 2.3 pounds of product per 1000 square feet (100 pounds/A) to greens, tees, or other turfgrass at a height of less than 0.375 inch. Refer to item four of our January 31, 1995 letter. As described in the above referenced EEB review, the proposed increase in application rate would substantially increase the risk to avian species and would not be acceptable.

2. In the directions for use on potatoes under the broadcast column, delete "of active ingredient" in the phrase "gallons of active ingredient per acre". The application rates are given in terms of the amount of product per acre, not the amount of active ingredient per acre.

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3. The prohibitive statements cited below appear to be advisory in nature. Refer to PR Notice 95-2, II.A.4. for a description of such statements. Examples of advisory statements are those which are related to use precautions, efficacy, crop damage, and product incompatibility and are not EPA-mandated. Statements which are advisory must be identified on the label as such by replacing prohibitive language such as "do not", "must not" and "it is required" with advisory language such as "should not", or "it is recommended".

Please verify the basis for these statements and revise them, as needed.

"In the Columbia River Basin, it is required that Mocap EC be applied following fall or spring application of a registered fumigant nematicide."

"Do not use MOCAP on tobacco in Florida."

4. Correct the worker protection standard (WPS) labeling statements as described below.

a. Delete the several redundant WPS statements appearing under the "Hazard to Humans and Domestic Animals" heading. Refer to the WPS labeling accepted on October 13, 1994 and revise your label accordingly.

b. Add the statement, "Ethoprop is an organophosphate." as it appeared on the WPS label accepted October 13, 1994.

c. As specified in the Agency letter of October 13, 1994, the statement, "Only protected handlers may be in the area during application." must be moved from its present position in the "Agricultural Use Requirements" box to the "Directions for Use" section before the statement, "For any requirements specific to your_ _ _".

5. Qualify the claim, "other turfgrass" by specifying "other golf course turfgrass" wherever this claim appears throughout the label.

6. Specify "golf course turfgrass" wherever reference to use on turfgrass is made throughout the label.

It is understood that, as stated in your letter of April 13, 1995, field residue trials supporting the continued registration of both the at planting time and at pegging time applications for peanuts have been conducted and that results have been submitted to the Agency's Special Review and Reregistration Division for evaluation.

If this condition is not complied with, the registration

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will be subject to cancellation in accordance with FIFRA sec. 6(e). Your release for shipment of the product bearing the amended labeling constitutes acceptance of this condition.

A stamped copy of the label is enclosed for your records.

Sincerely yours,

Robert A. Forrest
Product Manager (14)
Insecticide-Rodenticide Branch
Registration Division (7504C)

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ACCEPTED
with COMMENTS
in EPA Letter Dated 4 9 17

MOCAP[®] 10% Granular

Nematicide Insecticide

AUG 3 1 1995

Under the Federal Insecticide,
Fungicide, and Rodenticide Act
as amended for the pesticide
registered under EPA Reg. No.

NOT FOR DOMESTIC USE

ACTIVE INGREDIENTS:	
Ethoprop: (O-Ethyl S, S-Dipropyl Phosphorodithioate).....	10.0%
INERT INGREDIENTS:	90.0%

264-465

EPA Reg. No. 264-465

EPA Est. No.

KEEP OUT OF REACH OF CHILDREN

WARNING ADVISO

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 1-800-334-9745

STATEMENT OF PRACTICAL TREATMENT

IF SWALLOWED: Give 1 or 2 glasses of water and induce vomiting by touching back of throat with finger. Do not induce vomiting or give anything by mouth to an unconscious person. Call a physician, Poison Control Center, or hospital emergency room.

If not breathing, give mouth to mouth artificial respiration.

IN CASE OF SKIN CONTACT: Immediately remove all contaminated clothing, and wash skin with soap and water. Get medical attention. Wash clothing before reuse. Discard contaminated shoes.

FOR EYES: Flush with plenty of water for at least 15 minutes. Call a physician immediately in all cases of suspected poisoning.

