3125 236

Pre-Reg. (7409)

236-7409 LD

U.S. LABEL

Date of Draft: 11/18/91 (Pre-Reg)(T)

Reason to Issue: To revise Environmental Hazards per EPA comments.

EPA Reg. No. 3125-236

RESTRICTED USE PESTICIDE

For Sale to and Use Only by a Certified Applicator for Uses Authorized By His Certification, or By Persons Under His Direct Supervision.

NEMACUR[®] 15% Granular

SYSTEMIC INSECTICIDE - NEMATICIDE

FOR EFFECTIVE CONTROL OF NEMATODES IN CERTAIN FIELD, FRUIT AND VEGETABLE CROPS

KEEP OUT OF REACH OF CHILDREN

ACTIVE INGREDIENT: Ethvl 3-methvl-4-

Ethyl 3-methyl-4-(methylthio)phenyl

(1-methylethyl)phosphoramidate 15%

INERT INGREDIENTS:

. <u>85%</u>

) DANGER POISON

See rear panel for Statements of Practical Treatment and Other Precautionary Statements.

PELIGRO

EPA Reg. No. 3125-236

PRECAUCION AL USUARIO: Si usted no puede leer o entender inglés, no use este producto hasta que la etiqueta le haya sido explicada ampliamente.

(TO THE USER: If you cannot read or understand English, do not use this product until the label has been fully explained to you.)

DEC 1 0 1991

STOP - READ THE LABEL BEFORE USE

NET WEIGHT

POUNDS

MOBAY CORPORATION
A Bayer USA INC. COMPANY
AGRICULTURAL CHEMICALS DIVISION
Box 4913, Kansas City, Mo. 64120

DIRECTIONS FOR USE

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It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

IMPORTANT: Read these entire Directions and Conditions of Sale before using NEMACUR 15% Granular systemic insecticide-nematicide.

CONDITIONS OF SALE: THE DIRECTIONS ON THIS LABEL WERE DETERMINED THROUGH RESEARCH TO BE THE DIRECTIONS FOR CORRECT USE OF THIS PRODUCT. THIS PRODUCT HAS BEEN TESTED FOR A RANGE OF WEATHER CONDITIONS SIMILAR TO THOSE WEATHER CONDITIONS THAT ARE ORDINARY AND CUSTOMARY IN THE GEOGRAPHIC AREA WHERE THE PRODUCT IS USED. INSUFFICIENT CONTROL OF PESTS AND/OR INJURY TO THE CROP TO WHICH THE PRODUCT IS APPLIED MAY RESULT FROM THE OCCURRENCE OF EXTRAORDINARY OR UNUSUAL WEATHER, OR FROM FAILURE TO FOLLOW LABEL DIRECTIONS. IN ADDITION, FAILURE TO FOLLOW LABEL DIRECTIONS MAY CAUSE INJURY TO OTHER CROPS, ANIMALS, MAN, OR THE ENVIRONMENT. MOBAY OFFERS, AND THE BUYER ACCEPTS AND USES, THIS PRODUCT SUBJECT TO THE CONDITIONS THAT EXTRAORDINARY OR UNUSUAL WEATHER, OR FAILURE TO FOLLOW LABEL DIRECTIONS ARE BEYOND THE CONTROL OF MOBAY AND ARE, THEREFORE, THE RESPONSIBILITY OF THE BUYER.

Consult your State Agricultural Experiment Station or Extension Service Specialist or Mobay representative for guidance on the selection of dosage rates and timing of applications appropriate for your specific crop and pest. State regulations may contain additional restrictions or requirements. Check the "Remarks" and "Restrictions" sections of this label for additional directions.

Incorporation Recommendations: Unless otherwise specified, NEMACUR 15% Granular must be incorporated into the soil for optimum results. Incorporation may be accomplished by irrigation or mechanical equipment. For applications made at planting, the action of some planters during the planting operation may provide adequate incorporation. When utilizing planters which do not provide adequate incorporation of NEMACUR 15% Granular into the soil, additional incorporation may be achieved by use of equipment specifically designed for incorporation purposes behind the planter. Precautions should be taken to avoid disturbing seed or transplant replacement.

