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Pick up 10/21/88

OCT 21 1988

Mobay Chemical Corporation
Agricultural Chemicals Division
P.O. Box 4913
Kansas City, MO 64120

Attention: Mr. John Thornton

Subject: Nemacur® 15% Granular
EPA Registration No. 3125-236
Your application dated April 28, 1988

Labeling you submitted for the subject pesticide product in compliance with the Reregistration Guidance Document for end use products containing fenamiphos has been reviewed and found acceptable provided you complete the following:

1. Under "Recommended Applications for Garlic", revise the dosage rate column to more clearly indicate that the 9.2 to 18.4 ounce dose is applied per 1,000 linear feet of furrow rather than per 1,000 feet of row, since the terms "row" and "bed" may be considered synonymous by some users.
2. Under the "Environmental Hazards" heading, revise the water contamination statement to read, "Do not contaminate water when disposing of equipment washwaters".

A copy of the stamped labels, accepted with above comments, is enclosed for your record.

If you have any questions, please contact me or Sidney Jackson of my staff at (703) 557-8542.

Sincerely yours,

BEST AVAILABLE COPY

Lois A. Rossi *LJR*
Product Manager (21)
Fungicide-Herbicide Branch
Registration Division (TS-767C)

236-6400.BLD

Base Reg. (6400)

U.S. LABEL

Reason to Issue: To revise in accordance with EPA registration standard; to delete "Endangered Species Restrictions" in accordance with EPA PR Notice 88-1.

Date of Draft: 4/15/88 (PS)
Supersedes Draft Dated: 7/24/87

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

ACCEPTED
with COMMENTS
in EPA Letter Dated:

SYSTEMIC INSECTICIDE - NEMATICIDE

OCT 21 1988

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

3125-236

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

ACTIVE INGREDIENT:
Ethy 3-methyl-4-(methylthio)phenyl
(1-methylethyl)phosphoramidate 15%

KEEP OUT OF REACH OF CHILDREN

INERT INGREDIENTS: 85%
100%

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.)

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

NEMACUR 15% Granular pesticide

DIRECTIONS FOR USE

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.

NEMACUR 15% Granular pesticide

RECOMMENDED APPLICATIONS

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.

CROP	PEST	DOSAGE NEMACUR 15%G IN FURROW OR BAND OZS./1000 FT. OF ROW	REMARKS																											
FIELD CROPS																														
Cotton	Thrips (early season reduction)	6 to 8 oz. per 1000 ft. of row for any row spacing. (5 to 6.5 lbs per acre on 40 inch row).	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.																											
	Nematodes Thrips	8 to 18 oz. per 1000 ft. of row for any row spacing. (6.5 to 14.7 lbs. per acre on 40 inch row spacing).	<p>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.</p> <p>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.¹</p> <p><u>Suggested use rates of NEMACUR 15% G in oz./1000 feet of row based on nematode infestation levels:*</u></p> <table> <tr> <th>Bandwidth</th><th>Low</th><th>Moderate</th><th>High*</th></tr> <tr> <td>In furrow</td><td>8</td><td>10</td><td>12</td></tr> <tr> <td>In covering soil</td><td>8</td><td>10</td><td>12</td></tr> <tr> <td>6 inch band</td><td>8</td><td>10</td><td>12</td></tr> <tr> <td>8 inch band</td><td>10</td><td>12</td><td>14</td></tr> <tr> <td>10 inch band</td><td>11</td><td>13</td><td>16</td></tr> <tr> <td>12 inch band</td><td>12</td><td>14</td><td>18</td></tr> </table> <p>*Use the highest recommended rates in fields with a history of nematode problems.</p>	Bandwidth	Low	Moderate	High*	In furrow	8	10	12	In covering soil	8	10	12	6 inch band	8	10	12	8 inch band	10	12	14	10 inch band	11	13	16	12 inch band	12	14
Bandwidth	Low	Moderate	High*																											
In furrow	8	10	12																											
In covering soil	8	10	12																											
6 inch band	8	10	12																											
8 inch band	10	12	14																											
10 inch band	11	13	16																											
12 inch band	12	14	18																											

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.

¹ 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.