IF INHALED: Remove victim to fresh air. If not breathing, give artificial respiration. Get medical attention. Persons providing first aid should prevent contamination of themselves.

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 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.

PRECAUTIONARY STATEMENTS

WARNING

HAZARD TO HUMANS AND DOMESTIC ANIMALS

May be fatal if swallowed, inhaled or absorbed through skin. Rapidly absorbed through skin. Wear protective clothing including rubber gloves. In case of contact, wash immediately with soap and water. Do not breathe fumes or dust. Wear a mask or pesticide respirator jointly approved by the Mining Enforcement & Safety Administration and the National Institute for Occupational Safety and Health. After use, wash hands, arms and face thoroughly with soap and warm water before eating or smoking. Wash all clothing with soap and hot water before reuse. Discard contaminated shoes. Do not contaminate feed or food.

Do not store in or around the home.

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.

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PERSONAL PROTECTIVE EQUIPMENT (PPE)

Applicators and other handlers must wear coveralls over short-sleeved shirt and short pants, waterproof gloves, chemical-resistant footwear plus socks, chemical-resistant headgear for overhead exposure, chemical-resistant apron when cleaning equipment, mixing, or loading and dust/mist filtering respirator (MSHA/NIOSH approval number prefix TC-21C).

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.

When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240 (d) (4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

User Safety Recommendations

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

Remove clothing immediately if pesticide gets inside. Then wash body thoroughly and put on clean clothing.

ENVIRONMENTAL HAZARDS

This pesticide is toxic to aquatic organisms (fish and invertebrates), and wildlife. Birds feeding 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. Cover, incorporate or clean up granules that are spilled during loading or are visible on soil surface in turn areas. Do not contaminate water when disposing of equipment wash water.

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.

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

When treating agricultural crops, granules lying on the soil surface in turn areas at row ends must be incorporated to remove possible hazard to birds and other wildlife.

Do not apply in Long Island, New York.

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 expectations 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.

Only protected handlers may be in the area during application.

Do not enter or allow worker entry into 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 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 short-sleeved shirt and short pants, waterproof gloves, chemical-resistant footwear plus socks and chemical-resistant headgear for overhead exposure.

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

NON-AGRICULTURAL USE REQUIREMENTS

The requirements in this box apply to uses of this product that are NOT within the scope of the Worker Protection Standard for agricultural pesticides (40 CFR Part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries, or greenhouses.

Do not apply this product in a way that will contact workers or other persons either directly or through drift.

Do not allow unprotected humans or animals into treated areas until grass and soil surface have dried following incorporation with water.

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ENVIRONMENTAL HAZARDS

This pesticide is toxic to aquatic organisms (fish and invertebrates), and wildlife. Birds feeding in treated areas may be killed. Do not apply directly to water, 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. Cover or incorporate granules that are spilled during loading or are visible on soil surface in turn areas. Do not contaminate water when disposing of equipment wash water.

STORAGE AND DISPOSAL

STORAGE

Do not store in or around the home. Do not contaminate water, food, or feed by storage or disposal.

PESTICIDE DISPOSAL

Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide granules, 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

Completely empty bag into application equipment. Then dispose of empty bag in a sanitary landfill or by incineration, or if allowed by State and local authorities, by burning. If burned, stay out of smoke.

GOLF COURSE TURFGRASS

NOT FOR USE ON DOMESTIC TURFGRASS

GENERAL CAUTIONS AND RESTRICTIONS

General Precautions

Avoid contact with granules or breathing dust. Use appropriate equipment during application and handling. Do not apply with equipment carried on the chest or applicators which are likely to grind the granules or scatter granules outside the area intended for treatment.

Incorporation Information

MOCAP® brand 10G Nematicide Insecticide must be incorporated immediately after application with at least 0.1 inch of rainfall or irrigation. Failure to incorporate with water may result in a hazard to animals, poor pest control, injury to turfgrass, and longer persistence of mercaptan odor.

