


(A) 	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
	Application for Pesticide:		

## Section I

1. Company/Product Number 8622-39	2. EPA Product Manager Ruth Douglas	3. Proposed Classification  <input type="checkbox"/> None <input type="checkbox"/> Restricted
4. Company/Product (Name) 50-50 Preplant Soil Fumigant	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.

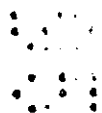
## Section III

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 <input type="checkbox"/> Other (Specify) _____	
* Certification must be submitted.		If "Yes," Unit Package wgt.	No. per container	If "Yes," Package wgt.	No. per container
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"/> Paper glued <input type="checkbox"/> Stenciled				<input type="checkbox"/> Other ( _____ )	

## Section IV

1. Contact Point (Complete items directly below for identification of individual to be contacted, if necessary, to process this application.)		
Name Rhona McGee	Title Regulatory Affairs Asst.	Telephone No. (Include Area Code) (212) 692-6635

## 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.		b. Date Application Received (Stamped)
2. Signature Rhona McGee	3. Title Regulatory Affairs Asst.	
4. Typed Name Rhona McGee	5. Date 9/26/95	

PRECAUTIONARY STATEMENTS  
HAZARDS TO HUMANS & DOMESTIC ANIMALS

**DANGER**

**HIGH ACUTE TOXICITY**

Extremely hazardous liquid and vapor under pressure. Do not breathe vapor. Inhalation or ingestion 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, a volatile-liquid tear gas. Chloropicrin vapor is very irritating to the upper respiratory tract, and even at low levels can cause painful irritation to the nose and throat, and to the eyes, producing tearing. If these symptoms occur, leave the fumigation area immediately. Continued exposure after irritation is evident, or higher concentrations, may cause painful irritation to the eyes or temporary blindness, which may cause panic that may in turn lead to further accidents.

**NOTE TO PHYSICIAN:** Early symptoms of overexposure are intense lachrimation and irritation of mucous membranes, 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; do not use water to clean them (Diesel oil is satisfactory).

**AIR CONCENTRATION LEVEL**

The acceptable air concentration level for persons exposed to chloropicrin is 0.1 ppm (0.7 mg/m<sup>3</sup>). The acceptable air concentration for persons exposed to methyl bromide is 5 ppm (20 mg/m<sup>3</sup>). The air concentration level is measured by a direct reading detection device, such as a Matheson-Kitagawa.

**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 brimmed temples and side shields when handling the liquid product (Do not wear goggles.) When the 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 chloropicrin in the working area is measured to be less than 0.1 ppm AND 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 0.1 ppm for chloropicrin OR 5 ppm for methyl bromide 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).

Under normal soil fumigation conditions, the air concentration level of chloropicrin in the working area will not generally exceed 0.1 ppm AND the air concentration level of methyl bromide in the working area will not generally exceed 5 ppm. Therefore, 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.

**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**

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.

**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.

**50-50  
PREPLANT  
SOIL FUMIGANT**

FOR CONTROL OF NEMATODES, WIREWORMS, WEED SEEDS,  
FUNGUS DISEASES, GRUBS, AND SOIL-BORNE INSECTS.

ACTIVE INGREDIENTS:	By Wt.
METHYL BROMIDE .....	49.7%
CHLOROPICRIN .....	49.5%
INERT INGREDIENT .....	0.8%
TOTAL .....	100%

**ACUTELY TOXIC CHEMICAL**

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

**KEEP OUT OF REACH OF CHILDREN**

**DANGER**  **PELIGRO**  
**POISON**

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. 8622-39

- ☐ EPA EST. NO. 87545-AZ-01
- ☐ EPA EST. NO. 15298-IS-01
- ☐ EPA EST. NO. 29516-FL-04
- ☐ EPA EST. NO. 29516-NC-01

**IN CASE OF EMERGENCY CONTACT:**

**AmeriBrom, Inc.**

52 VANDERBILT AVENUE  
NEW YORK, NY 10017  
TELEPHONE: (212) 286-4000  
FAX: (212) 286-4475

Chemtrec (800) 424-9300

or  
AmeriBrom West  
5419 Santa Clara Ave.  
Camarillo, CA 93010  
Call Collect: (805) 966-9719 (CA)  
(212) 286-4000 (NY)

AS27/Rev 3

Net contents: \_\_\_\_\_ LBS. / \_\_\_\_\_ KGS. 9/88

**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 ENTREE,"
- "Methyl Bromide and Chloropicrin Fumigants in use,"
- the date and time of fumigation, and
- name, address, and telephone number of the applicator.

