


1M30 (200)-17

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Please read instructions on reverse before completing form.

Form Approved. OMB No. 2070-0060. Approval expires 11-30-93

 <b>EPA</b>	United States Environmental Protection Agency Office of Pesticide Programs (H7505C) Washington, DC 20460	<input type="checkbox"/> Registration <input type="checkbox"/> Amendment <input type="checkbox"/> Other	OPP Identifier Number  203884
	<b>Application for Pesticide:</b>		

**Section I**

1. Company/Product Number 8622-17	2. EPA Product Manager <i>Ruth Douglas</i>	3. Proposed Classification <input type="checkbox"/> None <input type="checkbox"/> Restricted
4. Company/Product (Name) Metabrom 99	PM# 32	
5. Name and Address of Applicant (Include ZIP Code) Ameribrom, Inc. 52 Vanderbilt Avenue New York, NY 10017 <input type="checkbox"/> Check if this is a new address	6. Expedited Review. In accordance with FIFRA Section 3(c)(3) (b)(i), my product is similar or identical in composition and labeling to:  EPA Reg. No. _____ Product Name _____	

**Section II**

<input type="checkbox"/> Amendment - Explain below	<input type="checkbox"/> Final printed labels in response to Agency letter dated _____
<input type="checkbox"/> Resubmission in response to Agency letter dated _____	<input type="checkbox"/> "Me Too" Application.
<input checked="" type="checkbox"/> Notification - Explain below.	<input type="checkbox"/> Other - explain below.

Explanation: Use additional page(s) if necessary. (For section I and Section II.)

NOTIFICATION of amendment of the label for this product according to EPA's PR notice 93-10. The amendment is under the heading "Environmental Hazards" on the label.

**Section III**

1. Material This Product Will Be Packaged In:				2. Type of Container	
Child-Resistant Packaging <input type="checkbox"/> Yes* <input type="checkbox"/> No	Unit Packaging <input type="checkbox"/> Yes <input type="checkbox"/> No	Water Soluble Packaging <input type="checkbox"/> Yes <input type="checkbox"/> No		<input type="checkbox"/> Metal	<input type="checkbox"/> Plastic
				<input type="checkbox"/> Glass	<input type="checkbox"/> Paper
* Certification must be submitted.	If "Yes," Unit Package wgt.	No. per container	If "Yes," Package wgt.	No. per container	<input type="checkbox"/> Other (Specify) _____
3. Location of Net Contents Information <input type="checkbox"/> Label <input type="checkbox"/> Container		4. Size(s) of Retail Container		5. Location of Label Directions <input type="checkbox"/> On Label <input type="checkbox"/> On Labeling accompanying product	
6. Manner In Which Label is Affixed To Product <input type="checkbox"/> Lithograph <input type="checkbox"/> Other (_____) <input type="checkbox"/> Paper glued <input type="checkbox"/> Stenciled					

**Section IV**

1. Contact Point (Complete items directly below for identification of individual to be contacted, if necessary, to process this application.)

Name <i>Rhona McGee</i>	Title Regulatory Affairs Asst.	Telephone No. (Include Area Code) (212) 692-6635
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**Certification**

I certify that the statements I have made on this form and all attachments thereto are true, accurate and complete. I acknowledge that any knowingly false or misleading statement may be punishable by fine or imprisonment or both under applicable law.

2. Signature <i>Rhona McGee</i>	3. Title Regulatory Affairs Asst.	6. Date Application Received (Stamped)
4. Typed Name	5. Date <i>9/20/95</i>	

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

**DANGER**

**HIGH ACUTE TOXICITY**

Extremely hazardous liquid and vapor under pressure. Do not breathe vapor. Inhalation may be fatal or cause serious acute illness or delayed lung or nervous system injury. Liquid or vapor can cause serious skin or eye injury which may have a delayed onset. Do not get liquid on 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 other waters unless in accordance with the requirements of a National Pollutant Discharge Elimination System (NPDES) permit and the permitting authority has been notified in writing prior to discharge. Do not discharge effluent containing this product to sewer systems without previously notifying the local 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.

**AIR CONCENTRATION LEVEL**

The acceptable air concentration level for persons exposed to methyl bromide is 5 ppm (20 mg/M<sup>3</sup>), except that for entry into residential and commercial structures the acceptable air concentration level is 3 ppm. The air concentration level is measured by a direct reading detection device, such as a Matheson-Kitagawa, Draeger, or Sensidyne.

