

METAM SODIUM

Refer to Supplemental PRODUCT USE & CHEMIGATION BOOKLET for Additional Instructions
**A SOIL FUMIGANT SOLUTION FOR ALL CROPS
MAY BE APPLIED BY SPRINKLER, HOSE PROPORTIONER,
SOIL INJECTION OR CHEMIGATION
FOR CONTROL OF SOIL BORNE PESTS THAT ATTACK
ORNAMENTALS, FOOD AND FIBER CROPS.**

Controls Weed such as Annual Bluegrass, Bermuda grass, Chickweed, Dandelion, Ragweed, Henbit, Lambsquarter, Amaranthus, sp. Watergrass, Johnson Grass, Nutgrass, Wild Morninglory and Purslane.
Nematodes and Symphyliids
Soil Borne disease such as Rhizoctonia, Pythium, Phytophthora, Verticillium, Sclerotinia, Oak Root Fungus and Club Root of Crucifers.

ACTIVE INGREDIENT: Sodium methylidithiocarbamate (anhydrous) 32.7%
INERT INGREDIENTS: 67.3%
TOTAL 100.0%

Contains 3.18 lbs Active Ingredient METAM SODIUM per gallon

KEEP OUT OF REACH OF CHILDREN WARNING

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

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.

SEE SIDE PANEL FOR ADDITIONAL PRECAUTIONARY STATEMENTS
EPA REG NO 5481-350 EPA EST NO 5481-CA-1

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. When applying in enclosed areas, wear a mask or respirator of a type passed by MSHA or NIOSH for protection against METAM SODIUM. Keep children and pets out of treated areas until treatment is completed and pesticide has dissipated.

ENVIRONMENTAL HAZARDS

This product is toxic to fish. Do not apply directly to water or wetlands. Do not apply where runoff is likely to occur. Do not contaminate water by cleaning equipment or containers with this product. 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. Refer to Supplemental PRODUCT USE and CHEMIGATION BOOKLET. Do not apply this product through any irrigation system unless the supplemental labeling on the BOOKLET is followed.

RE-ENTRY 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 label directions must be followed by untrained persons. Do not enter treated areas without protective clothing until sprays have dried. Because certain states may require more restrictive re-entry intervals for various crops treated with this product, consult your State Department of Agriculture for further information. (Continued on Side Panel)

NET CONTENTS GALLON (S)
AMVAC CHEMICAL CORPORATION
4100 East Washington Blvd - Los Angeles, CA 90023

RE-ENTRY AND WORKER SAFETY STATEMENT (Continued)

Written or oral warnings must be given to workers 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 of areas or fields that may not be entered without specific protective clothing, period of time field 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 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:

WARNING: Area treated with METAM SODIUM on (Date) . Do not enter without appropriate protective clothing until sprays have dried. In case of accidental exposure see STATEMENTS OF PRACTICAL TREATMENT found on the METAM SODIUM product 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 0° 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 mixture 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 INSTRUCTIONS: Before applying this product area is thoroughly cultivate the area to be treated, breaking up clods and loosening soil deeply and thoroughly. A week before treatment, moisten soil after cultivation to the desired depth; sprinkle or flood irrigate immediately before application, cultivate lightly if the soil has crusted. See POTATOES section for specific directions on the application of METAM SODIUM to potato fields where no till stubble or cover crops exist. To prevent loss from evaporation, use only at times when air temperature is moderate and there is little wind movement. Soil temperatures must be in the range of 60° to 90° F. at a 3 inch depth. For other conditions see section CULTIVATION & PLANTING AFTER APPLICATION. Do not apply to the soil surface as in the sprinkler method, when air temperature is over 90° F or when low humidity or high winds would cause loss of METAM SODIUM before it can be dried into the soil with additional water. If fumes become unpleasant during treatment, apply more water to seal the fumes into the soil where they should be confined to achieve maximum fumigant benefit.