245

Do not allow  
are removed  
chloropicrin  
of methyl br  
during the s

Only a certifi  
warning sign

Use this pre  
Standard, 4  
of agricultu  
notification  
exceptions  
equipment,  
in this box  
section Sta

No instruct  
requiremen

**ENTRY R**

Greenhou  
be permitte  
equipped f  
is PROHIBI  
the start of  
tration leve  
AND the sk  
to be to les  
days), non-  
tration leve  
the air con  
than 5 ppm  
during tarp  
ing area is  
of methyl l

Outdoor S  
permitted  
equipped f  
— is PROH  
In addition  
while tarps

NOTIFICA  
posting fun  
Areas" sec  
sign for thi  
legibility, a

Greenhou  
outside all

Outdoor S  
areas.

PPE FOR I  
that is perm  
Animals"

P  
PESTICIDE  
doors und  
pesticide a

Do not con  
to a rack o  
handling o  
Do not use  
Transport c  
can be firm

Do not rem  
use. Reple

PESTICIDE  
pesticide is  
use accord  
mental Con  
Regional O  
empty cylir

CONTAIN  
clockwise u  
bonnet bel  
cylinders.  
Instructions

**RETURN C**

- (1) Cylind  
and shc
- (2) Do not
- (3) When a  
product
- (4) Contain  
product

This fumigan  
trained in its  
tions, includ  
Bromide Pro

All persons v  
and trained  
emergency p  
AM-210).

Do not fumig

**BEST AVAILABLE COPY**

**BEST AVAILABLE COPY**

**CAUTIONARY STATEMENTS  
TO HUMANS & DOMESTIC ANIMALS**

**DANGER**

**HIGH ACUTE TOXICITY**

liquid and vapor under pressure. Do not breathe vapor. It may be fatal or cause serious acute illness or delayed lung injury. Liquid or vapor can cause serious skin or eye injury which it. Do not get liquid on skin, in eyes or on clothing.

chloropicrin, a volatile-liquid tear gas. Chloropicrin vapor is respiratory tract, and even at low levels can cause painful redness, and to the eyes, producing tearing. If these symptoms occur immediately. Continued exposure after irritation is serious, may cause painful irritation to the eyes or temporary blindness that may in turn lead to further accidents.

Early symptoms of overexposure are intense lacrimation (tear production), dizziness, headache, nausea and vomiting. Lung edema may develop in 2 to 48 hours after exposure. Irritation; these effects are the usual cause of death. An irritant in blurred vision, staggering gait and mental impairment after a period of no exposure. Blood bromide levels are not the degree of exposure. Treatment is symptomatic.

**RDS:** This pesticide is toxic to wildlife. Do not discharge into lakes, streams, ponds, estuaries, oceans, or other water bodies with the requirements of a National Pollutant Discharge (NPDES) permit and the permitting authority has been notified. Do not discharge effluent containing this product to sewer without notifying the local sewage treatment plant authority. For more information, contact the Water Board or Regional Office of the EPA.

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

Do not use application devices incorporating natural rubber or other alloys; do not use water to clean them (Diesel).

**AIR CONCENTRATION LEVEL**

Permissible exposure limit for persons exposed to chloropicrin is 0.1 ppm. Permissible exposure limit for persons exposed to methyl bromide is 5 ppm. Air concentration level is measured by a direct reading analyzer.

**PERSONAL PROTECTIVE EQUIPMENT**

Workers must wear:

Long-sleeved shirt and long pants.

Workers with brown or tan skin should wear sunburn protection (e.g., sunscreen) when handling the product. When the air concentration level is above 0.1 ppm, protect the eyes by wearing a full-face respirator.

The air concentration level of chloropicrin in the working area must not exceed 0.1 ppm AND the air concentration level of methyl bromide must be less than 5 ppm.