The unpleasant odor associated with MOCAP® brand 10G Nematicide Insecticide is due to mercaptan, an impurity and breakdown product of ethoprop, the active ingredient. At the extremely low concentrations present following application of MOCAP® brand 10G Nematicide Insecticide, the odor may be offensive to some persons.

General Information

MOCAP® brand 10G Nematicide Insecticide is formulated to provide control of certain insects and nematodes in turfgrass. MOCAP® brand 10G Nematicide Insecticide must be incorporated with rainfall or irrigation immediately after application. Residual activity may vary with rate, environmental conditions, and pest being controlled.

The pesticidal activity of MOCAP® brand 10G Nematicide Insecticide is not affected by normal applications of fertilizers or other pesticides. Its effectiveness may be reduced if applied with highly alkaline materials.

Turfgrass Response Information

OVERSEEDING: MOCAP® brand 10G Nematicide Insecticide may be applied up to 2 weeks before fall overseeding without causing significant phytotoxicity to young grass seedlings. Application of MOCAP® brand 10G Nematicide Insecticide after fall overseeding can provoke unacceptable phytotoxicity to young grass seedlings and should be avoided for 10 to 12 weeks following overseeding.

PHYTOTOXICITY: Bentgrass and ryegrass are more sensitive to ethoprop than other turfgrass species. Phytotoxicity is likely to occur when using ethoprop on these grass species; however, the turf will normally outgrow this injury. If the risk of injury is unacceptable do not use this product.

Application to wet foliage may cause the granules to adhere to the turf foliage and cause phytotoxicity. To prevent turfgrass injury avoid application to wet foliage.

Exceeding recommended rates or overlapping swath widths may cause injury to some species/cultivars of turfgrass.

Application of rates greater than 2.3 pounds of MOCAP® brand 10G Nematicide Insecticide per 1000 square feet of turf (100 lbs/A) to greens, tees, or other turfgrass cut to height of less than 0.375 inch may cause unacceptable injury to the turfgrass. Cutting turfgrass extremely short exerts stress on the plants causing the turf to be more susceptible to injury.

Under certain conditions Chinese Elm has shown sensitivity to ethoprop. When Chinese Elm are present in the landscape do not apply MOCAP® brand 10G Nematicide Insecticide within the dripline to prevent potential injury.

APPLICATION PROCEDURES

Application may be made using standard drop spreaders, broadcast spreaders, or slit application equipment. Calibrate and adjust equipment prior to application to insure proper rate and accurate placement.

Retreatment of new pest infestations with MOCAP® brand 10G Nematicide Insecticide is allowed as necessary. However, do not apply more than 400 pounds per acre per year (40.0 lbs ai/A/year) in any combination of treatments. Do not exceed the maximum labeled rate of 200 pounds per acre (4.6 lbs/1000 sq ft or 20.0 lbs ai/A) at any single application.

PEST	LB/1000 SQ. FT.	LB/A	APPLICATION DIRECTIONS
Annual Bluegrass Weevil <i>(Hyperodes spp.)</i> Billbug (adult/larvae) Black Turfgrass Ataenius (adult/larvae) Chinch Bug Cutworms European Crane Fly (larvae) Sod Webworm (larvae) *White Grubs (such as: Chafer Beetle Japanese Beetle <i>(Phyllophaga spp.)</i>	1.15	50	OBSERVE PRECAUTIONARY INFORMATION Make uniform application to turf with properly calibrated equipment at any time of year that pests or their resulting damage is evident.
Mole Cricket	1.7 to 2.3	75 to 100	Use higher rate for heavy insect infestations and older instars.
Nematodes: Lesion Spiral Lance* Pin Sting Ring Stubby Root Rootknot Stunt	4.6	200	OBSERVE PRECAUTIONARY INFORMATION Make two applications at 90 to 120 day intervals following spring root flush in April or May. Application at this rate to greens, tees or other turfgrass cut to a height of less than 0.375 inch may cause unacceptable injury to the turfgrass.