**PERSONAL PROTECTIVE EQUIPMENT**

**Applicators and other handlers must wear:**

Loose fitting or well ventilated long-sleeved shirt and long pants.  
Shoes and socks.

Full-face shield or safety glasses with brow and temple shields (Do NOT wear goggles.)  
When the acceptable air concentration level is above 5 ppm and a respirator is required, protect the eyes by wearing a full-face respirator.

No respirator is required if the air concentration level of methyl bromide in the working area is measured to be less than 5 ppm.

A respirator is required if the acceptable air concentration level of 5 ppm is exceeded at any time. The respirator must be one of the following types: (a) a supplied-air respirator (MSHA/NIOSH approval number prefix TC-19C) OR (b) a self-contained breathing apparatus (SCBA) (MSHA/NIOSH approval number prefix TC-13F).

See Product Manual No. AM-210 for more information.

Under normal soil fumigation conditions, the concentration of methyl bromide in the working area will not generally exceed 5 ppm as a time-weighted average and no respiratory protection is required. However, there is the possibility of a spill or leak during soil fumigation. Therefore, a respirator of a type specified above must be available and will be required for entry into an affected area in the event of a leak or spill.

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## WORK SAFETY REQUIREMENTS

1. Do not wear jewelry, gloves, goggles, tight clothing, rubber protective clothing, or rubber boots when handling. Methyl bromide and chloropicrin are heavier than air and can be trapped inside clothing and cause skin injury.
2. Immediately after contamination remove outer clothing, shoes, and socks and do not reuse until thoroughly aerated or ventilated. Keep such clothing and shoes outdoors until thoroughly aerated. Then follow the PPE manufacturer's instructions for cleaning/maintaining PPE. If there are no such instructions for washables, use detergent and hot water. Keep and wash PPE and work clothing separately from other laundry.
3. Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product. Do not reuse them.
4. Follow PPE manufacturer's instructions for cleaning/maintaining protective eyewear and respirators.

## USER SAFETY RECOMMENDATIONS

### Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.
- Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. As soon as possible, wash thoroughly and change into clean clothing.

## DIRECTIONS FOR USE

This product is not to be used on commercial or residential structures that can be inhabited by people. It is a violation of Federal Law to use this product in a manner inconsistent with its labeling.

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

## PLACARDING OF FUMIGATED AREAS

The applicator (or supervisor of the application) must placard all entrances to the fumigated area with signs bearing:

- skull and crossbones symbol
- "DANGER/PELIGRO."
- "Area under fumigation. DO NOT ENTER/NO ENTRE."
- "Methyl Bromide Fumigant in use,"
- the date and time of fumigation, and
- name, address, and telephone number of the applicator.

Do not allow entry by unprotected persons into the fumigated area until the signs are removed. Such signs must only be removed when the air concentration level of methyl bromide is measured to be less than 5 ppm (3 ppm in residential and commercial structures). Signs must remain legible during entire posting period.

To determine whether aeration is complete, each fumigated site or vehicle must be monitored and shown to contain less than 5 ppm methyl bromide in the air space around and, when feasible, in the mass of the commodity. If 5 ppm or greater methyl bromide is detected, the placard must be transferred with the commodity to the new site. Workers who transfer or handle incompletely aerated commodity must be informed and appropriate measure must be taken (i.e., ventilation or respiratory protection) to prevent exposures from exceeding 5 ppm of methyl bromide.

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**RESTRICTED USE PESTICIDE  
DUE TO ACUTE TOXICITY**

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.

**METABROM 99**  
**FUMIGANT,**  
**CONTAINS 0.25% CHLOROPICRIN**

<b>ACTIVE INGREDIENT:</b>	<b>By Wt.</b>
METHYL BROMIDE .....	99.3%
INERT INGREDIENTS* .....	0.7%
	TOTAL ..... 100%

\*Contains CHLOROPICRIN (warning odorant tear gas)

**ACUTELY TOXIC CHEMICAL**

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

**KEEP OUT OF REACH OF CHILDREN**



**PELIGRO**

Si Usted no entiende la etiqueta, busque a alguien para que se la explique a Usted en detalle. (If you do not understand the label, find someone to explain it to you in detail.)

**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. 8622-17

- EPA EST. NO. 67545-AZ-01
- EPA EST. NO. 15298-IS-01
- EPA EST. NO. 29516-FL-04
- EPA EST. NO. 29516-NC-01

Distributed By:

IN CASE OF EMERGENCY CONTACT:

**AmeriBrom, Inc.**

Chemtrec (800) 424-9300

or

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Call Collect: (805) 988-9719 (CA)

(212) 286-4000 (NY)

AB21/Rev 3

Net contents: \_\_\_\_\_ LBS./ \_\_\_\_\_ KGS.