CROP	PEST	DOSAGE NEMACUR 15%G	RELARKS
FIELD Ci Cotto	Thrips (early season reduction)	6 to 8 oz per 1000 ft of row for any row spacing. (5 to 6.5 lb per acre on 40 inch row).	<u>In furrow/covering soil</u> : Apply specified dosage per 1000 ft of row in furrow or band in covering soil behind the seed "op and in front of covering devices.
<i>}</i>	Nematodes Thrips	8 to 18 oz per 1000 ft of row for any row spacing. (6.5 to 14.7 lb per acre on 40 inch row spacing).	In furrow/covering soil: Apply specified dosage per 1000 ft of row in furrow or band in covering soil behind the seed drop and in front of covering devices. Band: Apply specified dosage per 1000 ft of row in a 6 to 12 inch band over the row. Incorporate thoroughly to insure uniform distribution. Suggested use rates of NEMACUR 15% G in oz/1000 feet of row based on nematode infestation levels:* Bandwidth Low Moderate High* In furrow 8 10 12 In covering 8 10 12
			soil 6 inch band 8 10 12 8 inch band 10 12 14 10 inch band 11 13 16 12 inch band 12 14 18
			*Use the highest recommended rates in fields with a history of nematode problems.

IMPORTANT: Do not overlap bands on narrow row crops. Do not feed or graze cotton foliage. Under very heavy thrip pressure, additional control measures may be needed.

The action of some planters during planting operation may provide adequate incorporation. When using planters which do not disturb enough soil for incorporation or under dry conditions, additional incorporation can be achieved with scratchers, paddlewheels, pickwheels, ground driven rototillers or similar equipment behind the planter.



CROP	PEST	DOSAGE NEMACUR 15%G	REMARKS
FIELD CROPS Peanuts	(Cont'd) Nematoces Thrips (early season reduction)	11 to 18.7 oz for any row spacing (or 10 to 17 pounds per acre on 36-inch rows)	Apply specified dosage per 1000 ft of row as a 12-inch band at planting. Incorporate the granules into the soil. ON NARROW ROW CROPS, DO NOT ALLOW BANDS TO OVERLAP. Use the high rate in fields with high populations of nematodes, in fields where root-knot species other than southern root-knot, Meloidogyne incognita, are present or in fields having a history of serious nematode damage. Do not feed or graze green peanut vines or peanut vine hay. Do not hog down treated peanut fields.
VEGETABLES Bok Choy (direct seeded only) (California only)	Nematodes	14.7 to 18.4 oz per 1000 ft of row for any row spacing	Apply specified dosage in a 12- to 15-inch band over the row and incorporate. Refer to the table below for specific band width application rates. Treatment may be applied immediately before or at planting of direct seeded crop. ON NARROW ROW CROPS, DO NOT ALLOW BANDS TO OVERLAP. Bandwidth oz/1000 ft of Row 12" 14.7 15" 18.4

)			DOSAGE	
<u>(</u>	CROP	PEST	NEMACUR 15%G	REMARKS
	Cabbage (includes tight heading varieties of Chinese cabbage) (direct seeded and trans- planted) (Except cabbage grown for seed) Brussels Sprouts (trans- planted) (Except brussels sprouts grown for seed)	Nematodes	7.3 to 18.4 oz per 1000 ft of row for any row	Apply specified dosage in a 6- to 15- inch band over the row. Refer to table below for specific band width applica- tion rates. Application may be made prior to planting, during planting, after planting but prior to crop emergence (direct seeded cabbage), or immediately following transplanting. Treat a minimum band width of 6 inches per row for multiple rows on a single bed or a minimum 12-inch band width for a single row per bed. Utilize wider band widths in fields with a history of nematode damage. Incorporate mechan- ically or with overhead irrigation. On narrow row spacing do not allow bands to overlap. Do not treat more than 50% of the total field area. Do not make more than one application per crop season. Bandwidth oz/1000 ft of Row 6" 7.3 7" 8.6 8" 9.8 9" 11.0 9.5" 11.6 10" 12.2 12" 14.7 15" 18.4
	Eggp1ant	Neratodes	14.7 oz (or 13.4 ib per acre 36-inch rows)	Apply specified dosage per 1000 ft of row in a 12-inch band over the row at transplanting and immediately incorporate the granules into the soil. ON NARROW ROW CROPS, DO NOT ALLOW BANDS TO OVERLAP.
	Garlic	Bulb and Stem Nematode	9.2 to 18.4 oz/1,000 ft of planting furrow for any row spacing (15 to 30 lb no acre on 40-ir eds with two seedes [rows] per bed)	Apply specified dosage in-furrow with the garlic seed (cloves) at planting. For best results, plant the crop within 7 to 10 days after cracking (seed preparation).
•		<u> </u>		BEST AVAILABLE COPY