The acceptable air concentration level of 0.1 ppm for chloropicrin is exceeded at any time. The respirator types: (a) a supplied-air respirator (MSHA/NIOSH 19C) OR (b) a self-contained breathing apparatus (SCBA) with a minimum rating of 100 ft. lb. (30 min).

On conditions, the air concentration level of chloropicrin must not exceed 0.1 ppm AND the air concentration level of methyl bromide must not exceed 5 ppm. Therefore, a respirator of a type specified above must be used for entry into an affected area in the event of a leak.

**SAFETY REQUIREMENTS**

Wear goggles, tight clothing, rubber protective clothing, gloves. Methyl bromide and chloropicrin are heavier than air and can cause skin injury.

Immediately remove outer clothing, shoes, and socks and do not re-enter or ventilated. Keep such clothing and shoes away from fire. Then follow the PPE manufacturer's instructions. If there are no such instructions for washables, wash them. Keep and wash PPE and work clothing separately.

Absorbent materials that have been drenched or heavily soiled with product. Do not reuse them.

Follow the manufacturer's instructions for cleaning/maintaining protective equipment.

**SAFETY RECOMMENDATIONS**

Do not eat, drink, or use tobacco, or use chewing gum, or use any food or drink while using this product.

Immediately wash thoroughly if pesticide gets inside. Then wash thoroughly with soap and water.

Change into clean clothing immediately after handling this product. As soon as possible, change into clean clothing.

**DIRECTIONS FOR USE**

Do not use this product in a manner inconsistent with its labeling.

A way that will contact workers or other persons, either directly or indirectly, may be in the area during application. For more information, consult the agency responsible for your State or Tribe, consult the agency responsible for your State or Tribe.

**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.

**50-50  
PREPLANT  
SOIL FUMIGANT**

FOR CONTROL OF NEMATODES, WIREWORMS, WEED SEEDS, FUNGUS DISEASES, GRUBS, AND SOIL-BORNE INSECTS.

ACTIVE INGREDIENTS:	By Wt.
METHYL BROMIDE .....	49.7%
CHLOROPICRIN .....	49.5%
INERT INGREDIENT .....	0.8%
<b>TOTAL .....</b>	<b>100%</b>

**ACUTELY TOXIC CHEMICAL**

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

**KEEP OUT OF REACH OF CHILDREN**



If 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. 8822-39

- ☐ EPA EST. NO. 67545-AZ-01
- ☐ EPA EST. NO. 15296-IS-01
- ☐ EPA EST. NO. 29516-FL-04
- ☐ EPA EST. NO. 29516-NC-01

**IN CASE OF EMERGENCY CONTACT:**

**AmeriBrom, Inc.**

52 VANDERBILT AVENUE  
NEW YORK, NY 10017  
TELEPHONE: (212) 286-4000  
FAX: (212) 286-4475

Chemtrec (800) 424-9300  
or  
AmeriBrom West  
5419 Santa Clara Ave.  
Cambridge, CA 93010  
Call Collect: (805) 988-9719 (CA)  
(212) 286-4000 (NY)

AB27/Rev 3 Net contents: \_\_\_\_\_ LBS. / \_\_\_\_\_ GGS. 9/95

**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 and Chloropicrin Fumigants in use."
- the date and time of fumigation, and
- name, address, and telephone number of the applicator

Do not allow entry by unprotected person or animal. Such signs must only be removed when the fumigation is measured to be less than 1 ppm of methyl bromide is measured to be less than 1 ppm during the entire posting period.

Only a certified applicator (or someone under their direct supervision) may remove the warning signs at entrances to fumigated areas.

**AGRICULTURAL USE**

Use this product only in accordance with the label. Standard, 40 CFR 170. This Standard or of agricultural workers on farms, forests, nurseries, or other agricultural premises. It contains required notification, and emergency assistance, and exceptions pertaining to the statements in this box only apply to uses of this product under the Standard (WPS).

No instructions elsewhere on this label are required under the WPS.

