

PM 32 RES# 9622-10

**RESTRICTED USE PESTICIDE
DUE TO ACUTE TOXICITY**

For Restricted Use only. Certified Applicators or persons under their direct supervision and only for the uses covered by the Approved Restricted Use Pesticide Label.

**BRO/PIC-2
CONTAINS 2% CHLOROPICRIN**

Preplant Soil Fumigant

ACTIVE INGREDIENT:

METHYL BROMIDE

By Wt.

97.6%

INERT INGREDIENTS*

1.9%

Contains CHLOROPICRIN (warning odorant tear gas)

TOTAL 100%

ACUTELY TOXIC CHEMICAL

14.1 LBS. Active Ingredient per gal. (LIQUID IN CYLINDER)

KEEP OUT OF REACH OF CHILDREN

DANGER  **PELIGRO**
POISON

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

STATEMENT OF PRACTICAL TREATMENT

In all cases of overexposure, get medical attention immediately. Take person to a doctor or emergency treatment facility.

If inhaled - Get exposed person to fresh air. Keep warm. Make sure person can breathe freely. If breathing has stopped apply artificial respiration. Do not give anything by mouth to an unconscious person.

If on skin - Immediately remove contaminated clothing, shoes, jewelry, and any other item on skin. Wash contaminated skin area thoroughly with soap and water.

If in eyes - Hold eyelids open and flush with a steady, gentle stream of water for at least 15 minutes

See side panels for additional precautionary statements

EPA REG. NO. 8622-10

- EPA EST. NO. 10163-AZ-01
- EPA EST. NO. 15298-IS-01
- EPA EST. NO. 29516-FL-04
- EPA EST. NO. 29516-NC-01

Distributed by:
AMERIBROM, INC.
1250 BROADWAY
NEW YORK, N.Y.
10001

IN CASE OF EMERGENCY CONTACT:
Chemtec (800) 424-9390
or
Ameribrom West
5417 Santa Clara Ave.
Camarillo, Calif. 93010
Call Collect: (805) 988-9717 (Calif.)
(212) 563-4600 (N.Y.)

Net contents: _____ LBS./ _____ KGS.

kn
rg
or
dy

n.
10

Warranty: Seller warrants that the product conforms to its chemical description and is reasonably fit for the purpose stated on the label when used in accordance with directions and normal conditions of use, but neither this warranty nor other warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE, express or implied, extends to the use of this product contrary to label instructions or under abnormal conditions, or under conditions not reasonably foreseeable to seller, and buyer assumes the risk of any such use. Buyer assumes all risks of use, storage or handling of this material not in strict accordance with directions given herewith.

Placarding Required: The applicator must placard or post all entrances to the fumigated area with signs bearing, in English and Spanish:

1. The signal word DANGER/PELIGRO and the skull and crossbones symbol.
2. The statement "Area under fumigation. DO NOT ENTER/NO ENTREE".
3. The date of fumigation.
4. Name of fumigant used.
5. Name, address, and telephone number of the applicator.

Only a certified applicator or someone under his/her supervision may remove placards and only when the concentration of methyl bromide in the treated site is below 5 ppm. Any person who transfers a treated, tarpaulined soil to another site without aeration must ensure that the new site is placarded until the soil is aerated below the threshold concentration.

Respiratory Protection: If the concentration of methyl bromide in the working area, as measured by a direct-reading detector device (e.g., Draeger Tube as described in the Product Manual), does not exceed 5 ppm (20 mg/m³), no respiratory protection is required.

If this concentration is exceeded at any time, all persons in the working area must wear protective clothing and a NIOSH/MSHA approved self-contained breathing apparatus (SCBA) or combination air-supplied/SCBA respirator (see the Product Manual No. AM-210).

Aeration and Reentry: After fumigation, treated areas must be aerated until the level of methyl bromide is below 5 ppm. Do not allow entry into the treated area by any person before this time unless protective clothing and a respiratory protection device (SCBA or combination air-supplied/SCBA) is worn.

Spill and Leak Procedures: Evacuate immediate area of spill or leak. Use SCBA or combination air-supplied/SCBA respirator for entry into affected area to correct problem. Move leaking or damaged cylinders or containers outdoors or to an isolated location, observing strict safety precautions. Work upwind if possible. Allow spill to evaporate. Do not permit entry into spill area by unprotected persons until concentration of methyl bromide is determined to be less than 5 ppm.