The activity of METAM SODIUM is increased by the use of tarp (plastic, paper or fabric) spread loosely over the treated areas and secured to prevent removal by wind. Keep covered for a minimum period of 48 hours. Seven days after treatment cultivate areas to depth of 2 inches to aerate the soil. Do not seed earlier than 21 days after application when tarping method is used. Use promptly after mixing with water. Do not allow solution to stand. Flush equipment with water after each day's use. Disassemble valves and clean as directed.

PRODUCT INFORMATION

METAM SODIUM is a water soluble liquid which applied to properly prepared soil, the liquid is converted into a gaseous fumigant. After sufficient interval of time, the gas dissipates leaving the soil ready for planting. METAM SODIUM is recommended for the control of the following soil borne pests that attack ornamentals, food and fiber crops:
Weed seeds and seedlings Annual Bluegrass, Bermuda grass, Chickweed, Dandelion, Ragweed, Henbit, Lambsquarter, Amaranthus sp., Watergrass, Johnson Grass, Nutgrass, Wild Morninglory and Purslane. Nematodes and Symphyliids (Garden Compede) and Soil Borne Diseases such as (Rhizoctonia, Pythium, Phytophthora, Verticillium, Sclerotinia, Oak Root Fungus and Club Root of Crucifers).

USE PRECAUTIONS: Keep children and pets out of treated area. Keep off desirable lawns and plants. Do not apply within 3 feet of the drip line of desirable plants, shrubs or trees. Do not use in confined areas without adequate ventilation OR when fumes may enter nearby houses containing growing plants. Do not use in greenhouses where desirable plants are

present. Keep container tightly closed when not in use. Do not store near feed or food.

CULTIVATION AND PLANTING AFTER APPLICATION

On well drained soils of light to medium texture which are not excessively wet. A cold, planting may follow within 14 to 21 days after treatment. If soils are heavy or especially high in organic matter or remain wet and cold (below 60° F) following application, a minimum interval of 30 days should be observed. Where dosages are greater than 100 gal. per acre wait at least 60 days. On heavy, wet soils, light surface cultivation to break up crusting and promote drying of the soil should be done 5 to 7 days after application. This cultivation may be repeated as necessary. To avoid reinfesting treated soils, cultural practices should be such that untreated soils are not mixed with treated soils.

SPECIAL INSTRUCTIONS: When treating potting soil, or heavier field soils, including soil high in clay or organic matter, it is essentially important that the soil be allowed to aerate and dry thoroughly after using METAM SODIUM. During cold and wet weather, frequent shallow cultivations may aid the escape of METAM SODIUM from the soil. If in doubt transplant a seedling plant and examine for injury before planting crop.

USES, APPLICATION METHODS AND RATES FOR SHALLOW PESTS IN SEED BEDS, PLANT BEDS, LAWNS AND OTHER LIMITED AREAS

SPRINKLER CAN METHOD: Place 1 pt. METAM SODIUM (1 1/2 pt on very heavy soils or for deep rooted weeds) in a sprinkling can, fill with water and sprinkle uniformly over 50 sq ft. of well prepared soil. Sprinkle immediately with water until soil is sealed or tarp for 48 hours.

HOSE PROPORTIONER METHOD: Add 1 Qt. to 3 quarts of water in a bucket or other container and apply using a hose proportioner to an area of 100 sq ft. Sprinkle with water until soil is sealed or tarp for 48 hours.

SOIL INJECTION: Space injection shanks 5 inches apart and inject METAM SODIUM into well prepared soil. Follow immediately with a roller to smooth and compact the soil surface. Light watering or a tarp after rolling helps to prevent gas escape. For seedbeds a dosage of 75 to 100 gallons per acre, (1 1/2 to 2 pts per 100 sq ft.) is recommended.

ROTARY TILLER: Spray or sprinkle diluted METAM SODIUM immediately in front of tiller. Use 1 Qt. in 2 1/2 gals water per each 100 sq ft. Follow immediately with a roller to smooth and compact the soil surface. Light watering or a tarp after rolling will help prevent gas escape.

