

PM 21

5481-456

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U.S. ENVIRONMENTAL PROTECTION AGENCY
Office of Pesticide Programs
Registration Division (H7505C)
401 "M" St., S.W.
Washington, D.C. 20460

EPA Reg. Number:

Date of Issuance:

5481-456

SEP 27 1996

Term of Issuance:

Conditional

NOTICE OF PESTICIDE:

- Registration
- Reregistration

(under FIFRA, as amended)

Name of Pesticide Product:

METAM SODIUM 376

Name and Address of Registrant (include ZIP Code):

AMVAC Chemical Corporation
4100 Washington Blvd.
Los Angeles, CA 90023

Note: Changes in labeling differing in substance from that accepted in connection with this registration must be submitted to and accepted by the Registration Division prior to use of the label in commerce. In any correspondence on this product always refer to the above EPA registration number.

On the basis of information furnished by the registrant, the above named pesticide is hereby registered/reregistered under the Federal Insecticide, Fungicide and Rodenticide Act.

Registration is in no way to be construed as an endorsement or recommendation of this product by the Agency. In order to protect health and the environment, the Administrator, on his motion, may at any time suspend or cancel the registration of a pesticide in accordance with the Act. The acceptance of any name in connection with the registration of a product under this Act is not to be construed as giving the registrant a right to exclusive use of the name or to its use if it has been covered by others.

This product is conditionally registered in accordance with FIFRA sec. 3(c)(7)(A) provided that you:

1. Submit and/or cite all data required for registration/reregistration of your product under FIFRA sec. 3(c)(5) when the Agency requires all registrants of similar products to submit such data; and submit acceptable responses required for reregistration of your product under FIFRA section 4.

2. Make the following label changes:

a. Revise the EPA Registration Number to read, "EPA Reg. No. 5481-456".

b. The label must bear only one signal word. The appropriate signal word for this product is "Danger". Change the front panel signal word and the signal word under Precautionary Statements to "Danger". On page 3 at the end of the Reentry statements, change "Warning" to "Danger".

Signature of Approving Official:

Date:

9/27/96

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In the second sentence under General Information, change "Caution" to "Note" or some other word which is not also a signal word.

- c. The first sentence of the Restrict Use Pesticide box must read "Due to Acute Toxicity.", as the reason for the restricted use classification (refer to PR Notice 93-1).
 - d. Under Precautionary Statements, delete or revise the statement "Keep children and pets out of treated areas until treatment is completed and pesticide has dissipated". This statement conflicts with the 48 hours. On page 2 in the third sentence under Reentry and on page 3 in the written warning, change the interval to 48 hours.
3. Submit three copies of the revised final printed label for the record.

If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA sec. 6(e). Your release for shipment of the product constitutes acceptance of these conditions.

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

Enclosures A/S

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RESTRICTED USE PESTICIDE
For retail sale to and use only by Certified Applicators or persons under their direct supervision, and only for those uses covered by the Certified Applicator's Certification.

Metam 376

FOR TURFGRASSES

A SOIL FUMIGANT SOLUTION FOR SUPPRESSION OF NEMATODES AND TO REDUCE THEIR DAMAGING EFFECTS ON TURFGRASSES SUCH AS BERMUDA, FESCUE AND RYE GRASS ON GOLF COURSES.

Not for use on turf being grown for sale or for other commercial use as sod, or for commercial seed production, or for research purposes.

ACCEPTED
with COMMENTS
In EPA Letter Dated
SEP 27 1996

Under the Federal Insecticide, Fungicide, and Rodenticide Act amended, for the pesticide registered under EPA Reg. No. 5481-456

ACTIVE INGREDIENT:
Sodium methyldithiocarbamate (anhydrous) - - -
INERT INGREDIENTS: - - - - -
TOTAL

38%
62%
100%

Contains 3.76 lbs. METAM SODIUM per gallon - U. S. Patent No. 4,994,487 AND 5,075,332.

