

PRODUCT INFORMATION

VAPAM is a water soluble liquid. When 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. Vapam is recommended for the control of the following soil-borne pests that attack ornamental, food and fibre crops: Weeds and germinating weed seeds (annual bluegrass, Bermudagrass, chickweed, dandelion, ragweed, henbit, lambsquarters, *Amaranthus* sp. (pigweed, careless weed) watergrass, Johnsongrass, nutgrass, wild morningglory and purslane) nematodes, symphyliids (garden centipede); and soil-borne diseases (*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 where 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.

FISH CAUTIONS: This product is toxic to fish. Keep out of lakes, streams, or ponds. Do not apply where runoff is likely to occur. Do not apply when weather conditions favor drift from areas treated. Do not contaminate water by cleaning of equipment, or disposal of wastes. Apply this product only as specified on this label.

DIRECTIONS FOR USE

Before applying Vapam always cultivate thoroughly 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. This step is essential for all methods of use. Immediately before application, cultivate lightly if the soil has crusted.

To prevent loss from evaporation, use only at times when air temperature is moderate and there is little wind movement. Soil temperature must be in the range of 60-90 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 Vapam before it can be drenched 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 Vapam is increased by the use of a tarp (plastic, paper or fabric) spread loosely over the treated area and secured to prevent removal by wind. Keep covered for a minimum period of 48 hours. Seven days after treatment cultivate area 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 all equipment with water after each day's use. Disassemble valves and clean carefully.

CULTIVATION AND PLANTING AFTER APPLICATION

On well drained soils of light to medium texture which are not excessively wet or cold following application, planting may take place 14 to 21 days after treatment. If soils are heavy or especially high in organic matter or remain wet and/or cold (below 60 F.) following application of Vapam, 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 soils high in clay or organic matter, it is especially important that the soil be allowed to aerate and dry thoroughly after using Vapam. During cold and/or wet weather, frequent shallow cultivations may aid the escape of Vapam from the soil. If in doubt, transplant a seedling plant and examine for injury before planting crop.

USES, APPLICATION METHODS & RATES

FOR SHALLOW PESTS IN SEED BEDS, PLANT BEDS, LAWNS AND OTHER LIMITED AREAS:

SPRINKLING CAN METHOD: Place 1 pt. Vapam (1½ 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. Vapam to 3 qt. 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 in. apart and inject Vapam 4 in. into well prepared soil. Follow immediately with a roller to smooth and compact the soil surface. Light watering or a tarp after rolling helps prevent gas escape. For seedbeds a dosage of 75 to 100 gal. per acre (1½ pt. to 2 pt. per 100 sq. ft.) is recommended.

ROTARY TILLER: Spray or sprinkle diluted Vapam immediately in front of tiller. Use 1 qt. Vapam in 2½ gal. 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 in. apart and inject Vapam 4 in. deep into well prepared soil. Follow immediately with a roller to smooth and compact surface. Light watering or a tarp after rolling helps prevent gas escape. For field use, 40 to 100 gal. Vapam per acre is recommended.

SPRINKLER SYSTEM: Use only those sprinkler systems which give large water droplets to prevent excessive loss. Use 75 to 100 gal. Vapam per acre. For control of shallow pests (top 1 ft. or less of soil), run sprinklers 5 to 10 min. In next 10 to 20 min. inject into the sprinkler system all Vapam needed for the area covered. On

VAPAM

SOIL FUMIGANT SOLUTION FOR ALL CROPS

® TM Stauffer Chemical Company

ACTIVE INGREDIENTS: Sodium methyl dithiocarbamate (anhydrous)

INERT INGREDIENTS

U.S. Pat. Nos. 2,766,554; 2,791,605

CAUTION

HARMFUL IF INHALED OR SWALLOWED • IRRITATING TO EYES, NOSE, THROAT AND

Avoid breathing vapor or spray mist.

Do not get in eyes, on skin, on clothing.

In case of contact, immediately remove contaminated clothing or shoes and flush skin with plenty of water, and apply soothing lotion; for eyes, flush with water for at least 15 minutes and get medical attention.

DO NOT REUSE CONTAINER. DESTROY WHEN EMPTY.

Keep Out of Reach of Children

Wash and dry clothing and shoes before re-use. When applying in enclosed areas wear a respirator of a type approved by the U. S. Dept. of Mines for Vapam protection.

READ ALL LABEL DIRECTIONS BEFORE USING
DO NOT STORE BELOW 0 F. Product crystallizes at lower temperatures. Warm or store at higher temperatures and mix to redissolve crystals and assure uniformity before use.

EPA Reg. No. 10878-2

MADE IN U.S.A.

EPA Reg. No. 10878-2

PACKED BY
BARZEN OF MINNEAPOLIS, INC.
MINNEAPOLIS, MINNESOTA 55440

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