FIELD APPLICATION - WHERE ENTIRE AREA IS BEING TREATED:
SOIL INJECTION: Space thin injection shanks 5 inches apart and inject METAM SODIUM 4 inches deep into well prepared soil. Follow immediately with a roller to smooth and compact surface. Light watering or a tarp after rolling helps to prevent gas escape. For field use, 40 to 100 gallons of METAM SODIUM are recommended.

SPRINKLER SYSTEM: Use only those sprinkler systems which give large water droplets to prevent excessive loss. Use 75 to 100 gals METAM SODIUM per acre. For control of shallow pests (top 1 ft. or less of soil), run sprinklers 5 to 10 minutes. In next 10 to 20 minutes inject all METAM SODIUM needed for the area covered. On very light soils keep surface moist by sprinkling for 2 to 3 days. For control of pests deeper than 18 inches in the soil divide METAM SODIUM into 3 or more equal parts and apply at intervals during the sprinkling period.

CHECK OR FLOOD IRRIGATION: Meter METAM SODIUM at a steady rate into water during irrigation. Use 50 to 100 gal. per acre depending upon the kind of pest and depth desired, 3 to 18 inches of water per acre.

FIELD APPLICATION TO BEDS OR ROWS

SOIL INJECTIONS: METAM SODIUM may be injected into pre-formed plant beds following the directions given above under soil injection. If a wider treated band is desired space 3 or more shallow injection shanks 5 inches to cover the desired treating width. Use thin injection shanks and inject METAM SODIUM 4 inches deep into well prepared soil. Follow immediately with a roller to seal the soil surface. Light watering or a tarp after rolling helps to prevent gas escape. Apply at the rate of 40 to 122 1/2 fluid ounces per 1,000 linear feet of bed per chisel (40 to 100 gals per treated area). Space shanks 5 inches apart to cover the desired treating width.

SOIL COVERING METHOD (Bed-over methods): METAM SODIUM may be sprayed or dropped into the bed or row and into the soil immediately ahead of bed-making equipment. Cover the METAM SODIUM with soil to a depth of 3 to 6 inches. The soil should be rolled and compacted immediately after at the rate of 50 to 100 gallons per acre of treated soil or 14 to 20 1/2 fluid ounces per 100 linear feet of row (12-inch wide bed). If a narrower or wider bed is to be treated adjust the fluid ounces per 100 linear feet of row to reflect the actual treated acres.

METHOD OF DETERMINING FLUID OUNCES / 100 FEET OF LINEAR ROW

- 1) Determine width of bed in feet; by dividing the width of bed in inches by 12. Example: 8" bed = 8" divided by 12" = 0.666 feet
- 2) Determine square feet in 100 linear feet of bed by multiplying the width of the bed by 100. Example: 0.666 ft. x 100 ft. = 66.66 sq ft.

- 3) Determine the treated acres per 100 linear feet of bed by dividing the sq. ft. by 43,560 (sq. ft. in acre). Ex: 66.66 sq. ft. divided by 43,560 = 0.0015 acre.
- 4) To determine the fluid ounces per 100 linear ft.
 - a) 1 gal = 128 fl. oz.; 50 gals. = 6400 fl. oz.; 100 gal = 12,800 fl. oz.
 - b) Multiply fluid ounces by acres. Example: 50 gals = 6400 fl. oz. x 0.0015 = 9.6 fl. oz. per 100 linear feet row.

TREATMENT OF TREE REPLANT SITES

After removing dead or diseased trees and as much of the root system as possible, make a shallow basin over the planting site. Add METAM SODIUM to the stream of water while filling the basin. Use 1 qt. METAM SODIUM per 100 sq. ft. in sufficient water (depending on soil type) to penetrate at least 6 ft. For control of Oak Root Fungus, use a basin at least 20' x 20' ft. square. Increase dosage to 2 qts. per 100 sq. ft. in sufficient water to penetrate to the depth of root system. If water is tanked to the planting site, add METAM SODIUM to the water and mix before filling basin.