*Suppression of Lance nematodes can be achieved with recommended rates.

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ENHANCED TURFGRASS VIGOR: Properly timed applications of MOCAP® brand 10G Nematicide Insecticide can eliminate damage from surface and subsurface insects and reduce damage from plant parasitic nematodes. Diminished damage caused by these pests encourages root growth and allows better utilization of available water and nutrients, which can enhance turfgrass vigor and reduce stress to the turf.

	LB/1000 SQ. FT.	LB/A	APPLICATION DIRECTIONS
Multiple applications at reduced rates for INSECT CONTROL and REDUCED NEMATODE DAMAGE	2.3	100	<p>OBSERVE PRECAUTIONARY INFORMATION</p> <p>When applied at proper rates and timings, this treatment controls insects listed on the label and reduces damage caused by turfgrass nematodes.</p> <p>Make up to (but not more than) four applications at 60 to 90 day intervals following spring root flush in April or May using surface or slit application equipment.</p> <p>To optimize results, coordinate applications with the presence of threshold populations of insects and/or nematodes. To maximize economic benefits and minimize environmental contamination, accurately evaluate pest populations and avoid unnecessary applications of additional product.</p>

General: Do not apply more than 400 pounds of MOCAP® brand 10G Nematicide Insecticide per year (40.0 lbs. ai/A/year) in any combination of insect or nematode treatments.

SPREADER CALIBRATION TABLE FOR SURFACE APPLICATION EQUIPMENT*
MOCAP® Brand 10G Nematicide Insecticide

MOCAP® 10G lbs/acre	Lesco Rotary	Cyclone B3-Pro	Scotts Pro R-8A	Spyker 24-22	Lely HR**			Vicon		
					3 MPH	4 MPH	5 MPH	3 MPH	4 MPH	5 MPH
Applicator Speed	3 MPH	3 MPH	3 MPH	3 MPH	3 MPH	4 MPH	5 MPH	3 MPH	4 MPH	5 MPH
Swath Width	9 FT	9 FT	9 FT	8 FT	25 FT	25 FT	25 FT	25 FT	25 FT	25 FT
50	B	2.20	F+	3.25	2.75	3.00	3.25	10	11	12
75	C	2.50	H	3.50	3.00	3.50	3.75	11	13	15
100	D	2.75	H+	3.75	3.50	3.75	4.00	13	15	17
200	F	3.9	J	4.75	4.25	4.75	5.00	19	23	26

*These settings based on use of 14/40 grit Biodac™ carrier and are intended for initial calibration only. It is strongly recommended that your equipment be calibrated prior to actual application using these settings as a starting point. For calibration of slit application equipment, contact your local Rhône-Poulenc Representative.

**Settings are based on use of small seed feeding with central spreader setting.

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APPLICATION PROCEDURES AND PRECAUTIONS – AGRICULTURAL CROPS

INCORPORATION STATEMENT

MOCAP® brand 10G Nematicide Insecticide can be incorporated with a rotary tiller, rotary hoe, spring-tooth harrow, by double-disking or with other equipment for mixing the chemical with the soil to the recommended depth. Follow any specific incorporating instructions given under the crop headings.

