

AGRICULTURAL CHEMICAL
Do not ship or store with food, feeds or clothing.

05014104

**PRECAUTIONARY STATEMENTS
HAZARDS TO HUMANS & DOMESTIC ANIMALS**

DANGER  **POISON**

POISONOUS LIQUID AND VAPOR UNDER PRESSURE. INHALATION MAY BE FATAL OR CAUSE DELAYED LUNG INJURY. LIQUID AND VAPOR CAUSE BURNS WHICH MAY BE DELAYED.

Do not breathe vapor. Use only with adequate ventilation, or with proper respiratory protection (a full-face canister, self-contained or air-supplied respirator approved by NIOSH).

Avoid contact with eyes, skin, and clothing. In general, it is recommended that the minimum clothing practical be worn when working with this material. Rubber or leather protective wear, including gloves, should not be worn. Do not allow re-use of clothing or shoes contaminated with liquid fumigant until free of fumigant; for shoes, aerate for at least one week.

PHYSICAL HAZARDS: Gaseous liquid under pressure.

CHEMICAL HAZARDS: Do not use application devices made of aluminum, magnesium or their alloys.

DIRECTIONS FOR USE

It is a violation of federal law to use this product in a manner inconsistent with its labeling.

To be applied only by or under the supervision of pest control operators or other trained personnel responsible for pest control programs.

STORAGE & DISPOSAL

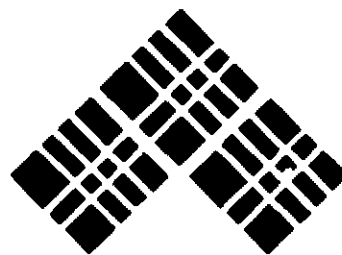
STORAGE: Store in a cool, dry, ventilated place — away from dwellings. It is recommended that the storage site be isolated from locations where foods, food grade materials, drugs, seeds, and feedstuffs are stored. Do not remove protective caps until cylinder is in position for connections to be made. **Leaking cylinders:** Evacuate area (or building) and do not allow unprotected individuals in area until clear of gas. If desired, cylinder may be moved to a safe place by an experienced individual wearing proper personal protective devices.

DISPOSAL: For spilled material, allow to evaporate off. Applying water to spill complicates detection of spilled material and increases evaporation time. **Empty cylinders,** close valve clockwise, or to the right, hand tight. Disconnect lines and replace both the small and large protective caps. Return empty cylinders to manufacturer by following instructions on POISON/Shipping tag attached to cylinder. Cylinders containing product should be returned only after contacting manufacturer for proper shipping instructions.

NOTICE TO BUYER/USER: State and/or local laws and regulations restrict the use of the material in many localities. Consult local pesticide authorities for regulations restricting your proposed usage. Comply with laws and regulations.

See attached pamphlet for specific use directions and precautions.

SELLER MAKES NO WARRANTY, EXPRESS OR IMPLIED, CONCERNING THIS MATERIAL OR THE USE OF THIS PRODUCT OTHER THAN INDICATED ON THE LABEL. BUYER ASSUMES ALL RISK OF USE AND OR HANDLING OF THIS MATERIAL WHEN SUCH USE OR HANDLING IS CONTRARY TO LABEL INSTRUCTIONS.



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.

NAMCO*

Namfume

(METHYL BROMIDE ODORIZED WITH 1/4% CHLOROPICRIN)

For Use As An Aid In The Control Of Structural Pests, Household Insect Pests, And As A Pre-Plant Soil Treatment.