**ENTRY RESTRICTIONS:**

**Greenhouse Soil Fumigation:** Entry (including the WPS) by any person equipped handler who is performing a task is PROHIBITED in the entire greenhouse (the start of application until 48 hours after the start of application) AND the air concentration level of methyl bromide is to be less than 5 ppm. Until the aerated (days), non-handlers are permitted in the greenhouse. The air concentration level of methyl bromide is to be less than 5 ppm. If tarps are used for the application during tarp removal and until the air concentration level is assured to be less than 0.1 ppm of methyl bromide in the working area.

**Outdoor Soil Fumigation:** Entry (including the WPS) by any person equipped handler who is performing a task is PROHIBITED from the start of application until 48 hours after the start of application. In addition, if tarps are used for the application while tarps are being removed.

**NOTIFICATION:** Notify workers of the application by posting fumigation warning signs, as described in the "Areas" section of this labeling. Post the fumigation sign for this application, but follow all WPS requirements, size, and timing of posting and removal.

**Greenhouses — Soil or Space Fumigation:** Post the fumigation sign at all entrances to the entire greenhouse.

**Outdoor Soil Fumigation:** Post the fumigation sign at all entrances to the fumigation area.

**PPE FOR ENTRY DURING THE ENTRY:** That is permitted by this labeling is listed in the "Areas" section of this labeling.

**PESTICIDE STORAGE, HANDLING**

**PESTICIDE STORAGE AND HANDLING:** Store cylinders under ambient conditions, or in the pesticide storage area.

Do not contaminate water, food or feed by storage or disposal. A rack or wall to prevent tipping. Cylinders should be handled or mechanical shock such as dropping. Do not use rope slings, hooks, ladders, or other equipment. Transport cylinders using hand truck, fork lift, or other equipment. Cylinders can be firmly secured.

Do not remove valve protection bonnet or use. Replace safety cap and valve protection.

**PESTICIDE DISPOSAL:** Pesticide waste disposal is a violation of Federal Law. If you are unable to use the product, contact your local, state, or federal government agency, or the Hazardous Waste Management and Emergency Response (HWER) Regional Office for guidance, or follow regulatory requirements for empty cylinders.

**CONTAINER DISPOSAL:** When cylinder is empty, turn cylinder upside down and close valve. Do not return to shipper. On cylinders, do not use cylinders for any other purpose. Follow instructions for return of empty or partially empty cylinders.

**RETURN OF CYLINDERS:**

- (1) Cylinders are the property of the manufacturer and should be returned promptly by the user.
- (2) Do not ship cylinders without safety cap and valve protection.
- (3) When a cylinder is partially full and contains product, contact the manufacturer or distributor for instructions.
- (4) Containers should never be refilled for any other product or purpose.

**SPECIFIC DIRECTIONS**

This fumigant is a highly hazardous material. It is not to be used in its proper use. Before using, read the label. Including those in the Manual for the Bromide Products, No. AM-210.

All persons working with this fumigant must be trained in the use of required respiratory protection procedures, and proper use of the product.

Do not fumigate with this product when soil

the fumigated area until the signs when the air concentration level of ppm AND the air concentration level 5 ppm. Signs must remain legible

his/her supervision) may remove tires.

#### REQUIREMENTS

Along with the Worker Protection requirements for the protection of workers, and greenhouses, and handlers of pesticides for training, decontamination, and contains specific instructions and labeling about personal protective equipment to workers. The requirements that are covered by the Worker Protection

Users from complying with the

ing early entry that would otherwise other than a correctly trained and ling task permitted by the WPS — re enclosed structure/building) from application AND until the air concentration is measured to be less than 0.1 ppm in the working area is measured if the soil is complete (usually 10-14 in-house ONLY while the air concentration remains less than 0.1 ppm AND in their working area remains less than 0.1 ppm. Non-handler entry is prohibited until level of chloropicrin in the work area AND the air concentration level assured to be less than 5 ppm.

early entry that would otherwise be other than a correctly trained and ling task permitted by this labeling until 48 hours after application. Non-handler entry is prohibited

ation by warning them orally and by in the "Placarding of Fumigated" warning sign instead of the WPS requirements pertaining to location, removal.