CROP_	PEST	DOSAGE NEMACUR 15% G	REMARKS
VEGETABLES	(Cont'd)		
Okra (Except Cali- fornia)	Nematodes	14.7 to 18.4 oz (or 13.4 to 16.7 pounds per acre on 36-inch rows)	Apply specified dosage per 1000 ft of row as a 12- to 15-inch band at planting. Incorporate the granules into the soil.
			Use low rate in 12-inch band. Use high rate in 15-inch band.
			BAND WIDTH (36-inch row spacing)
			<u> 12-inch</u>
			14.7 oz/1000 ft 18.4 oz/1000 of row of row or 13.4 lb/acre 16.7 lb/acre ON NARROW ROW CROPS, DO NOT ALLOW BANDS TO OVERLAP.
Non-Bell Peppers (Cali- fornia, Georgia and Puerto Rico Only)	Nematodes	10 to 14.7 oz for any row spacing (or 9 to 13.3 1b per acre on 36-inch rows)	Apply specified dosage per 1000 ft of row in a 12-inch band over the row at planting and incorporate the granules into the soil. Use the high rate in fields with high populations of nematodes or in fields having a history of serious nematode damage.

)			DOSAGE	
/	CROP	PEST	NEMACUR 15% G	REMARKS
)	FRUIT Citrus (In Califor- nia do not apply to Kumquat, Tangelo or Citrus hybrids)	Nematodes Citrus root weevil complex including Fuller rose beetle (Suppres- sion)	33-1/2 to 67 pounds	Apply specified dosage per acre in a band in up to 2 applications per season, not to exceed 67 pounds of NEMACUR 15% Granular per acre per season. Apply to the soil with ground equipment and incorporate immediately using mechanical incorporation or irrigation. Center the treated band on the tree row using a band width of 50% of the row spacing and covering the feeder root system of the plant. Under dry conditions, follow with overhead or flood irrigation. Do not apply more than 10 pounds active ingredient (67 pounds of NEMACUR 15% Granular) per acre per season. Do not apply within 30 days of harvest. Do not graze livestock on treated areas. On non-bearing citrus make initial applications when trees have recovered from transplanting shock and have initiated new growth, provided that one or more irrigations have been applied and soil has settled around the roots. Phytotoxicity may occur if applications are made before soil has settled and plants are growing.
	Strawberries	Nematodes	14.7 to 22 oz for any row spacing (or 12 to 18 pounds per acre on 40-inch rows).	Apply specified dosage per 1000 ft of row in a 12- to 18-inch band over the row and incorporate immediately by cultivation or by sprinkler irrigation prior to transplanting. Do not apply more than one application. Do not apply within 110 days of harvest. Apply by ground equipment only. BAND WIDTH 12-INCH 14.7 oz/1000 ft 0R 12 lb/acre (40-inch rows) (40-inch rows)
)				Use the maximum band width and rate in fields with high populations of nematodes or in fields having a history of serious nematode damage.