NEMACUR 15% Granular pesticide

RECOMMENDED APPLICATIONS

CROP	PEST	DOSAGE NEMACUR 15%G - BAND: OZ/ 1000 FT OF ROW	REMARKS									
FIELD CROPS (Cont'd)												
Peanuts	Nematodes Thrips (early season reduction)	11 to 18.7 oz for any row spacing (or 10 to 17 pounds per acre on 36-inch rows)	<p>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.</p> <p>Use the high rate in fields with high populations of nematodes, in fields where root-knot species other than southern root-knot, <i>Meloidogyne incognita</i>, are present or in fields having a history of serious nematode damage.</p> <p>Do not feed or graze green peanut vines or peanut vine hay. Do not hog down treated peanut fields.</p>									
VEGETABLES												
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	9.8 to 18.4 ozs for any row spacing (or 8.9 to 16.7 lb per acre on 36-inch rows)	<p>Apply specified dosage per 1000 ft of row as a 12- to 15-inch band. Incorporate the granules into the soil. ON NARROW ROW CROPS, DO NOT ALLOW BANDS TO OVERLAP.</p> <p><u>Suggested use rates of NEMACUR 15% G in oz/1000 feet of row based on nematode infestation levels:*</u></p> <table><tr><td><u>Bandwidth</u></td><td><u>Low</u></td><td><u>High*</u></td></tr><tr><td>12-inch band</td><td>9.8</td><td>14.7</td></tr><tr><td>15-inch band</td><td>12.2</td><td>18.4</td></tr></table> <p>*Use the highest recommended rates in fields with a history of nematode problems.</p>	<u>Bandwidth</u>	<u>Low</u>	<u>High*</u>	12-inch band	9.8	14.7	15-inch band	12.2	18.4
<u>Bandwidth</u>	<u>Low</u>	<u>High*</u>										
12-inch band	9.8	14.7										
15-inch band	12.2	18.4										

NEMACUR 15% Granular pesticide

RECOMMENDED APPLICATIONS

CROP	PEST	DOSAGE NEMACUR 15% G BAND: OZ/1000 FT OF ROW	REMARKS				
<u>VEGETABLES</u> (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. <u>BAND WIDTH (36-inch row spacing)</u> <table><tr><td><u>12-inch</u></td><td><u>15-inch</u></td></tr><tr><td>14.7 oz/1000 ft of row or 13.4 lb/acre</td><td>18.4 oz/1000 of row or 16.7 lb/acre</td></tr></table> ON NARROW ROW CROPS, DO NOT ALLOW BANDS TO OVERLAP.	<u>12-inch</u>	<u>15-inch</u>	14.7 oz/1000 ft of row or 13.4 lb/acre	18.4 oz/1000 of row or 16.7 lb/acre
<u>12-inch</u>	<u>15-inch</u>						
14.7 oz/1000 ft of row or 13.4 lb/acre	18.4 oz/1000 of row or 16.7 lb/acre						

CROP	PEST	DOSAGE NEMACUR 15% G	REMARKS
Garlic	Bulb and Stem Nematode	9.2 to 18.4 oz/1,000 ft of row for any row spacing (15 to 30 lb per acre on 40-inch beds with two seed lines [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).

NEMACUR 15% Granular pesticide

RECOMMENDED APPLICATIONS

CROP	PEST	DOSAGE NEMACUR 15% G	REMARKS
<u>FRUIT</u> Citrus (Arizona, California and Texas only) (In Califor- nia do not apply to Kumquat, Tangelo or Citrus hybrids)	Nematodes	33 1/2 to 67 pounds	<p>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.</p> <p>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.</p>

CROP	PEST	DOSAGE NEMACUR 15% G - BAND: OZ/1000 FT OF ROW	REMARKS
<u>FRUIT (Cont'd)</u> Non-bearing Strawberry nursery stock	Nematodes	17 oz for any row spacing (or 13.8 pounds per acre on 40-inch rows)	<p>Apply specified dosage per 1000 ft. of row in a 12-inch band over the row immediately after transplanting and incorporate with cultivation equipment. Apply a second application in a 12-inch band over the row 8 weeks after transplanting. Incorporate by cultivation or by sprinkler irrigation (1 inch of water) immediately following application. Do not apply more than two applications to non-bearing nursery stock. Use only on strawberry nursery stock that will not be harvested for fruit within 20 months after application.</p>

NEMACUR 15% Granular pesticide

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 produce with a knapsack or similar equipment that is placed on the user's body.

PROTECTIVE CLOTHING AND EQUIPMENT

USE ONLY WHEN WEARING THE FOLLOWING PROTECTIVE CLOTHING AND EQUIPMENT DURING MIXING/LOADING, APPLICATION, REPAIR AND CLEANING OF MIXING, LOADING AND APPLICATION EQUIPMENT, DISPOSAL 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; chemical-resistant gloves; chemical-resistant shoes (or chemical-resistant shoe covers or chemical-resistant 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 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 protective 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.

NEMACUR 15% Granular pesticide

RE-ENTRY STATEMENTS (Continued)

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 (date of application). See "Re-entry Statements" for use of proper protective clothing. 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 swallowed, vomiting should be induced. (See Precautionary Statements on label).

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 Statements on label for hazards associated with the handling of this material. Do not walk 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 800-424-9300.

PRECAUTIONARY STATEMENTS
HAZARDS TO HUMANS AND DOMESTIC ANIMALS

D A N G E R  P O I S O N

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.

NEMACUR 15% Granular pesticide

PRECAUTIONARY STATEMENTS (Continued)

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 pupils. Stomach pains. Vomiting and diarrhea.

STATEMENTS OF PRACTICAL TREATMENT

In case of poisoning call a physician immediately. Have patient lie down and keep quiet. If 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:

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 or wetlands (swamps, bogs, marshes, and potholes). Do not contaminate water by cleaning of equipment or disposal of wastes.

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