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#### AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements in this labeling about personal protective equipment, restricted-entry intervals, and notification to workers. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard (WPS).

No instructions elsewhere on this labeling relieve users from complying with the requirements of the WPS.

#### ENTRY RESTRICTIONS:

**Greenhouse Space Fumigation:** Entry (including early entry that would otherwise be permitted under the WPS) by any person — other than a correctly trained and equipped handler who is performing a handling task permitted by the WPS — is PROHIBITED in the entire greenhouse (entire enclosed structure/building) from the start of application until aeration reduces the air concentration level of methyl bromide in the working area to less than 5 ppm.

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**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 precautions and directions, including those in the Product Manual No. AM-210, Manual for the Safe Handling and Application of Methyl Bromide Products.

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).

When used for fumigation of enclosed spaces (e.g. empty structures, warehouses, greenhouses, boxcars, grain bins or elevators and other transport vehicles and tarpaulin covered areas) and soil, two persons trained in the use of this 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).

Specific USEPA instructions for the aeration and reentry of fumigated commercial structures must be strictly followed. See Commercial Structure Fumigation Directions.

Do not fumigate any raw or processed commodity with Metabrom 99.

Do not fumigate with this product when soil temperature is below 50°F. at 6-8 inches. Specific directions for use in empty structures, vehicles, chambers, vacuum chambers, railroad cars, and greenhouses are given in the Product Manual No. AM-210.

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

Specific instructions for application appears in the Product Manual No. AM-210.

**Prior to Fumigation:** Post all treated areas with warning signs.

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 "upwind" 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.

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**Greenhouse Soil Fumigation:** Entry (including early entry that would otherwise be permitted under the WPS) by any person — other than a correctly trained and equipped handler who is performing a handling task permitted by the WPS — is PROHIBITED in the entire greenhouse (entire enclosed structure/building) from the start of application until 48 hours after application AND until the air concentration level of methyl bromide in the working area is measured to be to less than 5 ppm. Until the aeration of the soil is complete (usually 10-14 days), non-handlers are permitted in the greenhouse ONLY while the air concentration level of methyl bromide in their working area remains less than 5 ppm. If tarps are used for the application, non-handler entry is prohibited during tarp removal and until the air level is measured to be less than 5 ppm.

**Outdoor Soil Fumigation:** Entry (including early entry that would otherwise be permitted under the WPS) by any person — other than a correctly trained and equipped handler who is performing a handling task permitted on this labeling — is PROHIBITED from the start of application until 48 hours after application. In addition, if tarps are used for the application, non-handler entry is prohibited while tarps are being removed.

**NOTIFICATION:** Notify workers of the application by warning them orally and by posting fumigant warning signs, as described in the "Placarding of Fumigated Areas" section of this labeling. Post the fumigant warning sign instead of the WPS sign for this application, but follow all WPS requirements pertaining to location, legibility, size, and timing of posting and removal.

**Greenhouses — Soil or Space Fumigation:** Post the fumigant warning signs outside all entrances to the entire greenhouse (entire enclosed structure/building).

**Outdoor Soil Fumigation:** Post the fumigant warning signs at entrances to treated areas.

**PPE FOR ENTRY DURING THE ENTRY-RESTRICTED PERIOD:** PPE for entry that is permitted by this labeling is listed in the "Hazards to Humans and Domestic Animals" section of this labeling.

### PESTICIDE STORAGE, HANDLING AND DISPOSAL

**PESTICIDE STORAGE AND HANDLING:** Store in a secure manner either outdoors under ambient conditions, or indoors in a well ventilated area. 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:** All 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 product or purpose.

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## 4. If mechanical aeration is used:

- A. For structures without attics, an aeration fan(s) must be inserted in a window or other exterior opening and sealed so that the air inside the structure is exhausted out of the structure. The aeration fan(s) must be capable of displacing 5,000 cubic feet of air per minute. To facilitate aeration, exterior openings, such as windows, vents, or an access door to the subarea, should be utilized. The structure must be aerated with the fan(s) operating for a minimum of 72 hours;
- B. After aeration is completed, the level of methyl bromide in the structure must be measured using a gas detector with a minimum detection limit of 3 ppm for methyl bromide. Measurements must be taken from an interior electrical outlet by inserting the detection device in the ground receptacle, or from other enclosed space within the wall on an interior and a perimeter wall; and
- C. (i) The level of methyl bromide is less than 3 ppm from each area measured; or  
(ii) If the level of methyl bromide is 3 ppm or greater, the structure must be aerated for additional 12 hours. At the end of the 12 hour period, the level of methyl bromide must be measured from the areas previously sampled. These procedures must be repeated until the level of methyl bromide is below 3 ppm.