1. Post the fumigant warning signs (entire enclosed structure/building).

warning signs at entrances to treated

STRICTED PERIOD: PPE for entry "Hazards to Humans and Domestic

#### LOADING AND DISPOSAL

Store in a secure manner either out in a well ventilated area. Post as a

age. Store cylinders upright, secured should not be subjected to roughing, bumping, dragging or sliding. Similar devices to unload cylinders. k or other device to which the cylinder

safety cap until immediately before bonnet when cylinder is not in use.

re toxic. Improper disposal of excess wastes cannot be disposed of by tect your State Pesticide or Environmental representative at the nearest EPA unit's instructions for return of partially

is empty, close valve by turning to valve outlet, and replace protection he registrant is authorized to refill other purpose. Follow registrant's empty cylinders.

turer or distributor where purchased ect freight.

s or valve protection bonnets.

e is no further requirement for the tributor for return instruction.

he consumer or used for any other

#### NOTES FOR USE

nd should be used only by individuals follow all label precautions and directions Handling and Application of Methyl

s knowledgeable about the hazards. equipment and detector devices. fumigant (see Product Manual No.

perature is below 50°F. at 6-8 inches.

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

Specific instructions for application appears in the "Annual for the Safe Handling and Application of Methyl Bromide Products 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 end 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. Do not open the system when there are people or structures downwind.

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 tarpaulins.

Two trained persons must be present during removal of tarpaulins.

Specific instructions for application of 50-50 to field soils appear in the Product Manual No. AM-210.

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.

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.

#### GENERAL INFORMATION

50-50, a preplant soil fumigant, is used for the control of soil-borne pests such as: Wireworms, June beetle larvae, white grubs and garden symphylians in the soil at the time of planting.

Soil-borne fungi, including Verticillium, Fusarium, Pythium, Phizoctonia, Phytophthora, Pyrenochaeta, Sclerotinia, Sclerotium, Armillaria, and the clubroot organism, Plasmodiophora.

Nematoodes (such as Criconemoides, Tylenchus, Pratylenchus, Xiphinema and Paratylenchus species)

Broadleaf and grassy weeds, such as annual bluegrass broomrape, common lambsquarters, torpedograss, nutsedge, Bermudagrass and quackgrass at higher rates.

50-50 is not effective against mallow, flaxseed, dodder, some species of clover, and certain other hard seeded weeds. Crops listed below can be treated.

#### SOIL PREPARATION

Before treatment the soil should be in condition for planting and with sufficient moisture to support seed germination. If fumigation is being done to control nutsedge, till the soil to a depth of at least 15".

#### APPLICATION

Apply with chisels spaced from 12" to 18" apart, and inject 50-50 to a depth of 5" to 8" below soil surface. Seal fumigant with a drag or cultipacker immediately behind chisels and then cover with a gas-tight tarpaulin.

#### DOSAGE TABLE

Crop To Be Planted:	Lbs. 50-50 per Acre <sup>1,2</sup>
Strawberries	300-480
Tomatoes	300-480
Cauliflower	300-480
Broccoli	300-480
Muskmelons	300-480
Peppers	300-480
Eggplants	300-480
Floral Crops	400-540
Nursery Crops	400-540
Plant & Seed Beds <sup>3</sup>	400-540

<sup>1</sup>Row or bed applications may be made at the broadcast rates but the amount used will be proportionately less per acre depending on the row spacing and width of treatment in the row or bed. The usual chisel spacing for methyl bromide treatment is 12" and it is assumed that each chisel treats a 12" strip when injected at a depth of 5" to 8".

<sup>2</sup>Use the higher rates for nutsedge control.

<sup>3</sup>Plants grown for transplanting.

<sup>4</sup>Growing difficulties in treated soil may be experienced with Carnations, Geraniums, Delphiniums, Holly, Mistletoe, Peas, Seville, Snapdragons, and certain other crops.

<sup>5</sup>For use on muskmelons, (all Cucumis melo melons, excludes watermelons), cantaloupes, Persian melons, honeydew melons, casabas, greenhaws, mango melons and their hybrids.

After 48 hours remove tarpaulin and allow the soil to aerate for two weeks before planting. Pepper seeds can be direct seeded through the use of plug mix after 72 hours.

