

PM-22

John S. Thornton
Miles Inc.
P.O. Box 4913
Kansas City, MO 64120-0013

Dear Mr. Thornton:

Subject: Addition of Groundwater Advisory
Nemacur 10% Turf and Ornamental Nematicide
EPA Registration No. 3125-237
Your Application Dated March 31, 1992

The amendment referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA), as amended is acceptable provided that you:

1. Make the labeling changes listed below before you release the product for shipment bearing the amended labeling:

- Update the Environmental Hazards Statement to read:

Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark.

2. Submit one (1) copy of your final printed labeling before you release the product for shipment.

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

Sincerely yours,



Cynthia Giles-Larker
Product Manager (22)
Fungicide Herbicide Branch
Registration Division (H7505C)

Enclosure

cc: W. Crutchfield
Reregistration Branch
Reregistration and Special Review Division (H7508W)

U.S. LABEL

Reason to Issue: To add groundwater advisory statement requested by EPA.

Date of Draft: 3/25/92 (Pre-Reg)(S)

EPA Reg. No. 3125-237

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

10% Turf and Ornamental Nematicide

FOR EFFECTIVE CONTROL OF
NEMATODES IN ORNAMENTALS, NURSERY
STOCK, AND TURFGRASSES

ACTIVE INGREDIENT:

Ethyl 3-methyl-4-(methylthio)phenyl
(1-methylethyl)phosphoramidate 10%

KEEP OUT OF REACH OF CHILDREN

INERT INGREDIENTS: 90%
100%

DANGER  **POISON**

See rear panel for Statements
of Practical Treatment and other
Precautionary statements.

EPA Reg. No. 3125-237

PELIGRO

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.)

ACCEPTED
with **COMMENTS**
In EPA Letter Dated:

STOP - READ THE LABEL BEFORE USE

NET WEIGHT

POUNDS

5-8-92

Accepted under Federal Insecticide
and Fungicide Act
for the pesticide
registered under EPA Reg. No.

3125-237

Miles Inc.
Specialty Products
Box 4913, Kansas City, Mo. 64120-0013

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 10% Turf & Ornamental 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. MILES 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 MILES AND ARE, THEREFORE, THE RESPONSIBILITY OF THE BUYER.

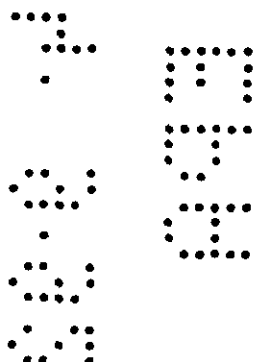
TURF GRASSES, ORNAMENTALS AND NURSERY STOCK:

NEMACUR 10% Turf and Ornamental Nematicide has shown excellent activity against the major genera of nematodes attacking turfgrasses and ornamental plants. When used according to directions NEMACUR 10% Turf and Ornamental Nematicide may control nematodes up to 7 months or longer.

NEMACUR 10% Turf and Ornamental Nematicide kills nematodes by contact action. Treated areas should be irrigated immediately after application in order to move the toxicant into the root zone.

NEMACUR 10% Turf and Ornamental Nematicide can be used on turfgrasses such as Bermuda and centipede grasses, bluegrasses, and bentgrasses. When applied uniformly according to directions, it will not harm established turfgrasses listed. Do not apply to new seeded areas until the plants have developed good root systems.

Consult your local Miles Representative, Agricultural Experiment Station or Extension authorities for information regarding proper timing of applications to turf.



RECOMMENDED APPLICATIONS

USE	PEST	DOSAGE-NEMACUR 10% TURF & ORNAMENTAL Nematicide	REMARKS
<p>Turfgrasses</p> <p>FOR USE ONLY ON GOLF COURSES, CEMETERIES, SOD FARMS, AND INDUSTRIAL GROUNDS</p> <p>In California, only for use on golf courses, and sod farms</p>	<p>Nematodes</p> <p>Mole crickets (except Calif- ornia)</p>	<p>2.3 pounds per 1000 square feet or 100 lbs/acre</p>	<p>Distribute specified dosage evenly over area to be treated. Irrigate the treated area <u>immediately</u> following application. Apply a minimum of 1/2 inch of water to move the product into the soil. The total irrigation must be completed within 6 hours of application. Apply irrigation so that puddling or runoff do not occur</p> <p>On golf course fairways apply across fairways within irrigation zones. Irrigation should be applied by zone immediately following application within that zone. Do not apply to more fairway irrigation zones than can be irrigated upon completion of application and finished within 6 hours after treatment.</p> <p>Do not apply product after soil has become saturated with water (reached field capacity).</p> <p>Do not treat newly seeded areas until the plants have developed good root systems. Do not apply more than 200 lbs of product per acre per year. <u>Do not use on residential lawns or public recreational areas other than golf courses.</u></p> <p>On sod farms, treated turf should not be cut for sod or sod handled for 30 days after treatment.</p>

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NEMACUR 10% Turf and Ornamental Nematicide