## 5. For structures with attics:

- A. An aeration fan must be inserted in the attic access door and a window or other exterior opening, and both sealed so that air inside the structure is exhausted outside the structure. The aeration fans must be capable of displacing a minimum of 5,000 cubic feet of air per minute. To facilitate aeration, exterior openings, such as windows, vents, or an access door to the subarea should be utilized. The structure must be aerated with the fans operating for a minimum of 72 hours;
- B. After aeration is completed, the level of methyl bromide in the structure must be measured using a gas detector device with a minimum detection limit of 3 ppm for methyl bromide residues. Measurements must be taken from within an interior electrical outlet by inserting the detection device in the ground receptacle, or other enclosed space within an interior and a perimeter wall; and
- C. (i) The level of methyl bromide is less than 3 ppm from each area measured; or  
(ii) If the level of methyl bromide is 3 ppm greater, aeration must continue for additional 12 hours. At the end of the 12 hour period, the level of methyl bromide must be measured from the areas previously sampled. These procedures must be repeated until the level of methyl bromide is below 3 ppm.

## 6. For structures with basements:

- A. In addition to the requirements of paragraphs 3, 4, and 5 above, the windows, vents, and interior doors of the basement must be open.
- B. After aeration is completed, the level of methyl bromide in the basement must be measured using a gas detector device with a minimum detection limit of 3 ppm for methyl bromide residues. A measurement must be taken from an interior electrical outlet by inserting the detection device in the ground receptacle, or from other enclosed space within the wall on an interior wall. In the absence of an interior wall, a measurement must be taken of the ambient air in the basement; and
- C. (i) The level of methyl bromide is less than 3 ppm; or  
(ii) If the level of methyl bromide is 3 ppm or greater, the structure must be aerated for an additional 24 hours for natural ventilation or an additional 12 hours for mechanical aeration. At the end of the additional ventilation period, the level of methyl bromide must be measured from the area in the basement previously sampled. These procedures must be repeated until the level of methyl bromide is below 3 ppm.

The applicator must obtain a Methyl Bromide Fact Sheet and have the customer understand and sign before application is made. For instructions regarding the Fact Sheet see Product Manual No. AM-210.



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**After Fumigation:** Keep pets, livestock, and other domestic animals out of the treated area during application, during the exposure period as specified for applications in Directions for Use, and during removal of tarpaulin.

Two trained persons must be present during removal of tarpaulins.

**Spill and Leak Procedures for Soil Fumigation:** In case of a rupture of hose or fitting while applying fumigant, immediately stop tractor and motor. Evacuate everyone from the immediate area of the spill or leak. Wear the personal protective equipment (including prescribed respirators) specified in the Hazards to Humans section of this labeling for entry into affected area to correct problem. Approach from upwind to make necessary repairs. Do not enter area without the required PPE until the spill has evaporated or the leak has been fixed.

**COMMERCIAL STRUCTURE FUMIGATION DIRECTIONS  
(Pest Control Operators Only)**

**DO NOT USE ON DWELLING OR RESIDENTIAL STRUCTURES THAT CAN BE INHABITED BY PEOPLE.**

When used for fumigation of commercial structures, two persons trained in the use of this product must be present during introduction of the fumigant, initiation of aeration, and after aeration when testing for reentry.

The structures to be fumigated are made gas-tight using a tarpaulin which has been staked and/or earth mounds placed on the ends of the tarpaulin. Area to be fumigated is calculated and Metabrom 99 introduced. Structures are to be posted showing date of fumigation. Aerate according to directions below.

Subterranean termites in tunnels will not be controlled unless gas is introduced into those areas by a special procedure.

**Insects Controlled:** Termites, wood borers, and any other insects (cockroaches, spiders) in gas-tight fumigated dwelling. Metabrom will control all insects and trapped rodents within the treated structure.