### CITRUS SOIL TREATMENT FOR CONTROL OF PHYC IN FLORIDA SANDY SOILS

This is a preplant or replant treatment. Do not apply to soil w harvestable fruit within 24 months. Use a minimum of 1½ lbs to fumigation for 96 hours covering treated area with a 4-mil t disease to a depth of 4 feet. Aerate 2 weeks before setting transp

Apply with chisels spaced 12 inches apart to a depth of 8 inches a drag or cultipacker immediately behind chisels. Cover with a Remove tarpaulin after recommended fumigation period and at before planting. If odors persist, disc or plow the soil to assis

Do not apply 50-50 when there is little or no air movement.

Do not apply near buildings inhabited by humans or livestock to fields where valuable crops are growing.

\*Phytophthora diseases controlled are root rot and crown rot

#### NOTE:

Following soil fumigation, undesirable concentrations of chlorop by areas. If this occurs, immediately cover treated area with a pl tarpaulin overnight and remove during the daytime. Recover il indicates that the undesirable concentration is continuing. Ther most likely to occur in the evening or at night when the air is r in movement. Do not make application of 50-50 when there is ment or there is an inversion condition in the atmosphere.

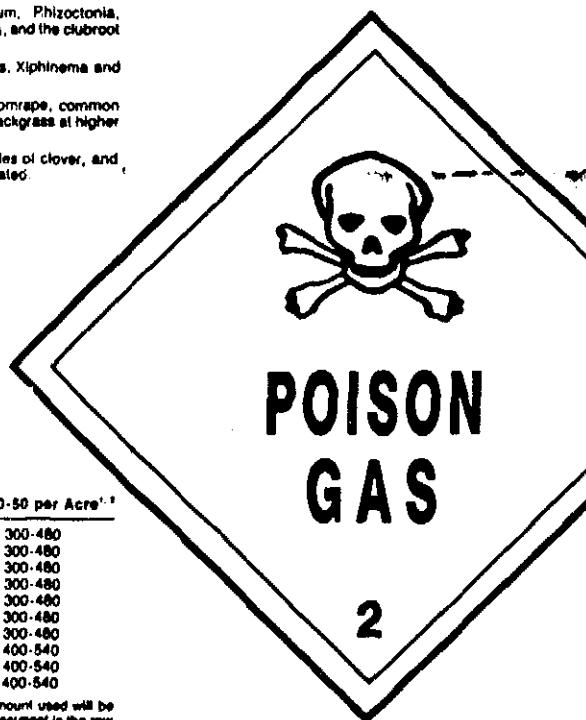
NOTE CAREFULLY: Following fumigation, the level of solub nitrogen may be raised. This is most likely to occur when her and fertilizers are applied to soils that are either acid, wet, co matter. Fertilizers containing ammonium salts should not be use containing nitrates until after the crop is well established and is above 65°F. In order to avoid ammonia injury, nitrate star fumigation, fertilize as indicated by soil test to protect against it is best that highly acid soils be limed before application to and reduce the possibility of ammonia toxicity.

#### NOTICE

Many pesticidal chemicals are poisonous and may leave a toxic to which they are applied. The U.S. Food and Drug Administr maximum amounts of such pesticide that may remain on raw at harvest, and it is the user's responsibility to see that there i crops at harvest in excess of these amounts. The "Fumigation I on the best available information, and if followed carefully shou residues at harvest. However, AmeriBrom, Inc. assumes no re accuracy nor for any loss due to excessive residues.

WARNING: Contains methyl bromide, a substance which ha environment by destroying ozone in the upper i

### CHLOROPICRIN AND METHYL BROMIDE MIXTURE UN 1581 INHALATION HAZARD



Warranty: Seller warrants that the product conforms to its che is reasonably fit for the purpose stated on the label when use directions under normal conditions of use, but neither this warre of MERCHANTABILITY or FITNESS FOR A PARTICULAR P implied, extends to the use of this product contrary to label abnormal conditions, or under conditions not reasonably for buyer assumes the risk of any such use. Buyer assumes all or handling of this material not in strict accordance with direc