CONVERSION TABLE FOR BANDED APPLICATIONS

ROW SPACING (INCHES)	POUNDS PER 1000 ROW FEET													
	0.65	0.75	1.125	1.35	1.4	1.5	1.7	1.8	2.1	2.4	2.55	2.75	2.8	3.2
	USE RATES AS POUNDS PER ACRE													
20	17.0	19.6	29.4	35.3	36.6	39.2	44.4	47.0	54.9	62.7	66.7	71.9	73.2	83.6
24	14.1	16.3	24.5	29.4	30.5	32.7	37.0	39.2	45.7	52.3	55.5	59.9	61.0	69.7
28	12.1	14.0	21.0	25.2	26.1	28.0	31.7	33.6	39.2	44.8	47.6	51.3	52.3	59.7
32	10.6	12.3	18.4	22.1	22.9	24.5	27.8	29.4	34.3	39.2	41.6	44.9	45.7	52.3
36	9.4	10.9	16.3	19.6	20.3	21.8	24.7	26.1	30.5	34.8	37.0	39.9	40.7	46.5
40	8.5	9.8	14.7	17.6	18.3	19.6	22.2	23.5	27.4	31.4	33.3	35.9	36.6	41.8
44	7.7	8.9	13.4	16.6	16.6	17.8	20.2	21.3	24.9	28.5	30.3	32.7	33.3	38.0
48	7.1	8.2	12.3	14.6	15.2	16.3	18.5	19.6	22.9	26.1	27.7	29.9	30.5	34.8

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)	POUNDS PER 1000 ROW FEET						
	2.75	3.2	4.8	5.5	6.4	8.0	9.6
	USE RATES AS POUNDS PER ACRE						
36	40.0	46.5	69.7	80.0	92.9	116.2	
48	29.9	34.8	52.3	59.8	69.7	87.1	104.5
60	24.0	27.9	41.8	48.0	55.8	69.7	83.6
72	19.9	23.2	34.8	39.8	46.5	58.1	69.7
84	17.1	19.9	29.9	34.2	39.8	49.8	59.7

REFER TO APPLICATION DIRECTIONS FOR SPECIFIC USE RATES FOR EACH CROP

It is important that applicator equipment be properly calibrated to apply the labeled rate. The following chart will help determine the proper rate of application for commonly used applicators. These are suggested gauge settings for applying 0.75 lb (or 12 ounces) per 1000 row feet, regardless of row spacing. **NOTE:** These settings should be used as starting points only. Be sure to calibrate your applicator under your operating conditions.

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AGRICULTURAL CROPS

GENERAL CAUTIONS AND RESTRICTIONS

Use MOCAP® brand 10G 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. Do not use on any crop not listed on this label or supplemental labeling, as any residues remaining may be illegal or harmful. Do not store or use in or around the home or home garden.

PLANT RESPONSE PRECAUTIONS

- To avoid possible injury to beans (snap and lima), cabbage, corn (field and sweet), cucumber and peanut, do not use as a seed furrow treatment or allow granules to contact the seed.
- Beans (snap and lima) grown in treated soil may remain green longer and may mature 1 to 2 weeks later than other beans.

APPLICATION STATEMENTS

- 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.
- When treating agricultural crops, granules left on the soil surface in turn areas at row ends must be incorporated to remove possible hazard to birds and other wildlife.
- Do not apply when weather conditions favor drift from areas treated. Apply this product only as specified on this label.
- For "per acre" rates when banding, refer to the use rate chart above.

FOR COMMONLY USED APPLICATORS, SEE CALIBRATIONS CHART BELOW

Suggested gauge settings for 12 ounces per 1,000 feet of row. (Do not change with row width). Be sure to calibrate your applicator under your operating conditions.

FOR APPLICATION RATE OF 12 OUNCES/1000 FEET OF ROW

Brand Of Applicator	SPEED IN MILES PER HOUR								
	2	3	4	5	6	7	8	9	10
Allis Chalmers	At all Speeds: GA9 = 11.35 Ounces . . . GA10 = 12.7 Ounces								
Gandy	19.1	23.5	26.7	29.5	32.1	34.5	36.6	38.7	40.8
International Harvester*	1/8.0	2/2.7	2/8.5	3/4.0	3/8.7	4/5.0	5/1.3	5/6.0	6/1.5
International Harvester (Cyclo)	1/5.7	1/9.3	2/4.7	3/0.5	3/5.1	4/0.6	4/5.8	5/1.5	5/7.0
John Deere**	1/29	2/6	2/13	2/19	2/27	3/1	3/6	3/11	3/15
John Deere (Max. Emerge.)	13	19	24	29	32	33	35	36	37
Noble	13	19	24	28	31	34	36	38	39
Noble (new)	9	11	14	17	20	22	25	27	29

*1/2.0 means Gate 1. Dial 8.0
 **1/29 means Range 1. Notch 29

AGRICULTURAL CROPS SPECIFIC USE DIRECTIONS

Where a range of rates is recommended, 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.

