

**FILE**

**JAN 16 1992**

Mr. Jack L. Prieur  
AMVAC Chemical Corp.  
4100 East Washington Blvd.  
Los Angeles, CA 90023

Dear Mr. Prieur:

Subject: Metam-Sodium Label Amendments  
Metam Sodium  
EPA Registration No. 5481-350  
Metam Sodium Soil Fumigant For All Crops  
EPA Registration No. 5481-418  
AMVAC Metam  
EPA Registration No. 5481-420  
Your Applications of December 5, 1991

Labeling you submitted pursuant to the agreement signed by the Metam-Sodium Task Force and the United States Environmental Protection Agency (EPA) has been reviewed and found to be acceptable with the following comments:

For products, Metam Sodium, EPA Registration No. 5481-350, and Metam Sodium Soil Fumigant for All Crops, EPA Registration No. 5481-418, make the following label changes.

1. For both the label and in the booklet, under Environmental Hazards, change the second sentence to read "Do not contaminate water when disposing of equipment washwaters."
2. Under the Precautionary Statements Section C, insert the words, "monitoring application equipment" between "ground application equipment" and "or entering treated fields".

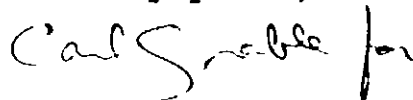
For product, AMVAC Metam, EPA Registration No. 5481-420, make the following label changes.

1. Same comments as outlined for item #1 above.
2. Since the label uses do not include chemigation as an application method for the small area use product, delete references to chemigation in the Protective Clothing and Equipment Section.
3. Under "Protective Clothing and Equipment Requirements", in paragraphs 1a and 3a, capitalize and underline "fit-tested".
4. Under "Reentry and Worker Safety Statement, in the third sentence, delete "as described in the Protective Clothing Statement on this label" and add "(chemical resistant footwear and body covering with long sleeves and long pants; a respirator if odor is detected and chemical resistant gloves if direct contact with the product is involved)."
5. Under General Instructions, clarify item i. Posting is the only required for non-tarped areas.
6. Under "Prevention of root graft-----", change to read "Drill holes in soil approximately-----".
7. Under "Treatment of Potting Soils", assure that the dosage rate under "cement mixer" is correct. It would seem that rates for both shredder and cement mixer would be equivalent. Previously accepted labels for similar products recommend 1 fl. oz. per 2 cu. ft. for both methods.

Submit five (5) copies of the final printed label.

If you have any questions regarding this matter, please contact me or Sidney Jackson at (703) 305-7610.

Sincerely yours,



Susan T. Lewis  
Product Manager (21)  
Fungicide-Herbicide Branch  
Registration Division (H7505C)

**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.

# AMVAC METAM

**A SOIL FUMIGANT SOLUTION FOR POTTING and PLANTING SOILS and FOR SMALL AREAS - TO CONTROL SOIL-BORNE PESTS THAT ATTACK ORNAMENTALS, FOOD AND FIBER CROPS.**

**MAY BE APPLIED BY SPRINKLER CAN, LIQUID FERTILIZER HOSE-END SPRAYER or HOSE PROPORTIONER, SOIL INJECTION OR ROTARY TILLER**

**Controls Weeds such as Annual Bluegrass, Bermudagrass, Chickweed, Dandelion, Ragweed, Henbit, Lambsquarter, Amaranthus sp., Watergrass, Johnson Grass, Nutgrass, Wild Morning-glory and Purslane.**

**Nematodes and Symphylids**

**Soil-Borne diseases such as Rhizoctonia, Pythium, Phytophthora, Verticillium, Sclerotinia, Oak Root Fungus and Club Root of Crucifers.**

ACTIVE INGREDIENT: Sodium methylthiocarbamate(anhydrous)	32.7%
INERT INGREDIENTS: - - - - -	67.3%
<b>TOTAL</b>	<b>100.0%</b>