RECOMMENDED APPLICATIONS (Continued)

CROP	PEST	DOSAGE NEMACUR 15% G	REMARKS
FRUIT Pineapple (Puerto Rico only)	Nematocies NOTE: Pos	66-2/3 to 133-1/3 pounds tplanting application	Apply specified dosage (10 to 20 lb active ingredient) per acre over the entire area to be treated before planting and thoroughly incorporate into the soil mechanically or with sufficient rainfall or irrigation (not to exceed the depth of the root zone).
	for NEMACU Do not app crop seaso	R 3 for directions ar ly more than a total	of 20 lb active ingredient per acre per formulation or method of application. Do
Non-bearing Strawberry nursery stock			Apply specified dosage per 1000 ft of row in a 12-inch band over the row

RESTRICTIONS

Any food crop not specified on this label may be planted into treated areas 120 days after the last application. Any cover crops that are planted during the 120 day period must be plowed under and not grazed.

Do not use on other crops. Use only according to label directions.

Do not apply this product with a knapsack or similar equipment that is placed on the user's body.

PROTECTIVE CLOTHING AND EQUIPMENT

USE-ONLY WHEN WE'RING THE FOLLOWING PROTECTIVE CLOTHING AND EQUIPMENT DURING MIXING/ LOADING, APPLICATION, REPAIR AND CLEANING OF MIXING, LOADING AND APPLICATION EQUIPMENT, RISTOSAL OF THE PESTICIDE, AND EARLY REENTRY INTO TREATED AREAS: Protective suit of one or two pieces covering all parts of the body except head, hands, and feet; chemicalresistant gloves; chemical-resistant shoes (or chemical-resistant shoe covers or chemicalresistant boots); and a NIOSH- or MSHA-approved respirator. In addition, mixer/loaders must, wear a chemical-resistant apron. During equipment repair and cleaning, the respirator

PROTECTIVE CLOTHING AND EQUIPMENT (Continued)

need not be worn. During early reentry after dust has settled and vapors have dispersed, the respirator need not be worn.

IF MIXING/LOADING IS PERFORMED USING A CLOSED SYSTEM, THE FOLLOWING PROTECTIVE CLOTHING AND EQUIPMENT MAY BE WORN AS AN ALTERNATIVE: Long-sleeved shirt and long-legged pants; chemical-resistant gloves; chemical-resistant apron; shoes and socks.

IF APPLICATION IS PERFORMED USING AN ENCLOSED CAB, THE FOLLOWING PROTECTIVE CLOTHING AND EQUIPMENT MAY BE WORN AS AN ALTERNATIVE: Long-sleeved shirt and long-legged pants; shoes, and socks. Chemical-resistant gloves must be available in the cab and must be worn when exiting. This clothing is inadequate to protect you during equipment repair or cleaning, reentry, or pesticide disposal work.

IMPORTANT! If pesticide comes in contact with skin, wash off with soap and water. Always wash hands, face, and arms with soap and water before smoking, eating, drinking, or toileting.

AFTER WORK: Before removing gloves, wash them with soap and water. Take off all work clothes and shoes. Shower using soap and water. Wear clean clothes. Do not reuse contaminated clothing. Personal clothing worn during work must be laundered separately from household articles. Store rotective clothing separately from personal clothing. Clean or launder protective clothing after each use. Respirators must be cleaned and filters replaced according to instructions included with the respirator. Protective clothing and equipment that becomes heavily contaminated must be destroyed according to state and local regulations. HEAVILY CONTAMINATED CLOTHING CANNOT BE ADEQUATELY DECONTAMINATED.

RE-ENTRY STATEMENTS

Do not apply this product in such a manner as to directly or through drift expose workers or other persons. The area being treated must be vacated by unprotected persons. Do not reenter treated area for 48 hours unless appropriate protective clothing is worn. Any person coming in direct contact with treated soil prior to incorporation or irrigation, or with treated wet soil after the initial irrigation, must wear protective clothing and equipment as described in the section "Protective Clothing and Equipment" on this label. Wash thoroughly with soap and water after handling and before eating or smoking.

Because certain states may require more restrictive reentry intervals for various crops treated with this product, consult your State Department of Agriculture for further information.