KEEP OUT OF REACH OF CHILDREN CAUTION

"PRECAUCION AL USUARIO: Si usted no lee ingles, no use este producto hasta que la etiqueta haya sido explicado ampliamente"

STATEMENT OF PRACTICAL TREATMENT

Immediately start the procedures below and contact a Poison Control Center, a physician or the nearest hospital. Describe the type and extent of exposure, the victim's symptoms, and follow the advice given.
IF ON SKIN: Immediately flush skin with large amounts of running water for at least 15 minutes while removing contaminated clothing and shoes. Get medical attention if irritation persists.
IF IN EYES: Immediately flush eyes with large amounts of water for at least 15 minutes. Hold eyelids apart to ensure rinsing of the entire surface of the eye and lids with water. Get medical attention immediately.
IF INHALED: Remove to fresh air. If not breathing, clear the victims airway and start mouth to mouth artificial respiration. If breathing is difficult, give oxygen, preferably with a physicians advice. Get medical attention immediately.
IF SWALLOWED: Immediately give several glasses of water but do not induce vomiting. If vomiting occurs, give fluids again. Have a physician determine if condition of patient will permit induction of vomiting or evacuation of stomach. Do not give anything by mouth to an unconscious or convulsing person.

PRECAUTIONARY STATEMENT

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION: Harmful if inhaled or swallowed. Irritating to eyes, nose, throat and skin. Avoid breathing vapors or spray mist. Avoid contact with skin, eyes, or clothing. In case of contact, immediately remove contaminated clothing. Wash and dry clothing before reuse. Keep children and pets out of treated areas until treatment is completed and pesticide has dissipated.(MS376-1G.PM5\02-06-96)

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EPA REG. NO. 5481-ULA EPA EST. NO. 5481-CA-1
Net Contents 5 Gallons

AMVAC CHEMICAL CORPORATION
4100 East Washington Blvd. - Los Angeles, CA 90023 U.S.A.

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RESTRICTED USE PESTICIDE

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Metam 376

PROTECTIVE CLOTHING AND EQUIPMENT REQUIREMENTS

1. The following protective clothing and equipment are required to be used by persons actually engaged in carrying out any operations that are likely to involve direct contact with METAM 376 including mixing-loading, equipment calibrations or adjustments, clean up and repair of application equipment (equipment includes, but is not restricted to pumps, spray tips, drop lines, and holding tanks); sampling; clean up of spills; fumigant transfer; and rinsate disposal, or by any other person engaging in activities likely to result in direct contact with the product. This protective equipment must also be used for any operations that are done within 6 feet of unshielded, pressurized hoses containing METAM 376.

a. A properly FIT-TESTED NIOSH or MSHA approved half-face respirator with organic vapor cartridge plus non-venting chemical goggles, or a NIOSH or MSHA approved full-face respirator with organic vapor cartridges.

b. Body covering that has long sleeves and long pants. When a closed system is not used, mixers and loaders must also wear chemical resistant apron or cloth coveralls.

c. Chemical resistant gloves and boots.

2. The following protective clothing must be worn at all times by persons operating or monitoring application equipment or entering treated fields within 8 hours after completion of application.

a. Chemical resistant footwear.

b. Body covering that has long sleeves and long pants.

3. The following protective clothing and equipment must be immediately available at all times for use by persons operating tractor drawn ground application equipment or monitoring application equipment, or entering treated fields within 8 hours after completion of application.

a. A properly FIT-TESTED NIOSH or MSHA approved half-face respirator with organic vapor cartridge plus non-venting chemical goggles, or a NIOSH or MSHA approved full-face respirator with organic vapor cartridges. This equipment must be worn when the pungent, rotten egg odor of Metam 376 is detected, or any eye irritation is experienced.

b. Chemical resistant gloves. These must be worn when a person is engaged in carrying out any operation that is likely to involve direct contact with the product, including those operations listed in the preceding paragraph No. 1 above.

ENVIRONMENTAL HAZARDS

This product is toxic to fish. 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 apply where runoff is likely to occur. Do not contaminate water when disposing of equipment washwaters. Apply this product only as specified on this label.

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. Do not apply this product through any type of irrigation system.