ACTIVE INGREDIENTS: Methyl Bromide 99.75%
Chloropicrin 0.25%

*Trademark of Van Waters & Rogers

BEST AVAILABLE COPY

KEEP OUT OF REACH OF CHILDREN

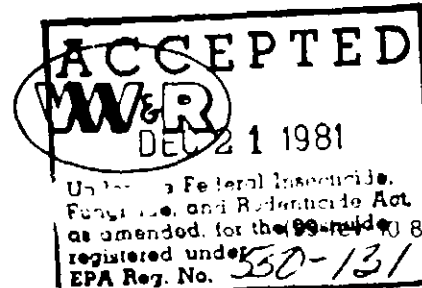
DANGER  **POISON**

STATEMENT OF PRACTICAL TREATMENT

SEEK IMMEDIATE MEDICAL ASSISTANCE IN CASE OF POISONING

If inhaled: Carry patient to fresh air. Get medical assistance at once. Make sure patient can breathe freely. Keep patient warm and quiet. Give artificial respiration if breathing has stopped. Oxygen should be administered only by qualified personnel. In case of contact: For skin, immediately remove all contaminated skin coverings including shoes, clothing, personal articles and adhesive or other bandages. Wash skin thoroughly with soap and running water. If irritation or blisters develop get medical attention. For eyes, flush thoroughly with plenty of water for at least 15 minutes and seek immediate medical attention. Note to Physician: Keep patient at rest and under observation for 24 to 48 hours. Secondary infection of burns (blisters) are common.

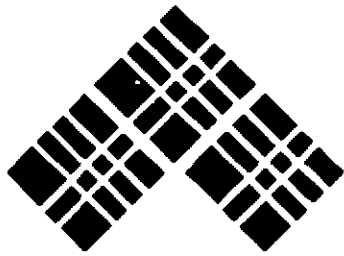
SEE LEFT PANEL FOR ADDITIONAL PRECAUTIONARY STATEMENTS



Manufactured By
Van Waters & Rogers
division of Univar

San Mateo CA 94403

EPA Reg. No. 550-131-AA
EPA Est. No. 550-CA-1



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

NAMCO[®]

Namfume

(METHYL BROMIDE ODORIZED
 WITH 1/4% CHLOROPICRIN)

**For Use As An Aid In The Control Of Structural Pests,
 Household Insect Pests, And As A Pre-Plant Soil Treatment.**

ACTIVE INGREDIENTS: Methyl Bromide 99.75%
 Chloropicrin 0.25%

*Trademark of Van Waters & Rogers

KEEP OUT OF REACH OF CHILDREN

DANGER  **POISON**

STATEMENT OF PRACTICAL TREATMENT

SEEK IMMEDIATE MEDICAL ASSISTANCE IN CASE OF POISONING

If inhaled: Call physician immediately. If patient is breathing, ensure patient can breathe freely. Remove patient from exposure and give oxygen if available. If breathing stops, give artificial respiration if trained to do so. If patient is unconscious, give artificial respiration by qualified personnel. **In case of contact:** Wash contaminated skin with soap and water. Wash eyes with copious amounts of water. If irritation persists, seek medical attention. Flush thoroughly with plenty of water. **Note to Physician:** Keep patient under observation. **First Aid:** See Material Safety Data Sheet for first aid information.

BEST AVAILABLE COPY

ACCEPTED



21
 registered under
 EPA Reg. No. 550-131

Manufactured By
Van Waters & Rogers
 division of Univar

San Mateo, CA 94401

05058405

(99-rev 10/81)

EPA Reg. No. 550-131-AA

**PRECAUTIONARY STATEMENTS
HAZARDS TO HUMANS & DOMESTIC ANIMALS**

DANGER  **POISON**

POISONOUS LIQUID AND VAPOR UNDER PRESSURE. INHALATION MAY BE FATAL OR CAUSE DELAYED LUNG INJURY. LIQUID AND VAPOR CAUSE BURNS WHICH MAY BE DELAYED.

Do not breathe vapor. Use only with adequate ventilation, or with proper respiratory protection (a full-face canister, self-contained or air-supplied respirator approved by NIOSH).

Avoid contact with eyes, skin, and clothing. In general, it is recommended that the minimum clothing practical be worn when working with this material. Rubber or leather protective wear, including gloves, should not be worn. Do not allow re-use of clothing or shoes contaminated with liquid fumigant until free of fumigant; for shoes, aerate for at least one week.

PHYSICAL HAZARDS: *Gaseous liquid under pressure.*

CHEMICAL HAZARDS: Do not use application devices made of aluminum, magnesium or their alloys.

USE PRECAUTIONS

Due to the presence of chloropicrin, Namfume should not be used to fumigate dairy, cheese or meal plants, or to fumigate living plants, fresh fruits or vegetables.

This product may react with some substances to cause unpleasant odors or other deleterious effects. For this reason the following list is provided as a guide to those materials which should not normally be exposed to this product. This list is not necessarily complete.