BANANA and PLANTAIN

POUNDS OF MOCAP® 10G				
APPLICATION TIMING	PESTS CONTROLLED	BANDED PER 1000 ROW FEET	BROADCAST PER ACRE	APPLICATION DIRECTIONS
	nematodes banana root borer ¹	N/A	N/A	Apply 60 gm of MOCAP® 10G in a radius of 3/4 meter around each producing stem. Before application, remove ground litter from area to be treated. For best results, make application just before irrigation or a rainy period. If application is made during a dry period and irrigation is not available, mix MOCAP® 10G into the top 2 cm of soil with a rake. Repeat application in 6 months. ¹ <i>Cosmopolites sordidus</i>

BEANS (Snap and Lima)

POUNDS OF MOCAP® 10G				
APPLICATION TIMING	PESTS CONTROLLED	BANDED PER 1000 ROW FEET	BROADCAST PER ACRE	APPLICATION DIRECTIONS
at planting or up to 3 days before planting	nematodes garden symphylans	1.4 to 1.8	60 to 80	Band: Apply in 12 to 15 inch band on the row (36-inch row spacing). Mix with the top 2 to 4 inches of soil. Do not use as a seed furrow treatment or allow granules to contact the seed or phytotoxicity may occur.
	garden symphylans	1.4 to 1.8	20 to 30	Broadcast: Apply using the indicated broadcast rate per acre and mix with the top 2 to 4 inches of soil immediately after.
Note: Beans grown in treated soil may remain green longer than other beans and mature 1 to 2 weeks later. Make only one application per crop.				

CABBAGE

POUNDS OF MOCAP® 10G				
APPLICATION TIMING	PESTS CONTROLLED	BANDED PER 1000 ROW FEET	BROADCAST PER ACRE	APPLICATION DIRECTIONS
at planting or up to 1 week before planting	nematodes garden symphylans	1.1	50	Band: Apply in 12 to 15 inch band on the row (36-inch row spacing). Mix with the top 2 to 4 inches of soil. Do not use as a seed furrow treatment or allow granules to contact the seed or phytotoxicity may occur. Broadcast: Apply the indicated rate per acre and mix with the top 2 to 4 inches of soil immediately after.
Note: Make only one application per crop.				

CORN (Field and Sweet)

POUNDS OF MOCAP® 10G				
APPLICATION TIMING	PESTS CONTROLLED	BANDED PER 1000 ROW FEET	BROADCAST PER ACRE	APPLICATION DIRECTIONS
at planting	corn rootworms wireworms cutworms garden symphylans suppression of white grubs	0.65 (10.5 oz.)	N/A	Band: Apply in a 6 to 7-inch band on the row over a closed seed furrow. Mix the granules with the top 1/2 inch of soil using drag chains, spring-tooth incorporators, or similar equipment. Apply water immediately after MOCAP® 10G application to carry the treatment into the soil.
at planting	nematodes corn rootworms wireworms cutworms garden symphylans suppression of white grubs	1.125 to 1.35 (18 to 21.5 oz.)	N/A	Band: Apply in a band 12 to 15 inches wide on the row. Incorporate or cover treatment with soil to a depth of 2 to 4 inches right after application. Plant into treated zone.
at cultivation (after plant emergence up to layby)	corn rootworms	0.65 (10.5 oz.)	N/A	Band: On small corn, apply in a 6 to 7 inch band over the row. On the taller corn, apply in bands 3 to 4 inches wide on each side of the corn directing the granules toward the base of the plants. Cover the granules with soil by making application immediately ahead of cultivation equipment.
Note Do not apply in seed furrow or allow granules to come into contact with seed or phytotoxicity may occur. Make only one application per crop.				