REENTRY AND WORKER SAFETY STATEMENT

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 person. Do not enter treated areas for 8 hours after application unless protective clothing is worn; (chemical resistant footwear and body covering with long sleeves and long pants; a respirator if odor is detected, or any eye irritation is experienced and chemical resistant gloves if direct contact with the product is involved). Because certain States may require more restrictive reentry intervals consult your State Department of Agriculture for further information. Written or oral warning must be given to workers and persons who are expected to be in treated areas or in an area to be treated with this product. (MS376-2G.pm5 \ 02-06-96)

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Metam 376

REENTRY AND WORKER SAFETY STATEMENT continued:

(Indicate specific oral warnings which inform workers and persons of areas that may not be entered without specific protective clothing, period of time area must be vacated and appropriate actions to take in case of accidental exposure.) Posting also is required. Consult your State Dept. of Agriculture for further information. When oral warnings are given, warnings shall be given in a language customarily understood by the workers or persons. Oral warnings must be given if there is a reason to believe that written warnings cannot be understood. Written warnings must include the following information.

WARNING: Area treated with METAM 376 on Date() Time(). Do not enter without appropriate protective clothing for 8 hours after application. In case of accidental exposure see STATEMENT OF PRACTICAL TREATMENT found on the METAM 376 label.

STORAGE AND DISPOSAL

Do not contaminate water, food or feed by storage or disposal. **STORAGE:** Store product in a cool, dry, locked place out of reach of children. Do not store below 32° F. Product crystallizes at lower temperatures. If exposed, warm or store at higher temperatures and mix to redissolve crystals and assure uniformity before use. **PESTICIDE DISPOSAL:** Pesticide wastes are toxic. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal law. If these wastes cannot be disposed of 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: (METAL) Triple rinse or equivalent. Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by other procedures approved by State and local authorities. (PLASTIC) Triple rinse or equivalent. Puncture and dispose of in a sanitary landfill, or by incineration, or if allowed by State and local authorities by burning. If burned stay out of smoke.

GENERAL INFORMATION

Before applying METAM 376 to areas with poor water penetration or severe compaction prepare the turf by hollow core aerification or other available methods to increase water penetration. **CAUTION:** Do not use wetting agents to increase water penetration into the turf profile within 7 days of treatment.

IMPORTANT - DO NOT APPLY WITHIN 50 FEET OF ANY OCCUPIED BUILDINGS SUCH AS SCHOOLS, HOSPITALS, COMMERCIAL OR OFFICE BUILDINGS, FACTORIES, RESIDENTIAL BUILDINGS, ETC.

PRODUCT INFORMATION

Metam 376 is a water soluble liquid. When applied according to the "Use Directions" on this label the liquid is converted into a gaseous fumigant. After a sufficient interval of time the gas totally dissipates.

WHEN TO USE MAXIMUM AND MINIMUM RATES

The application rate of METAM 376 is dependent on the soil type to be treated, density or thickness of the thatch layer and depth of the desired treatment. Generally a light sandy soil requires a lower application rate than a heavier mineral soil. In addition, turf with a dense or thick thatch generally requires the higher rate.

PLANNING THE APPLICATION

METAM 376 may be applied to turf grasses any time of the year when chronic nematode damage is adversely affecting the quality of the turf grass. Do not repeat an application within 30 days.

THATCH MOISTURE AT TIME OF TREATMENT

The thatch layer and underlying soil to depth of treatment should contain sufficient water (>70% field capacity) at the time of application. (MS376-3G.PM5 \ 02-06-96)

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PHYTOTOXICITY

Use of METAM 376 in accordance with the label may cause temporary discoloration (phytotoxicity) to some turf. Before using this product it is recommended that a small area be treated to determine the level of phytotoxicity, if any, on your turfgrass. Discoloration, if any, will appear within 7 days.

NOTE: Higher rates may cause more discoloration than lower rates. For test procedures and additional information contact your local METAM 376 distributor or AMVAC CHEMICAL CORPORATION.