**Dosage Rate:** See Table II and Product Manual No. AM-210.

Remove the following materials from building before fumigation as they may develop undesirable odors: furs, high protein flour and cereals, horsehair articles, iodized salt, patent leather articles, rubber goods, sulfur containing compounds or synthetic detergents.

See Product Manual No. AM-210 and Table II for specific dosages, pests controlled and exposure time.

**Aeration and Reentry:** At the end of the exposure period, after all tarpaulins or seals are removed from the structure, open all interior and exterior doors, windows, and vents that are operational. No person shall be allowed to reenter the structure unless wearing protective clothing and a NIOSH/MSHA approved self-contained breathing apparatus (SCBA) or combination air-supplied/SCBA respirator until the following criteria are met:

1. After fumigation, fumigated areas must be aerated until the air concentration level of methyl bromide is measured to be less than 5 ppm (3 ppm for residential and commercial structures).
2. Until the acceptable air concentration level is reached, do not allow any person to enter into the fumigated area unless he/she is wearing the personal protective equipment (including prescribed respirator) specified in the Hazards to Humans section of this labeling. In greenhouses, additional Worker Protection Standard restrictions apply.
3. If non-mechanical or natural ventilation is used:
  - A. The structure must be aerated for a minimum of seven days from the time the tarpaulins are removed.
  - B. After aeration is completed, the level of methyl bromide in the structure must be measured using a gas detector device with a minimum detection limit of 3 ppm for methyl bromide. Measurements must be taken from an interior electrical outlet by inserting the detection device in the ground receptacle, or from other enclosed space within the wall on an interior and a perimeter wall; and
  - C. (i) The level of methyl bromide is less than 3 ppm from each area measured; or (ii) If the level of methyl bromide is 3 ppm or greater, the structure shall be aerated for an additional 24 hours. At the end of the 24 hour period, the level of methyl bromide must be measured from the areas previously sampled. These procedures must be repeated until the level of methyl bromide is less than 3 ppm.

**C. NON-TARP NEMATODE CONTROL**

For control of nematodes (including *Meloidogyne* spp., *Xiphinema* spp., *Criconeimoides*, *Pratylenchus*, and *Paratylenchus*) on almonds, apples, apricots, cherries, citrus, grape vineyards, peaches, pecans, pistachios, plums, prunes, strawberries, tomatoes and walnuts.

**Pre-treatment Soil Preparation:** Plow or rip the soil to a depth of which effective treatment is required. The soil should be worked until free of clods or large lumps. Residue from previous crops should be worked into the soil to allow for decomposition prior to fumigation. Soil moisture should be optimum for seed germination. For best results soil should be kept moist for at least four days prior to treatment. Do not fumigate if the soil temperature is below 50°F.

For best results, fumigate when soil temperature is 60°F. to 90°F. at the depth of 6 inches. Use the higher labelled rates for muck and heavy clay soils.

**Dosage and Method of Application:** This is a preplant or replant treatment. Do not apply to soil where trees or vines will bear harvestable fruit within 24 months. A waiting period of at least 14 days should be observed between application and planting. Methods and dosage of application are as follows:

1. **Chisel Application.** After the soil has been properly prepared, inject 400-872 pounds of Metabrom 99 per acre by chisel application with 2 chisels spaced 66 inches apart to a depth of 24-30 inches. For non-tarp applications be sure to properly seal the chisel line which may be accomplished by the following equipment modifications. Weld a wing behind the chisel 2 to 4 inches above the chemical outlet to break the chisel mark. Place a shovel behind the chisel at the soil surface to push dirt into the upper chisel mark. Follow with a cone-shaped press wheel with a shovel to pull additional soil into the chisel line. This is followed by a flat roller to press the soil even with the adjacent soil surface. This treatment will treat a strip 96 inches wide.
2. **Deep Injection Auger-Probe Treatment.** Use one pound of Metabrom 99 per injection site in lighter soils; two pounds of Metabrom 99 in fine textured soils. Use one injection site per 100 square feet (on a 10 ft. x 10 ft. grid pattern) with the injection in the center of the area to be treated. Tamp or compact the soil at the point of injection. Metabrom 99 used with a tarp will not usually control most weed seeds. However, some control may be observed on deep-rooted perennials such as morningglory (bindweed) and rhizomes of Johnsongrass.