RECOMMENDED APPLICATIONS

USE	PEST	DOSAGE-NEMACUR 10% TURF & ORNAMENTAL	REMARKS
Iris, Lily and Narcissus bulbs (Except California)	Nematodes	60 to 100 lbs. per acre (based on 42- inch rows - 12,445 linear feet of row per acre) or 4.8 to 8 lbs per 1000 feet of row	Apply specified dosage in the furrow at time of planting so that the material is incorporated into the covering soil, or in a 10-to 12-inch band over the row after planting. <u>NOTE:</u> On year-old plantings, apply over the row. Irrigate immediately after treatment using a minimum of 1/2 inch of water. Tolerance of bulbs to NEMACUR may vary with varieties. Test a small number of plants if tolerance is not locally known. Do not apply to green foliage.
Leather leaf fern	Nematodes	100 lbs per acre	Apply specified dosage uniformly to the area. Irrigate immediately after treatment using a minimum of 1/2 inch of water.
Protea <u>Leucospermum spp.</u> <u>Protea spp.</u> <u>Banksia spp.</u> <u>Leucadendron spp.</u> (Hawaii only)	Nematodes	1 to 2.25 lbs. per 1000 sq. ft. (45 to 97.5 lbs. per acre)	Distribute specified dosage evenly over area to be treated as a post-plant application. Incorporate into the upper 2 to 3 inches of soil and irrigate treated area immediately using a minimum of 1/2 inch of water. Do not apply more than twice per year.
Anthurium	Nematodes	18.3 to 36.7 ozs. per 1000 square feet or 50 to 100 lbs per acre	Apply specified dosage uniformly to the area. Irrigate immediately after treatment using a minimum of 1/2 inch of water. Do not apply more than twice in any one 12 month period.

RECOMMENDED APPLICATIONS

USE	PEST	DOSAGE-NEMACUR 10% TURF & ORNAMENTAL	REMARKS
<p>Nursery stock</p> <p>[<u>Ajuga</u> (<u>Ajuga</u> <u>metallica</u> c.)</p> <p>Azalea (<u>Rhododendron</u> spp.)</p> <p>Boxwood (<u>Buxus</u> spp.)</p> <p>Cactus (<u>Cactus</u> spp.)</p> <p>Clematis (<u>Clematis</u> spp.)</p> <p>Cotoneaster (<u>Cotoneaster</u> spp.)</p> <p>Euonymus (<u>Euonymus</u> spp.)</p> <p>Firethorn (<u>Pyracantha</u> spp.)</p> <p>Flowering crab (<u>Malus</u> spp.)</p> <p>Flowering cherry (<u>Prunus</u> spp.)</p> <p>Gardenia (<u>Gardenia</u> spp.)</p> <p>Holly (<u>Ilex</u> spp.)</p> <p>Hibiscus (<u>Hibiscus</u> spp.)</p> <p>Ivy (<u>Hedera helix</u> <u>baltica</u>)</p> <p>Juniper (<u>Juniperus</u> spp.)</p> <p>Lilies (<u>Hosta</u> <u>grandiflora</u>)</p> <p>Pachysandra (<u>Pachysandra</u> spp.)</p> <p>Periwinkle (<u>Vinca minor</u>)</p> <p>Pieris (<u>Pieris</u> <u>janponica</u>)</p> <p>Pine (<u>Pinus</u> spp.)</p> <p>Rhododendron (<u>Rhododendron</u> spp.)</p> <p>Rose (<u>Rosa</u> spp.)</p> <p>Sedum (<u>Sedum</u> spp.)</p> <p>Spruce (<u>Picea</u> spp.)</p> <p>Viburnum (<u>Viburnum</u> spp.)</p> <p>Yews (<u>Taxus</u> spp.)</p> <p>Yucca (<u>Yucca</u> spp.)]</p>	Nematodes	100 lbs. per acre	<p>Apply specified dosage uniformly to the area. Irrigate immediately after treatment using a minimum of 1/2 inch of water.</p> <p>Do not apply more than twice per year per planting site. Do not consume fruit or nuts from treated plants.</p> <p>If nursery stock other than those listed are to be treated, treat a few plants first and observe for phytotoxicity before treating on a large scale.</p> <p>Workers shall not enter treated areas within 48 hours after completion of an application unless impervious boots and gloves are worn. In addition, for a 7-day period following completion of an application, impervious gloves and boots must be worn when entering treated fields that are muddy.</p>

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NEMACUR 10% Turf and Ornamental Nematicide

Recommended Spreader Settings for
Applications to Turf

These spreader settings are starting points for equipment calibration. As spreader age and condition, and terrain roughness have an effect on delivery rates, individual spreaders should be calibrated to determine the correct setting.

Spreader Type	Dosage - NEMACUR 10% Turf and Ornamental Lbs Per 1,000 Sq. Ft.	Applicator Speed	Spreader Width
	2.3		
Cyclone B-1	3 1/4	3 mph	6 ft
Gandy	17.5	2 mph	
10 T	24.5	4 mph	
603	6.75	2 mph	
	16.5	4 mph	
604	7.5	2 mph	
	11.25	4 mph	
605	7.5	2 mph	
	10.75	4 mph	
Turf Tender	17	2 mph	
	21	4 mph	
Lesco 101	C+	3 mph	6 ft
Scotts' RX-7	A+	3 mph	6 ft
Scotts' RX-8	G+	3 mph	6 ft

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 or plants not covered by the label. Use only according to label directions. Do not allow livestock or poultry to feed on grass or grass clippings.

Do not apply this product with a knapsack applicator 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, hand, 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. For those uses where a 48-hour reentry interval is recommended, the respirator need not be worn after the treated areas are dry after irrigation following application.

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. Unless more restrictive intervals are specified elsewhere on this label, do not allow reentry into treated areas until areas are dry following irrigation after application unless appropriate protective clothing is worn. Treated sod farms and commercial nurseries should not be re-entered for 48 hours after application unless protective clothing is worn. 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.

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, warning 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 10% Turf and

RE-ENTRY STATEMENTS (Continued)

Ornamental Nematicide (date of application). Unless more restrictive intervals are specified elsewhere on this label do not allow reentry into treated areas until areas are dry following irrigation after application, unless appropriate protective clothing is worn. Treated sod farms and commercial nurseries should not be reentered for 48 hours after application unless appropriate protective clothing is worn. 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

Not for use or storage in or around the home.

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 Miles Emergency Response Team for decontamination procedures or any other assistance that may be necessary. The Miles 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.

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.

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 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.