STEPS TO FOLLOW WHEN TREATING POTTING SOIL

- A. SPRINKLER METHOD:**
 1. Spread soil in a smooth layer 4 inches high on concrete or on pretreated soil.
 2. Sprinkle METAM SODIUM at the rate of 1 pint in 5 gallons of water per 100 sq. ft. of surface area.
 3. Layers can be treated one on top of another.
 4. Sprinkle top layer with sufficient additional water to seal the surface, or cover with tarp (plastic, kraft paper, etc.)
- B. CEMENT MIXER:** Add METAM SODIUM to soil mix at rate of 1 fl. oz. per cu. ft. of soil in cement or similar mixer. Mix thoroughly.
 2. After soil is treated and piled, sprinkle water over entire surface to seal in gas; OR cover with tarp (plastic, kraft paper, etc.)
- C. SHREDDER:** Dilute METAM SODIUM in sufficient water to obtain even distribution. As soil is ejected from shredder, spray uniformly on soil stream at rate of 1 fl. oz. per 2 Cu Ft. soil.
 2. After all soil is retreated and piled, apply light water seal to entire surface or cover with tarp.

TOBACCO PLANT BEDS

Field applications are recommended wherever possible. Head end follow directions carefully. Treatment in the South should generally be made before November 30. Prepare the bed 5 to 7 days before application to insure best conditions for weed seed germination and fumigant action. The bed should be free of weeds, level and in good tilth. Cover the bed immediately after treatment with plastic cover. Keep covered no less than one day but no more than two days. The cover need not be tented but should be secure to prevent wind from uncovering the treated area. Seven days after date of application loosen the treated soil to a depth of 2 inches. Do not seed tobacco earlier than 21 days after application.

A. TARP METHOD: Apply 1 to 1 1/2 gallons of METAM SODIUM in a minimum of 40 gallons of water per 100 sq. yds. Apply uniformly over the entire bed. Follow GENERAL DIRECTIONS given above.

B. FRENCH METHOD: Apply 2 1/2 gallons of METAM SODIUM in 150 to 200 gallons of water per 100 sq. yds. Application may be made with sprinklers, sprayers with nozzles or any suitable equipment. Follow GENERAL DIRECTIONS given above.

SYMPHYLIID CONTROL

Soil should be in good bed condition to a depth of 8 to 10 inches. Maintain adequate soil moisture during the Spring season to bring symphyliids to the upper soil surface. Treat during July - August when symphyliids are in the upper soil surface. Apply as a broadcast treatment at 20 gallons METAM SODIUM per acre using blade or chisel injectors. Inject below level of Symphyliid concentration, usually 6 to 8 inches. Pack soil with a roller immediately after application.

POTATOES

For suppression of potato pests such as Nematodes, Weed Seeds and Verticillium Dahliae: **SOIL INJECTION:** Apply 40 gallons per acre of METAM SODIUM. Follow directions for FIELD APPLICATION WHERE ENTIRE AREA IS TREATED. **SPRINKLER SYSTEM PRE-PLANT:** Apply 50 to 100 gallons of METAM SODIUM per acre. Inject to a sprinkler system that can deliver an even water distribution for the area being treated. (See METAM SODIUM Product Use & Chemigation Booklet). Soil temperatures should be in the range of 40° to 90° F. in the treatment zone. On very light soils, keep surface area moist by sprinkling periodically for 2 to 3 days. Apply in a minimum of 1 acre inch of water. METAM SODIUM may be applied where crop stubble or vegetation exist without prior tillage, provided there is adequate soil penetration of METAM SODIUM.
PEPPERMINT

Verticillium Wilt: When infestation is limited to small spots in a field, spread can be reduced by treating the infected spots. Apply at the rate of 100 gallons of METAM SODIUM per acre using injector blade or thin shank injector rig. Follow directions for "FIELD APPLICATION - WHERE ENTIRE AREA IS BEING TREATED." See Supplemental BOOKLET for more. This is Notif. Amount copy to change the word "soils" to "crops" in 4th line of Reentry Statement on front panel. (This version dated 12-21-80 was EPA ACCEPTED 11-23-80)

NOTIFICATION:
LABEL NOT FOR SALE PER PER NOTIC
DATE JAN 4 1991