CUCUMBERS

POUNDS OF MOCAP® 10G				
APPLICATION TIMING	PESTS CONTROLLED	BANDED PER 1000 ROW FEET	BROADCAST PER ACRE	APPLICATION DIRECTIONS
at or just before planting	nematodes	2.55	N/A	Band: Apply in a band 12 to 15 inches wide on the row (7-foot row spacing). Mix with the top 2 to 4 inches of soil right after application. Where beds are used, prepare bed and knock off top to provide a level area for treatment. Do not use as a seed furrow treatment or allow granules to contact the seed or phytotoxicity may occur.
Note: Make only one application per crop.				

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PEANUT

POUNDS OF MOCAP® 10G				
APPLICATION TIMING	PESTS CONTROLLED	BANDED PER 1000 ROW FEET	BROADCAST PER ACRE	APPLICATION DIRECTIONS
at planting or up to 1 week before planting	nematodes	1.4 to 2.8	40 to 60	Band: Apply in a 12-inch band on the row (36-inch row spacing) at planting. Do not use as a seed furrow treatment or phytotoxicity may occur. Broadcast: Make application from one week before planting to at-planting time.
at pegging	nematodes corn rootworms Suppression of lesser cornstalk borer and white mold (<i>Sclerotium rolfsii</i>)	2.1	N/A	Band: Apply in a single band 15 to 18 inches wide on the row. Lightly incorporate and/or cover with soil by running sweeps down row middles.
	corn rootworm only	1.7	N/A	Band: Apply in a band 18 inches wide on the row. Lightly incorporate and/or cover with soil by running sweeps down row middles.

Note: Use the higher rate for control of peanut root knot nematode (*M. arenaria*) and in fields where infestations of other nematodes have been especially severe. To determine your infestation level consult local or state recommendations for sampling methods and economic thresholds. Mix with the top 2 to 4 inches of soil immediately after application.

POTATOES

		RATE OF MOCAP® 10G		
APPLICATION TIMING	PESTS CONTROLLED	BANDED POUNDS MOCAP® 10G/ 1000 ROW FEET	BROADCAST POUNDS OF ACTIVE INGREDIENT PER ACRE	APPLICATION DIRECTIONS
prior to planting or at planting or prior to crop emergence	symphylans wireworms	2.1	40 to 60	Band: Uniformly distribute granules 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.
	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)	2.1	60 to 120	CAUTION: 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® brand 10G Nematicide Insecticide as a concentrated band directly in the furrow may increase the potential for delayed emergence. To minimize the contribution of MOCAP® brand 10G Nematicide Insecticide to this effect, apply so as to distribute the product in the soil surrounding the seed piece and avoid application directly 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	60 to 120 (90 to 120 in the Columbia River Basin)	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® brand 10G Nematicide Insecticide may not adequately protect tuber quality.

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**POTATOES
(Continued)**

APPLICATION TIMING	PESTS CONTROLLED	RATE OF MOCAP® 10G		APPLICATION DIRECTIONS
		BANDED POUNDS MOCAP® 10G/ 1000 ROW FEET	BROADCAST POUNDS OF ACTIVE INGREDIENT PER ACRE	
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	120	<p>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. It is recommended that MOCAP® brand 10G Nematicide Insecticide be applied following fall or spring application of a registered fumigant nematicide. In the Columbia River Basin, it is required that MOCAP® brand 10G Nematicide Insecticide be applied following fall or spring application of a registered fumigant nematicide.</p> <p>Under severe* infestation or long growing season conditions, MOCAP® brand 10G Nematicide Insecticide may not adequately protect tuber quality.</p>

Note: Use the broadcast application instead of band for control of moderate* to heavy* infestations of wireworms or nematodes. Do not make more than 1 application per crop. Do not make aerial applications. Do not exceed 12 pounds of active ingredient per acre per crop. Do not apply MOCAP® brand 10G 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).