- (1) Foodstuffs: (a) Iodized salt; (b) Full fat soya flour; (c) Any kind of material that may contain reactive sulfur compounds such as some soap powders, some baking sodas and some salt blocks used for cattle licks; (d) Fresh fruit and vegetables.
- (2) Certain rubber goods: (a) Sponged rubber; (b) Foam rubber as in rug padding, pillows, cushions, and mattresses; (c) Rubber stamps and other similar forms of recycled rubber.
- (3) Furs, horsehair and pillows, especially leather pillows.
- (4) Leather goods — particularly white kid or any other leather goods tanned with sulfur processes.
- (5) Woolens — extreme caution should be used in the fumigation of any Angora woolens, and some adverse effect has been noted on the fumigation of woolen suits, coats, blankets, hand-knit woolen socks, sweaters, shawls and woolen yarn.
- (6) Viscose rayons — those rayons processed or manufactured by a process in which carbon disulfide is used.
- (7) Paper: (a) Silver polishing papers; (b) Certain writing paper cured by sulphide processes.
- (8) Photographic chemicals — (This does not mean camera film but photographic chemicals used in dark rooms).
- (9) Rug padding.
- (10) Cinder blocks or mixed concrete and cinder blocks occasionally pick up odors.
- (11) Any materials that may contain reactive sulfur compounds.
- (12) Charcoal materials — charcoal absorbs this product and thereby not only contaminates the charcoal, it also reduces the gas concentration to a point where an adequate fumigation job might not be obtained.
- (13) Seeds and bulbs that are to be used for planting.
- (14) Pets, fish and birds.
- (15) Living plants or nursery stock.

BEST AVAILABLE COPY

CLEAN-UP OF PLANT STAKES

TREATMENT OF PLANT STAKES FOR "CLEAN-UP" PRIOR TO USE: Treat with 10 pounds of this product per 100 cubic feet under cover. Maximum exposure time should not exceed more than 48 hours, including safety. Apply to the fumigator for additional directions and instructions.

ORCHARD & VINEYARD PLANTING SITE FUMIGATION

This product may be used as an aid in controlling nematodes, insects, burrowing and root-knotting animal and fungus diseases (*Armillaria*, etc.), Oak Root Fungus, Phytophthora rot and crown rot, and other soil-borne organisms, and weeds, in and to be planted or stored to deciduous fruits and nuts, citrus, and vineyards, WHERE THE CROPS WILL NOT BE HARVESTED FOR A PERIOD OF AT LEAST 24 MONTHS.

RATES & PRECAUTIONS:

FOR CITRUS, BURROWING AND ROOT KNOT NEMATODE: Apply 10 to 15 pounds per 100 cubic feet.

PHYTOPHTHORA ROOT ROT: Apply 10 to 15 pounds per 100 cubic feet and a 4 day exposure period is required.

OAK ROOT FUNGUS (*Armillaria mellea*): To facilitate deep penetration of the fumigant the soil should be as dry as possible. This may be accomplished by allowing weeds to grow together with the oak, and by planting a crop of Sudan grass in the spring and a third crop in the fall through the summer months. The soil should be better prepared in places where it is elsewhere. Rates vary from 10 to 15 pounds per 100 cubic feet, depending on soil conditions, soil moisture, soil pH, and soil organic matter. Sprays of fertilizer should be applied to the soil after the fumigation. Retreatment of treated areas should be made as necessary.

APPLICATION METHODS:

BACKHOEING AND AUGERING: Method of application is by backhoeing or by using a 3/4" diameter, 12" length, 1/2" diameter tube or pipe with a 1/2" diameter auger. The soil should be backhoed to a depth of 20 inches and the fumigant applied in the backhoeing operation. The fumigant should be applied in the backhoeing operation.

TREE SITE INJECTOR: Use the tree site injector to apply the fumigant to the soil around the base of the tree. The fumigant should be applied in the backhoeing operation.

TARPING: A tarp should be placed over the treated area to prevent the fumigant from escaping. The fumigant should be applied in the backhoeing operation.

TRACTOR DRAWN INJECTION EQUIPMENT: Use tractor drawn injection equipment to apply the fumigant to the soil. The fumigant should be applied in the backhoeing operation.