(The following may appear on supplemental labeling accompanying the product) Written or oral warnings must be given to workers who are expected to be in a treated area or in an area about to be treated with this product. Oral warnings should include those statements found under the label heading "Precautionary Statements" and "Re entry Statements" included on this label. When oral warnings are given, warnings shall be given in a language customarily understood by workers. Oral warnings must be given if there is reason to believe that written warnings cannot be understood by workers. Written warnings must include the following information: DANGER, area treated with NEMACUR 15% Granular on (Jate of application). See "Protective Clothing and Equipment" for use of proper protective clothing. If on skin, remove contaminated clothing and wash skin immediately with suap and warm water. If eyes are contaminated, wash with flowing water for at least 15 minutes. If swallowed, vomiting should be induced. (See Precautionary Statements on 1951).

NEMACUR 15% Granular Pesticide	10/11
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STORAGE AND DISPOSAL

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

Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, 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: Do not use container in connection with food, feed, or drinking water. 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.

Store in a cool, dry place and in such a manner as to prevent cross contamination with other pesticides, fertilizers, food, and feed. Store in original container and out of the reach of children, preferably in a locked storage area.

Handle and open container in a manner as to prevent spillage. If the container is leaking or material spilled for any reason or cause, carefully sweep material into a pile. Refer to Precautionary Itatements on label for hazards associated with the handling of this material. Do not alk through spilled material. Dispose of pesticide as directed above. In spill or leak incidents, keep unauthorized people away. You may contact the Mobay Emergency Response Team for decontamination procedures or any other assistance that may be necessary. The Mobay Kansas City Emergency Response Telephone No. is 816-242-2582, or contact Chemtrec at 800-424-5300.

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

DANGER POISON

Fatal if swallowed, or absorbed through the skin. Causes eye irritation. May be fatal if inhaled. Do not get in eyes, on skin, or on clothing. Do not breathe dust. Wear protective clothing, rubber gloves, and goggles or face shield when handling. Wash thoroughly with soap and water after handling and before eating or smoking. Remove and wash contaminated clothing before reuse.

Do not contaminate feed or food. Keep all unprotected persons out of the operating area or vicinity. Wash hands, arms, and face thoroughly with soap and warm water before eating or smoking. Wash all contaminated clothing with soap and hot water before re-use. Keep out of the reach of children.

Not for use or storage in or around the home.

SYMPTOMS OF Poisoning: A sense of "tightness" in the chest. Sweating. Contracted publis. Stomach pains. Vomiting and diarrhea.

STATEMENTS OF PRACTICAL TREATMENT

In case of noisoning call a physician immediately. Have patient lie down and keep quiet. It swallowed, vomiting should be induced. Administer water freely and induce vomiting by giving one dose (1/2 oz or 15 mL) of syrup of ipecac. If vomiting does not occur within 10 to 20 minutes, administer second dose. If syrup of ipecac is not available, induce vomiting by sticking finger down throat. Repeat until vomit fluid is clear. Never give anything by mouth to an unconscious person. Professional medical assistance should be secured immediately. If on skin, remove contaminated clothing and wash skin immediately with soap and warm water. If eyes are contaminated, wash with flowing water for at least 15 minutes. If inhaled, remove victim to fresh air. If not breathing, give artificial respiration, preferably mouth-to-mouth.

NOTE TO PHYSICIAN:

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ANTIDOTE - Administer atropine sulfate in large therapeutic doses. Repeat as necessary to the point of tolerance. 2-PAM is also antidotal and may be administered in conjunction with atropine.

Compound inhibits cholinesterase resulting in stimulation of the central nervous system, the parasympathetic nervous system, and the somatic motor nerves. Do not give morphine. Watch for pulmonary edema, which may develop in serious cases of poisoning even after 12 hours. At first sign of pulmonary edema, the patient should be placed in an oxygen tent and treated symptomatically.

ENVIRONMENTAL HAZARDS

This pesticide is toxic to fish and wildlife. Birds feeding on treated areas may be killed. Cover, incorporate, or pick up spilled granules at row ends or turn areas. Runoff from treated areas may be hazardous to aquatic organisms in neighboring areas. Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment washwaters.

Ground Water Advisory: Fenamiphos is known to leach through soil and has been found in ground water as a result of agriculture use. Users are advised not to apply in areas where soils are permeable, particularly where ground water is used for drinking water. Consult with the pesticide state lead agency for information regarding soil permeability and aquifer vulnerability in your area.

NEMACUR is a Reg. TM of Bayer AG, Germany.