BEST AVAILABLE COPY

signs  
level of  
n level  
legible  
  
remove  
  
section  
action  
others  
ation,  
s and  
active  
ments  
Pro-  
  
h the  
  
wise  
1 and  
S --  
from  
con-  
ppm  
sured  
10-14  
con-  
AND  
less  
blot  
work-  
level  
n.  
  
se be  
1 and  
eting  
stion.  
blot  
  
nd by  
ated  
WPS  
stion.  
  
signs  
ting).  
  
eated  
  
entry  
reatic  
  
r out-  
as a  
  
ured  
ough  
ding.  
ders.  
inder  
  
store  
use.  
  
ices  
of by  
Iron-  
EPA  
rticity  
  
ning  
ction  
refill  
ant's  
  
ased  
  
r the  
  
ther  
  
iduals  
direct-  
methlyl  
  
zards.  
vices,  
al No.  
  
ches.

### 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:** 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 end 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. Do not open the system when there are people or structures downwind.

**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 tarpaulin.

Specific instructions for application of 50-50 to field soils appear in the Product Manual No. AM-210.

**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.

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.

### GENERAL INFORMATION

50-50, a preplant soil fumigant, is used for the control of soil-borne pests such as: Wireworms, June beetle larvae, white grubs and garden symphytina in the soil at the time of planting.

Soil-borne fungi, including Verticillium, Fusarium, Pythium, Rhizoctonia, Phytophthora, Pyrenochaeta, Sclerotinia, Sclerotium, Annularia, and the clubroot organism, Plasmodiophora.

Nematodes (such as Citronemoides, Tylenchus, Pratylenchus, Xiphinema and Paratylenchus species)

Broadleaf and grassy weeds, such as annual bluegrass, broomrape, common lambsquarters, torpedograss, nutsedge, Bermudagrass and quackgrass at higher rates.

50-50 is not effective against mallow, flares, dodder, some species of clover, and certain other hard seeded weeds. Crops listed below can be treated.

### SOIL PREPARATION

Before treatment the soil should be in condition for planting and with sufficient moisture to support seed germination. If fumigation is being done to control nutsedge, till the soil to a depth of at least 15".

### APPLICATION

Apply with chisels spaced from 12" to 18" apart, and inject 50-50 to a depth of 6" to 8" below soil surface. Seal fumigant with a drag or cultipacker immediately behind chisels and then cover with a gas-tight tarpaulin.

### DOSAGE TABLE

Crop To Be Planted:	Lbs. 50-50 per Acre <sup>1,2</sup>
Strawberries	300-480
Tomatoes	300-480
Cauliflower	300-480
Broccoli	300-480
Muskmelons <sup>3</sup>	300-480
Peppers	300-480
Eggplants	300-480
Floral Crops <sup>4</sup>	400-540
Nursery Crops <sup>4</sup>	400-540
Plant & Seed Beds <sup>4</sup>	400-540

<sup>1</sup>Row or bed applications may be made at the broadcast rates but the amount used will be proportionately less per acre depending on the row spacing and width of treatment in the row or bed. The usual chisel spacing for methyl bromide treatment is 12" and it is assumed that each chisel treats a 12" strip when injected at a depth of 8" to 9".

<sup>2</sup>Use the higher rates for nutsedge control.

<sup>3</sup>Plants grown for transplanting.

<sup>4</sup>Growing difficulties in treated soil may be experienced with Carnations, Contlers, Delphiniums, Holly, Mulberry Rose, Salvia, Snapdragons, and certain other crops.

<sup>5</sup>For use on muskmelons, (all Cucurbit melon melons, excludes watermelons), cantaloupes, Persian melons, honeydew melons, casabas, craneshaws, mango melons and their hybrids.

After 48 hours remove tarpaulin and allow the soil to aerate for two weeks before planting. Pepper seeds can be direct seeded through the use of plug mix after 72 hours.

### CITRUS SOIL TREATMENT FOR CONTROL OF PHYTOPHTHORA\* IN FLORIDA SANDY SOILS

This is a preplant or replant treatment. Do not apply to soil where trees will bear harvestable fruit within 24 months. Use a minimum of 1 1/2 lbs./100 sq. ft. Expose to fumigation for 96 hours covering treated area with a 4-mil tarpaulin. Will control disease to a depth of 4 feet. Aerate 2 weeks before setting transplants in treated area.