Contains 3.18 lbs Active Ingredient METAM SODIUM per gallon

## KEEP OUT OF REACH OF CHILDREN WARNING

**PRECAUTIONAL STATEMENT:** Sustained no lee ingries, 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 immediately. **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 victim's airway and start mouth to mouth artificial respiration. If breathing is difficult, give oxygen preferably with a physician's 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

**WARNING:** Harmful if inhaled or swallowed, irritating to eyes, nose, throat and skin. Avoid breathing vapors or spray mist. Do not get in eyes, on skin, or clothing. Causes skin irritation. May be fatal if absorbed through the skin. In case of contact, immediately remove contaminated clothing. Wash and dry clothing before reuse. Keep children & pets out of treated areas until treatment is completed and pesticide has dissipated.

#### PROTECTIVE CLOTHING AND EQUIPMENT REQUIREMENTS

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 Sodium including mixing-loading equipment calibrations or adjustments, clean up and repair of application equipment (equipment includes but is not restricted to chemigation equipment, shanks, tillers, drop lines, and holding tanks); sampling, clean up of spills, fumigant transfer; and residue 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 8 feet of unshielded, pressurized hoses containing Metam Sodium.

**1. 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 48 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 48 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 Sodium is detected. **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. (SEE SIDE PANEL FOR ADDITIONAL PRECAUTIONARY STATEMENTS)

EPA REG. NO. 5481-420 EPA EST. NO. 5481-CA-1

### 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 by cleaning equipment or 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 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 48 hours after application unless protective clothing is worn as described in the PROTECTIVE CLOTHING STATEMENT on this label. Because certain State Departments 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. (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.) 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 Sodium on Date: [ ] Do not enter without appropriate protective clothing for 48 hours after application. In case of accidental exposure see STATEMENT OF PRACTICAL TREATMENT found on the Metam Sodium label. Posting also is required. Consult your State Department of Agriculture for further information.

### 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 0° F. Product crystallizes at lower temperatures. If exposed to warm or store at higher temperatures and mix to redissolve crystals to assure uniformity before use. **PESTICIDE DISPOSAL:** Pesticide wastes are toxic. Improper disposal of excess pesticide, spray mixture, or empty container 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, out of smoke.

**GENERAL INSTRUCTIONS:** Before applying this product always thoroughly cultivate the area to be treated, breaking up clods and loosening soil deeply and thoroughly a week before treatment. Moisten soil to the desired depth. If the soil has crusted, cultivate immediately before application.

Then: **a.** Lightly sprinkle with water the area to be treated before application of Metam Sodium. **b.** Apply Metam Sodium uniformly over the area. Immediately sprinkle treated area with water to seal the soil. Sprinkle point of run-off. **NOTE: DO NOT ALLOW WATER TO RUN-OFF TREATED AREA AS PLANTS IN ADJOINING AREAS MAY BE DAMAGED.**

**c.** Immediately cover treated area with a plastic tarp. **e.** Weight the tarp down around the edges to prevent wind or inadvertent removal of tarp. **NOTE: WEIGHTS MUST BE HEAVY ENOUGH TO DETER ANIMALS AND CHILDREN.**

**f.** Do not remove tarp for 48 hours. **g.** Seven days after treatment cultivate area to a depth of 2 inches to aerate the soil. **h.** Do not seed earlier than 21 days after application. **i.** Posting is required. **REENTRY AND WORKER SAFETY STATEMENT** on this label.

**IMPORTANT! - TARPING IS REQUIRED WHEN USING METAM SODIUM NEAR ( 1/2 MILE) TO POPULATED AREAS** such as schools, hospitals, commercial or office buildings, factories, residential areas, etc. Do not use Metam Sodium in Seed Beds, Pottling/Planting Soils, Planting Lawns and other small planting area uses. **TARPING IS NOT REQUIRED IF TREATMENT IS MADE FURTHER THAN 1/2 MILE FROM POPULATED AREAS.**

NET CONTENTS \_\_\_ GALLON