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

SUGARCANE

APPLICATION TIMING	PESTS CONTROLLED	POUNDS OF MOCAP® 10G		APPLICATION DIRECTIONS
		BANDED PER 1000 ROW FEET	BROADCAST PER ACRE	
at planting	nematodes wireworms	2.75 to 5.5	N/A	<p>Band: Apply evenly in a band 12 to 15 inches wide centered over the seed pieces in the opened furrow (6-foot row spacing) immediately before closing. Mix with the soil using a disc hiller or other suitable equipment as the cane is covered. Use the higher rates in fields where nematode and/or wireworm infestations are severe. To determine your infestation level consult local or state recommendations for sampling methods and economic thresholds.</p>

NOTE: Make only one application per crop.

SWEET POTATOES

POUNDS OF MOCAP® 10G

APPLICATION TIMING	PESTS CONTROLLED	BANDED PER 1000 ROW FEET	BROADCAST PER ACRE	APPLICATION DIRECTIONS
2 to 3 weeks before planting	nematodes wireworms white grubs banded cucumber beetle flea beetle larvae (palestriped and sweet potato flea beetles)	2.4 to 3.2	60 to 80	Band: Apply in a band 12 to 15 inches wide on the row (minimum 42-inch row spacing). Good results have been obtained by opening the row, applying in a 12 to 15 inches band on the row, bedding over and dragging. Broadcast: Apply the indicated rate per acre and mix with the top 2 to 4 inches of soil immediately after.

Note: Make only one application per crop.

TOBACCO*

POUNDS OF MOCAP® 10G

APPLICATION TIMING	PESTS CONTROLLED	BANDED PER 1000 ROW FEET	BROADCAST PER ACRE	APPLICATION DIRECTIONS
from one week before transplanting to transplanting time	cutworms flea beetle larvae mole crickets southern root-knot nematode wireworms	4.8 to 9.6	60 to 120	Band: Apply in a band 18 to 24 inches wide on the row (42-inch row spacing) after the fertilizer has been listed or bedded. Broadcast: Use a double gang disc harrow or other cultivating equipment that will do a good job of mixing MOCAP® 10G with the soil. After mixing, apply fertilizer and, for best results, shape a wide bed with a tractor equipped with 4 disc hillers and wide sweeps for running out the middles. Be sure that only the treated soil (top 2 to 4 inches) is used to make beds.
from two weeks before transplanting to transplanting time	cutworms flea beetle larvae wireworms	N/A	20	Broadcast: Broadcast material uniformly on top of the soil and incorporate to a depth of 2 to 4 inches. Use a disc harrow or other cultivation equipment that will do a good job of making MOCAP® with the soil.

Note: Use the higher rates in fields where nematode infestations have been especially severe or where soil is sandy. To determine your infestation level consult local or state recommendations for sampling methods and economic thresholds. Mix with the top 2 to 4 inches of soil immediately after application. Make only one application per crop.
*Do not use of MOCAP® on tobacco in Florida.

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LIMITED WARRANTY AND DISCLAIMER

The manufacturer warrants (a) that this product conforms to the chemical description on the label; (b) that this product is reasonably fit for the purposes set forth in the directions for use when it is used in accordance with such directions; and (c) that the directions, warnings, and other statements on this label are based upon responsible experts' evaluation of reasonable tests of effectiveness, of toxicity to laboratory animals and to plants, and residues on food crops, and upon reports of field experience. Tests have not been made on all varieties or in all states or under all conditions. THE MANUFACTURER NEITHER MAKES NOR INTENDS, NOR DOES IT AUTHORIZE ANY AGENT OR REPRESENTATIVE TO MAKE, ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, AND IT EXPRESSLY EXCLUDES AND DISCLAIMS ALL IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

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