**TABLE I  
METABROM 99 SOIL FUMIGATION USES**

Treatment Site	Rate (lbs/A)	Exposure Time
Field Soils to be Planted to:		
Tomato .....	180-240	24-48 hrs.
Strawberry .....	180-240	24-48 hrs.
Citrus & Deciduous fruits .....	400-870 <sup>1</sup>	24-48 hrs.
& Nuts (non-food) .....	435-870 <sup>2</sup>	24-48 hrs.
Nursery Soils:		
Turf .....	180-435	24-48 hrs.
Ornamentals .....	180-435	24-48 hrs.
Forest Tree Seedlings .....	180-435	24-48 hrs.
Strawberry (non-food) .....	180-435	24-48 hrs.
Greenhouse Soil (non-food crops, for Tomatoes, see rate above) .....	180-435	24-48 hrs.
Seed or Transplant Beds (non-food) .....	180-435	24-48 hrs.
Tobacco .....	872	24-48 hrs.
Potting Mix .....	1#/Cu. Yd.	24-48 hrs.

<sup>1</sup>Deep injection application.

<sup>2</sup>Topical application.

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**TABLE II  
METABROM 99**

**APPLICATION SUMMARY FOR STRUCTURAL PEST CONTROL AND OTHER SITES<sup>1</sup>**

Treatment Site	Pests	Rate (#/1000 cu. ft.)		Exposure
		Volume	Dosage	
Commercial structures, Garages and Barns	termites, (drywood & dampwood)	Less than 100,000 cu. ft.	¼-3#	24 hrs.
	bedbugs, cockroaches, silverfish, powder post beetle, death watch beetle, carpenter ants, rats, mice	100,000-500,000 cu. ft.	1¼-1½#	24 hrs.
		500,000-1,000,000 cu. ft.	1-1¼#	24 hrs.
Over 1,000,000 cu. ft.			1#	24 hrs.
Warehouses (empty)	cockroaches, rats, mice, confused		4-5 oz.	12-18 hrs.
Feed Rooms (empty)	flour beetle, rice weevil, granary		3#	24 hrs.
Grain Bins (empty)	weevil, saw toothed grain beetle,		3#	24 hrs.
Bags, Boxes and Crates (empty)	rusty grain beetle, lesser grain borer, cadelle, Khapra beetle, drugstore beetle, larder beetle, carpet beetle, capra beetle, cof- fee bean weevil, groundnut bruchid, common bean weevil, dried fruit beetle, golden spider beetle, Australian spider beetle, cigarette beetle, angoumois grain moth, Mediterranean flour moth, warehouse moth, Indian meal moth, common grain mite		1½-3# <sup>(a)</sup>	24 hrs.
			2-3# <sup>(b)</sup>	2 hrs.
Furniture	termites, (drywood & dampwood), bedbugs, cockroaches, silverfish, powder post beetle, death watch beetle, carpenter ants, clothes moth, cigarette beetle, drugstore beetle, carpet beetle		1-3# <sup>(a)</sup>	24 hrs.
			2-3# <sup>(b)</sup>	2 hrs.
Lumber and Wood Products	termites (drywood & dampwood), powder post beetle, round and flat headed borers, carpenter ants and bark beetles		1-3# <sup>(a)</sup>	24 hrs.
			2-3# <sup>(b)</sup>	2 hrs.
Greenhouses (empty)	mealybugs, scale insects; and mites		3#	4 hrs.
Mushroom houses (empty)	mushroom flies		2#	24 hrs.
Poultry Houses (empty)	poultry mites, bedbugs		2#	24 hrs.
Baled Tobacco	drugstore beetle, cigarette beetle, tobacco beetle, tobacco moth		2-3# <sup>(a)</sup>	48-72 hrs.
			4# <sup>(b)</sup>	4 hrs.
Baled Cotton	pink bollworm, boll weevil		3# <sup>(a)</sup>	24 hrs.
			4# <sup>(b)</sup>	2 hrs.

<sup>1</sup>At temperatures below 60°F., increase the dosage by ½ pound per 1,000 cu. ft. for every 10°F., drop in temperature or use an approved procedure to heat the fumigant. Do not fumigate when temperature is below 50°F.

<sup>2</sup>For dwellings do not use methyl bromide formulations containing 2% or more chloropicrin.

<sup>(a)</sup> Atmospheric

<sup>(b)</sup> Vacuum Chamber (25-27)

NOTE: Remove food and feed commodities before fumigating dwellings.

**WARNING:** Contains methyl bromide, a substance which harms public health and environment by destroying ozone in the upper atmosphere.

**BROMIDE  
062**

**BEST AVAILABLE COPY**

**METHYL BROMIDE  
UN 1062  
INHALATION HAZARD**



**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 under 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.