Apply with chisels spaced 12 inches apart to a depth of 8 inches. Seal fumigant with a drag or cultipacker immediately behind chisels. Cover with a gas-proof tarpaulin. Remove tarpaulin after recommended fumigation period and aerate soil for 2 weeks before planting. If odors persist, disc or plow the soil to assist aeration.

Do not apply 50-50 when there is little or no air movement.

Do not apply near buildings inhabited by humans or livestock or in area adjacent to fields where valuable crops are growing.

\*Phytophthora diseases controlled are root rot and crown rot.

### NOTE:

Following soil fumigation, undesirable concentrations of chloropicrin may drift to nearby areas. If this occurs, immediately cover treated area with a plastic tarpaulin. Leave tarpaulin on overnight and remove during the daytime. Recover the area if eye irritation indicates that the undesirable concentration is continuing. These concentrations are most likely to occur in the evening or at night when the air is most likely to be static in movement. Do not make application of 50-50 when there is little or no air movement or there is an inversion condition in the atmosphere.

**NOTE CAREFULLY:** Following fumigation, the level of soluble salts and ammonia nitrogen may be raised. This is most likely to occur when heavy rates of fumigant and fertilizers are applied to soils that are either acid, wet, cold, or high in organic matter. Fertilizers containing ammonium salts should not be used. Apply only fertilizers containing nitrates until after the crop is well established and the soil temperature is above 55°F. In order to avoid ammonia injury, nitrate starvation, or both. After fumigation, fertilize as indicated by soil test to protect against injury to plant roots. It is best that highly acid soils be limed before application to stimulate nitrification and reduce the possibility of ammonia toxicity.

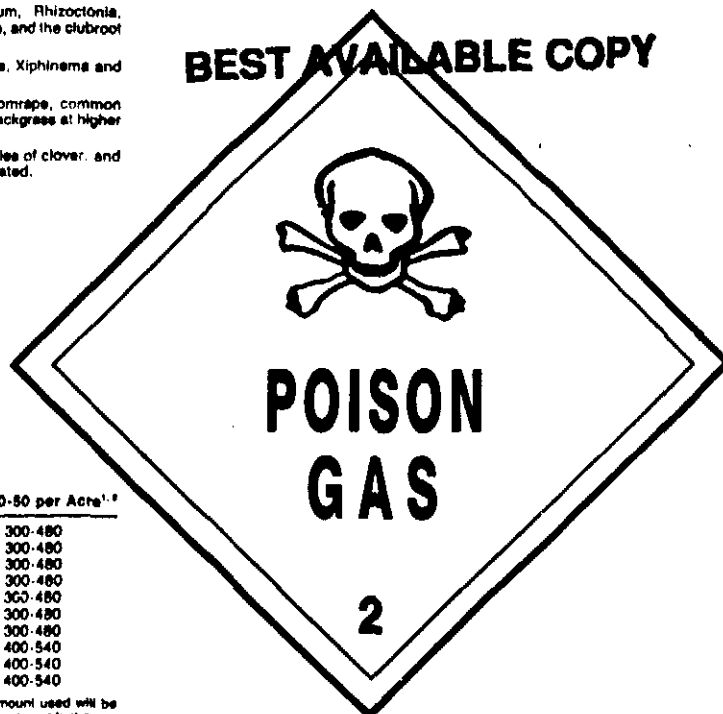
### NOTICE

Many pesticidal chemicals are poisonous and may leave a toxic residue on the plants to which they are applied. The U.S. Food and Drug Administration has established maximum amounts of such pesticide that may remain on raw agricultural products at harvest, and it is the user's responsibility to see that there is no residue on such crops at harvest in excess of these amounts. The "Fumigation Directions" are based on the best available information, and if followed carefully should not leave excessive residues at harvest. However, AmeriBrom, Inc. assumes no responsibility as to their accuracy nor for any loss due to excessive residues.

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

## CHLOROPICRIN AND METHYL BROMIDE MIXTURES UN 1581 INHALATION HAZARD

BEST AVAILABLE COPY



**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.