Contaminated soil, water, and other cleanup debris is a toxic hazardous waste. Report spill to the National Response Center (800-424-8802) if the reportable quantity of 1000 lbs. is exceeded.

PRECAUTIONS FOR USAGE PRIOR TO, DURING, AND AFTER SOIL FUMIGATION

Specific instructions for application appears in the Manual for the Safe Handling and Application of Methyl Bromide Products No. AM-210.

Prior to Fumigation: Comply with all local regulations and ordinances. Obtain an application permit from Agricultural Regulatory Agencies as required.

Never fumigate alone. It is imperative always to have an assistant and proper protective equipment in case of accidents.

Drivers of application equipment must advise other workers of all precautions and procedures. In addition, drivers must instruct their helpers in the mechanical operation of the tractor and how to safely work with the tractor and driver while fumigating.

Handle this fumigant in the open, with the operator "up wind" from the container where there is good ventilation.

Check fumigant pressure systems for leaks before beginning operation.

Two trained persons must be present during introduction of the fumigant.

When fumigating soil from a tractor, 5 gallons of water must be carried on the tractor and placed where it is readily accessible. In addition to water available on the tractor, at least 5 gallons additional water must be available from the service truck. This water must be potable and in containers marked "Decontamination water not to be used for drinking".

All trash should be cleared from the field before starting fumigation.

During Fumigation: This fumigant should not be applied when there is an atmospheric inversion. Since uncomfortable concentrations of chloropicrin may drift to nearby areas, immediately cover treated area with plastic tarpaulin for a minimum of 48 hours.

Do not lift injection shanks to turn at the end of a pass until fumigant has drained from system following closure of shutoff valve.

If trash is inadvertently pulled by the shanks to the ends of the field when fumigating, it must be covered by lifting the shanks, then covering the trash with polyethylene film before making the turn for the next pass.

When changing the cylinders, be certain they are turned off and fumigant system is not under pressure.

After fumigation: Post all treated areas with warning signs.

Keep all animals, children and unauthorized people away from area under fumigation for 48 hours after fumigation and during removal of tarpaulin.

Two trained persons must be present during removal of the tarpaulin.

Spill and Leak Procedures: In case of a rupture of hose or fitting while applying fumigant, immediately stop tractor and meter. Evacuate immediate area of spill or leak. Use SCBA or combination air-supplied/SCBA respirator for entry into affected area to correct problem. Approach from upwind to make necessary repairs. Do not reenter area without respiratory protection until a spill has evaporated or a leak has been fixed.

SOIL FUMIGATION DIRECTIONS

The following are general instructions on the use of Bro-Pic-2 for soil fumigation to be used as preplanting soil treatment in seed beds or transplant beds for the production of transplants only.

SOIL FUMIGANT USES: Bro-Pic-2 is an effective soil fumigant for the control of nematodes, weed seeds and certain soil-borne disease-causing fungi. In seed beds and potting soils it contributes to a maximum production of healthy, vigorous tobacco, vegetable transplants, nursery and forest tree seedlings. Where "srips," "cuttings," "spuds" or seeds are used as in greenhouses, nurseries, golf greens, lawn and ornamental gardens, healthy and vigorous rooting is established quickly.

SOIL PREPARATION: Plow or otherwise work soil to a fine tilth. Add fertilizer, manure or compost, work in well. Soil should be moist and friable for best results. Do not fumigate when soil is dry or excessively wet.

CAUTION: Do not fumigate when soil temperature is below 50°F. Use in vegetable beds is limited to the production of transplants only.

EXPOSURE PERIODS: Expose for 48 hours when soil temperature is between 50°F. and 60°F. and for 24 hours when above 60°F.

DOSAGE: For most purposes use 1 lb. of Bro/Pic-2 for each 100 sq. ft. of soil to be treated.

WHEN TO PLANT: After the exposure aerate soil for 3 days before seeding or 5 to 7 days before setting out vegetable growth.

APPLICATION OF Bro/Pic-2: The "cold method" consists of conveying the liquid methyl bromide through a plastic tube from the cylinder to the evaporating pan under the cover. Use one vaporizer pan for each 300 to 400 sq. ft. Anchor discharge tube in pan with temporary weight for easy withdrawal. Support polyethylene cover with mounds of dirt, inverted bottles or straw-filled sacks. Anchor edges of cover in shallow trench. The resulting gas spreads over and penetrates the soil. Do not discharge the liquid directly on the soil.