STRIP FUMIGATION: Use strip fumigation to apply the fumigant to the soil. The fumigant should be applied in the backhoeing operation.

SEED AND PLANT BED FUMIGATION

Fumigation of seeds and plant beds should be done in a well-ventilated area. The fumigant should be applied in the backhoeing operation.

PREPARE SEED OR PLANT BED AS YOU WOULD FOR PLANTING: Prepare the seed or plant bed as you would for planting. The fumigant should be applied in the backhoeing operation.

After the seed or plant bed is prepared, apply the fumigant to the soil. The fumigant should be applied in the backhoeing operation.

After the fumigation, the seed or plant bed should be covered with a tarp. The fumigant should be applied in the backhoeing operation.

PLACE COVER SUPPORTS AT REGULAR INTERVALS: Place cover supports at regular intervals. The fumigant should be applied in the backhoeing operation.

PLACE EVAPORATING CONTAINERS ON PREPARED BED. INSERT APPLICATION TUBING IN CONTAINERS. Evaporating containers are essential for the volatilization and uniform dispersion of the fumigant. These may be tin pans or basins made of plastic covering. Evaporators should be placed at intervals of approximately 30 feet. NOTE: Evaporating containers are not needed if vaporized fumigant is used.

Anchor one end of each length of polyethylene tubing into each evaporating container with short length of pipe, rock or other suitable weights so that the liquid is directed into the container. The other free ends of the polyethylene tubes should extend out from under the cover so that the applicator can readily attach them to the cylinders containing the fumigant.

PLACE GASPROOF PLASTIC COVER CAREFULLY OVER AREA TO BE TREATED. SEAL EDGES OF THE COVER WITH DIRT. After the supports and tubing are in place, the gasproof cover should be laid with its edges in the furrow and sealed with earth. Enough earth should be used to cover the edges to a width of 3 to 4 inches, after which it should be tamped down firmly. Exercise care in preventing damage to cover. It is wise to place a shoveled foot on the edge of the cover every few feet as it is being laid to keep the wind from blowing it. The sides and other end are then sealed tightly with earth.

APPLYING THE FUMIGANT. The fumigant may be applied as either a liquid or a gas. The gas results from heating of the fumigant using a coil of copper tubing placed in heated water. This method eliminates the need for the evaporating container. In either case the cylinder should be fitted with the proper adapters which allow the gas to be dispensed beneath the tarpaulin.

REMOVE COVER AFTER RECOMMENDED EXPOSURE PERIOD, AERATE, PREPARE SEED OR PLANT BED FOR PLANTING. The minimum exposure period is 24 hours if the soil temperature is below 50° F. A 48-hour exposure period is necessary.

WHEN TO PLANT AFTER TREATMENT. The treated soil must be aerated before planting. Some seeds such as tobacco can be planted 48 hours after the removal of the cover. A longer aeration period may be required before planting certain flower seeds. Usually a period of several days is necessary for proper soil aeration. Some plants in treated soil after it has been aerated for a week to ten days will sprout better in the soil than if they were sown immediately after the removal of the cover to a lesser degree the aeration of the soil.

Pest Control Desired	Type of Soil or Material	Dosage	Minimum Exposure Time	Aeration Time Before Planting
	Turf Renovation: Lawns, parks, golf greens, athletic fields and other ornamental and recreational turf areas.	1 lb per 100 sq ft	24 hours	48 hours
Nematodes insects and weed seeds	Nonfood and Nonleaf Crop Areas: Seed and plant beds for tobacco, flowers, shade and forest trees, ornamental shrubs and vines, and other similar plants. Also vegetables for production of transplants only. Permanent planting sites for tobacco, flowers, shade and ornamental shrubs and vines and other similar plants.	1 lb per 50 sq ft	24 hours	48 hours
	Well-rotted compost, manure, peat, top soil and top soil.	1 lb per 20 sq ft	24 hours	72 hours
	Mulching straw on lawns, athletic fields, STAW OR MAY ARE NOT TREATED TO ANY DEGREE.	1 lb per 40 sq ft	48 hours	48 hours
Damping off and organisms such as <i>Pythium</i> <i>Rhizoctonia</i> <i>Fusarium</i>	Turf Renovation: Same sites as listed above.	1 lb per 100 sq ft	24 hours	72 hours
	Nonfood and Nonleaf Crop Areas: Same plants as listed above.	1 lb per 50 sq ft	24 hours	72 hours
	Well-rotted compost and manure.	1 lb per 20 sq ft	24 hours	72 hours

Suggestions for establishing weed-free turf: Lawn grass seed or sprigs may be planted following treatment with this product in order to establish a weed-free lawn. Treat the soil according to the above directions. Where an old lawn site to be renovated, the turf is usually worked up before fumigating. Frequent experiments have shown that the ground should be worked by fumigation and the dead sod scrapped or seeded after removal of the cover. Frequent sprinkling after seeding will insure a uniform stand.