DIRECTIONS FOR USE ON TURFGRASS

SPRAY ON AND IRRIGATE INTO SOIL

Application rates:

Use 5.14 to 15.4 fluid ounces per 1,000 sq.ft. which is equal to 1.75 to 5.25 gallons of product per acre.

Application Notes:

1. Mix 1.75 to 5.25 gallons of METAM 376 in 100 gallons of total spray liquid (1.75 to 5.25 gallons of METAM 376 in 98.75 to 94.75 gallons of water respectively) for each treated acre. This is equivalent to 5.14 to 15.4 fluid ounces per 2.29 gallons of water per 1,000 sq.ft.

2. Apply using a spray boom with low pressure spray tips that produce large droplet sizes. Select spray tip size and ground speed per manufacturer recommendations to maintain spray boom pressure of 30 p.s.i. or less. Do not exceed 30 p.s.i. on the spray boom. **NOTE:** Total coverage of the turf foliage is not necessary as METAM 376 is a soil fumigant.

3. Following spray application irrigate at least twice with sufficient water to penetrate the soil profile 3 to 5 inches deep. The volume of water will vary with soil type and depth of control desired. First irrigation to be initiated within 20 minutes of spray application. Apply second irrigation within one hour of the spray application. A third irrigation may be required to penetrate the soil to the desired depth. Do not exceed 0.5 inches of water on each irrigation.

SOIL DRENCH APPLICATION TO TURF

Application Rates:

Use 0.51 to 1.54 fluid ounces /100 sq.ft. which is equal to 1.75 to 5.25 gallons of product per acre.

Application Notes:

1. Mix 0.51 TO 1.54 fluid ounces of Metam 376 in 62 gallons of water and drench onto 100 sq.ft. (62 gallons of water per 100 sq.ft. is equivalent to 1 inch of water per acre.) **NOTE:** Use diluted product within 1 hour of mixing.

2. Apply with a hand held wand with a low pressure water breaker such as a "Dram Water Breaker". Delivery to the wand from the tank can be made with any pump capable of delivering 10 to 15 gallons per minute at 15 to 25 p.s.i.

3. Immediately after application, irrigate with 0.1 inch of water to remove excess METAM 376 from grass blades and surface thatch.

4. Application of METAM 376 by the soil drench method should be limited to treatment of small areas only.

(MS376-4G.PM5 \ 02-06-96)

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Metam 376

IMPORTANT: PLEASE READ BEFORE USE

By using this product, the user accepts the following: **LIMITED WARRANTY:**

AMVAC warrants that (a) this product conforms to the chemical description on its label; (b) this product is reasonably fit for the purposes stated on its label, subject to the inherent risks referred to herein, when used in accordance with its directions; and (c) that the directions, warnings, cautions, and other statements on this label are based upon responsible experts' evaluations of reasonable tests of effectiveness, of toxicity to laboratory animals and plants, and upon reports of field experience. Testing has not been performed on all varieties of turfgrass in all states, or under all application, weather and turf conditions.

There are no express warranties other than those set forth herein. Amvac neither makes nor intends, nor does it authorize any agent or representative to make, any other warranty, express or implied. Amvac expressly excludes and disclaims all implied warranties of merchantability, fitness for particular purpose, or any other warranty of quality or performance.

This warranty does not extend to, and the user shall be solely responsible for, any loss or damage which results from the use of this product in any manner which is inconsistent with this label's directions, warnings or cautions.

User's exclusive remedy and Amvac's or Seller's exclusive liability for any claim, loss, damage, or injury resulting from the use or handling of this product, whether or not based in contract, negligence, strict liability in tort, or otherwise shall be limited, at Amvac's option, to replacement of, or repayment of the purchase prices for, the quantity of product with respect to which damages are claimed. In no event shall Amvac or Seller be liable for special, indirect, or consequential damages resulting from the use or handling of this product. (MS376-5G.PM5 \ 02-06-96)

FOR THE FOLLOWING EMERGENCIES, PHONE 24 HOURS A DAY
TRANSPORTATION: CHEMTREC - - - - - 1-800-424-9300
MEDICAL: HAZARD INFORMATION SERVICES (H.I.S.) 1-800-228-5635 Ext. 169

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