The "chisel injection method" is applied with chisels spaced 12 inches apart to a depth of 8 inches. Seal fumigant with drag or cult packer immediately behind chisels. Cover with a gas-proof tarpaulin. Remove tarpaulin after recommended fumigation period and aerate soil.

The field use of "hot gas" from cylinders in conjunction with mechanical laying of the polyethylene cover requires detailed description. For further information on this use inquire from your supplier or from Ameribrom, Inc.

TREE AND VINE SITE FUMIGATION DIRECTIONS

CITRUS SOIL FOR CONTROL OF PHYTOPHTHORA AND CITRUS NEMATODES IN FLORIDA SANDY SOILS: This is a preplant or replant treatment. Trees which are planted in this treated soil will not have harvestable fruit for a period of at least 24 months. Apply with chisels spaced 12 inches apart to a depth of 6 to 8 inches. Seal fumigant with a drag or cult packer immediately behind chisels. Apply at the rate of 1 lb./100 sq. ft. Cover with a 4-mil tarp and expose to fumigation for 96 hours. Will control disease to a depth of 4 feet. Aerate 2 weeks before setting transplants in treated area.

CONTROL OF ARMILLARIA MELLEAE (OAK ROOT FUNGUS) ON DECIDUOUS FRUITS AND NUTS, CITRUS AND VINEYARDS:

DOSAGE AND METHOD OF APPLICATION: This is a preplant or replant treatment. Crops which are planted in this treated soil will not have harvestable fruit for a period of at least 24 months. Methods and dosage of application are as follows:

1. After the soil has been properly prepared, inject 2 pounds of Bro/Pic-2 per 100 sq. ft. by chisel application spaced 48 inches apart to a depth of 36 inches. Covered with adequate polyethylene film seal, it will control *Armillaria melleae* (oak root fungus) in grape vineyards, citrus groves, and all deciduous fruit tree orchards on a preplant or replant basis. Do not apply to soil where trees or vines will bear fruit within 24 months.
2. **DEEP INJECTION AUGER-PROBE TREATMENT:** 36 inches or more below the surface of the soil will effectively control *Armillaria melleae* (oak root fungus) in grape vineyards, citrus groves, and all deciduous fruit tree orchards. Use one pound of Bro/Pic-2 per injection site in lighter soils, two pounds of Bro/Pic-2 in fine textured soils. There is one (1) injection site per 100 sq. ft. (on a 10 ft. x 10 ft. grid pattern, with the injection in the center of the area to be treated).

PREPARATION FOR APPLICATION

To obtain the maximum control of *Armillaria melleae* with methyl bromide, the soil in the area to be treated must be dry to the depth requiring treatment. This can be accomplished by:

- (a) planting Sudan grass in the Spring, irrigating until the grass has established itself, then do not irrigate any further.
- (b) naturally by leaving infected plants in the area to be treated and letting weeds, etc., grow without irrigation.

When soil is dried, cut and remove grass, plants and debris. Rip soil to a depth of 18 to 24 inches, and dry to same moisture.

EXPOSURE PERIOD - AERATION

1. To insure proper time concentration relationship to control oak root fungus, we recommend a seven-day period before removing the polyethylene film cover, and a one-day interval with "DEEP INJECTION AUGER-PROBE TREATMENT" after which on planting or replanting of trees, vines or other deep rooted crops may begin 14 days later.
2. Methyl bromide under these very dry conditions will not control most weed seeds. Some control may be observed, however, on deep rooted perennials such as morning glory (bindweed) and the rhizomes of Johnsongrass.

Methyl
Bromide,
Liquid
UN 1062



POISON

6

INHALATION HAZARD

ACCEPTED
8622-10
16 SEP 1988

UNDER THE FEDERAL INSECTICIDE
FUNGICIDE AND RODENTICIDE ACT
716 ECONOMIC PULVER REGISTER
REG. NO. 8622-10 (SUBJECT)
NO OTHER COMMENTS

43
03

skin, in eyes or on clothing.