² Suggestions for fumigating mulching material: Straw mulch should be thoroughly stacked several days prior to treatment since seeds must be moist at time of fumigation to be effective. After the treatment the material is to be piled up and covered with a plastic cover with edges sealed in the same manner as the turf areas referred to.

³ Exposure and aeration times should be determined if the temperature is between 50° F and 55° F. This product should not be used if temperature is below 50° F.

Seeds of certain species of plants, such as clover and alfalfa, with thin, light, bare and others with hard seeds may require a higher dosage or a longer exposure period for effective control.

⁴ Soil in which plants are to be sown should be aerated a week to ten days.

⁵ Growing difficulties may be experienced with ornamentals and this defect may be minimized by using a shading net and certain other crops.

USE PRECAUTIONS

Every grower should be familiar with the use of this product. The following instructions are given as a guide. While conditions for at least a few of the uses are given, the use of this product is not limited to these uses. It may be used on a wide variety of soils and plants. However, the use of this product is not recommended on the following plants: ornamental flowers, florist roses, holly, alder, and other plants which are highly sensitive to fumigation. The use of this product on these plants may result in injury or death.

- Fumigation with this product is a hazardous operation. It should be carried out only by persons who are familiar with the use of this product. The use of this product should be carried out in a well-ventilated area. The use of this product should be carried out in a well-ventilated area. The use of this product should be carried out in a well-ventilated area.
- Application should be made when the soil is moist. The use of this product on dry soil may result in injury to the plants. The use of this product on dry soil may result in injury to the plants.
- Do not treat areas to be used for lawns or other areas where children or pets may be present.
- Be sure treated plants are fumigated with this product. The use of this product on untreated plants may result in injury to the plants.
- Do not contain fumigated areas by using plastic covers or other means. The use of this product on untreated plants may result in injury to the plants.
- May or straw treated directly in the field or in a covered area.

GAS MASKS: A gas mask should always be worn whenever there is any possibility of exposure to methyl bromide, chloropicrin. Before entering an atmosphere containing methyl bromide, chloropicrin be sure to check the mask for leaks. This may be done by placing the hand over hole in bulb of filter and inhaling; if properly tight, the face mask will collapse.

SUGGESTED MAXIMUM TIME (IN MINUTES) THAT CANISTERS SHOULD BE USED IN FUMIGATIONS

Type of Canister	Concentrations of this product in lb. per 1000 cubic feet			
	1 lb. or less	1 to 2 lbs	2 1/2-3 lbs	3 1/2-4 lbs
Super Black (For organic vapors)	120 min.	60 min.	45 min.	30 min.
Regular Size Black (For organic vapors)	60	30	22	15
Supersize Yellow (For acid gases and organic vapors)	30	20	10	5
Regular Size Yellow (For acid gases and organic vapors)	18	13	10	5
Red (All purpose)	18	13	10	5

NOTE: Destroy all used canisters by crushing outlet hose connections so that these cannot be mistaken for fresh canisters.

THE HALIDE GAS DETECTOR: This detector is the most useful means for determining the presence or absence of harmful concentrations of methyl bromide and/or chloropicrin. The following table indicates the approximate product concentration associated with color intensity in the flame.

This Product Present Parts per Million	Pounds per 1000 cubic feet	Flame Color in Daylight
0	0	No color
25	0.0625	Faint shade of green
50	0.125	Moderate green
125	0.31	Green
250	0.625	Strong green
500	1.25	Strong green to blue-green
800	2.0	Strong blue-green
1000	2.5	Blue

*Note that in using the gas detector at night the flame has a blue tinge which is taken into consideration. Therefore the color changes are the same.