This product contains chloropicrin as a warning odorant. Chloropicrin may be irritating to the upper respiratory tract, and even at low levels can cause painful irritation to the eyes, producing tearing. If these symptoms occur, leave the fumigation area immediately.

NOTE TO PHYSICIAN: Early symptoms of overexposure are dizziness, headache, nausea and vomiting, weakness and collapse. Lung edema may develop in 2 to 48 hours after exposure, accompanied by cardiac irregularities; these effects are the usual cause of death. Repeated overexposure can result in blurred vision, staggering gait and mental imbalance, with probable recovery after a period of no exposure. Blood bromide levels suggest the occurrence, but not the degree of exposure. Treatment is symptomatic.

ENVIRONMENTAL HAZARDS: This pesticide is toxic to wildlife. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans, or public waters unless this product is specifically identified and addressed in an NPDES permit. Do not discharge effluent containing this product to sewer systems without previously notifying the sewage treatment plant authority. For guidance contact your State Water Board or Regional Office of the EPA.

PHYSICAL HAZARDS: Do not use or store near heat, open flames, or sparking electrical equipment.

CHEMICAL HAZARDS: Do not use application devices incorporating natural rubber or aluminum or 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.

PROTECTIVE CLOTHING: Wear loose cotton long sleeve shirt and pants, shoes and socks that are cleaned after each wearing. Do not wear jewelry, gloves or boots when handling. Methyl bromide is heavier than air and may be trapped inside clothing and cause skin injury. If full-face respiratory protection is not required, wear goggles or full face shield for eye protection when handling liquid. After application, immediately remove clothing, shoes and socks. Do not reuse contaminated clothing or shoes until cleaned. Drenched clothing cannot be adequately decontaminated.

PESTICIDE STORAGE, HANDLING AND DISPOSAL

PESTICIDE STORAGE AND HANDLING: Store in dry, cool, well-ventilated area under lock and key. Post as a pesticide storage area.

Do not contaminate water, food or feed by storage. Store cylinders upright, secured to a rack or wall to prevent tipping. Cylinders should not be subjected to rough handling or mechanical shock such as dropping, bumping, dragging or sliding. Do not use rope slings, hooks, tongs, or similar devices to unload cylinders. Transport cylinders using hand truck, fork truck or other device to which the cylinder can be firmly secured.

Do not remove valve protection bonnet and safety cap until immediately before use. Replace safety cap and valve protection bonnet when cylinder is not in use.

PESTICIDE DISPOSAL: Pesticide wastes are toxic. Improper disposal of excess pesticide is a violation of Federal Law. If these wastes cannot be disposed of by use according to label instructions, either contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance, or follow registrant's instructions for return of partially empty cylinders.

CONTAINER DISPOSAL: When cylinder is empty, close valve by turning clockwise until hand tight, screw safety cap onto valve outlet, and replace protection bonnet before returning to shipper. Only the registrant is authorized to refill cylinders. Do not use cylinders for any other purpose. Follow registrant's instructions for return of empty or partially empty cylinders.

RETURN OF CYLINDERS:

- (1) Cylinders are the property of the manufacturer or distributor where purchased and should be returned promptly by collect freight.
- (2) Do not ship cylinders without safety caps or valve protection bonnets.
- (3) When a cylinder is partially full and there is no further requirement for the product, contact the manufacturer or distributor for return instruction.
- (4) Containers should never be refilled by the consumer or used for any other purpose.

SPECIFIC DIRECTIONS FOR USE

This fumigant is a highly hazardous material and should be used only by individuals trained in its proper use. Before using, read and follow all label precaution and directions, including those in the Manual for the Safe Handling and Application of Methyl Bromide Products No. AM-210.

All persons working with this fumigant must be knowledgeable about the hazards, and trained in the use of required respirator equipment and detector devices, emergency procedures, and proper use of the fumigant (see the Product Manual No. AM-210).

PRECAUTIONS FOR USAGE

When used for fumigation of soil in enclosed spaces (e.g. greenhouses and tarpaulin covered areas) two persons trained in the use of the product must be present during introduction of the fumigant, initiation of aeration, and after aeration when testing for reentry. Two persons do not need to be present if monitoring is conducted remotely (outside the area being fumigated).

Do not fumigate with this product when soil temperature is below approx. 50°F. at 6-8 in. Specific directions for use in greenhouses are given in the Product Manual No. AM-210.

