8622-43

|2/|1/200 / RESTRICTED USE PESTICIDE

Due to acute inhalation 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.

METAPICRIN

FUMIGANT - FOR PREPLANT SOIL FUMIGATION

ACTIVE INGREDIENTS:

By wt.

1/7

TOTAL...... 100%

ACUTELY TOXIC CHEMICAL

13.8 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 expliquea Usted en detalle. (If you do not understand the label, find someone to explain it to you in detail.)					
FIRST AID					
lf inhaled	mouth-to-mouth, if possible.	911 or an ambulance, then give artificial respiration, preferably by doctor for further treatment advice.			
If swallowed	Have person sip a glass of wat	told to do so by the poison control center or doctor.			
lf on skin or clothing	 Take off contaminated clothing Rinse skin immediately with pl Call a poison control center or 	enty of water for 15-20 minutes.			
tf in eyes		y and gently with water for 15-20 minutes. ent, after the first 5 minutes, then continue rinsing eye. doctor for treatment advice.			
Have the product container or label with you when calling a poison control center or doctor, or going for treatment.					
NOTE TO PHYSICIAN					
"Note to Physician: Probable mucosal damage may contraindicate the use of gastric lavage."					

See side panels for additional precautionary statements.

EPA REG. NO. 8622-43

AmeriBrom, Inc.

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AB25/rev 8

EPA EST. NO. 67545-AZ-01
 EPA EST. NO. 15298-IS-01
 EPA EST. NO. 29516-FL-04
 EST. EST. NO. 29516-NC-01
 EST. EST. NO. 5785-CA-01

IN CASE OF EMERGENCY CONTACT:

Chemtrec (800) 424-9300

OR

AmeriBrom West 5419 Santa Clara Ave Camarillo, CA 93010 Call Collect: (805) 988-9719 (CA) (201) 242-6560 (NJ)

Net contents:	LBS./KGS.	8/01
	ACCEPTED	
	DEC 17 2001	
	Under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, for the pesticide registered under EPA Reg. No. 86 22-43	

PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS & DOMESTIC ANIMALS

DANGER

Poison liquid and vapor. Inhalation of vapors may be fatal. Contact with liquid may produce burns. Do not get into eyes, on skin, or clothing. Harmful or fatal if swallowed.

This product is chloropicrin, a volatile-liquid tear gas. Chloropicrin vapor is very irritating to the upper respiratory tract, and even at the low levels can cause painful irritation to the nose and throat, and to the eyes, producing tearing. If these symptoms occur, leave the furnigation area immediately. Continued exposure after irritation is evident, or higher concentrations, may cause painful irritation to the eyes or temporary blindness, which may cause pain that may in turn lead to further accidents.

NOTE TO PHYSICIAN: Metapicrin is a volatile liquid that is the active ingredient in tear gas. As a gas it is a powerful lachrymator. Early symptoms of overexposure are lachrymation, respiratory distress and vomiting. Pulmonary edema may develop later. Treatment is symptomatic.

ENVIRONMENTAL HAZARDS: This pesticide is toxic to wildlife. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, occans, 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 sever systems without previously notifying the local sewage treatment plant authority. For guidance contact your State Water Board or Regional Office of the EPA.

PHYSICAL OR CHEMICAL HAZARDS: Chloropicrin may be corrosive under certain conditions. DO NOT USE WATER to clean equipment. Flush equipment with kerosene or fuel oil. Do not use handling equipment or containers made from magnesium alloy, aluminum, or alkali metals. Chloropicrin is a non-flammable liquid.

AIR CONCENTRATION LEVEL

The acceptable air concentration level for persons exposed to chloropicrin is 0.1 ppm (0.7 mg/m³). If the air concentration level exceeds 0.1 ppm, an air purifying respirator must be worn. If the air concentration level exceeds 4 ppm, an air supplying respirator must be worn. The air concentration level is measured by a direct reading detection device, such as a Matheson-Kitagawa.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Some materials that are chemical-resistant to this product are listed below. If you want more options, follow the instructions for Category H on an EPA chemical resistance selection chart.

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 0.1 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.

A respirator is required under the following circumstances:

- If the acceptable air concentration level exceeds 0.1 ppm at anytime, applicators and other handlers must wear (a) a respirator
 with an organic-vapor-removing cartridge with a pre-filter approved for pesticides (MSHA/NIOSH approval number prefix TC-23C),
 OR (b) a respirator with a canister approved for pesticides (MSHA/NIOSH approval number prefix TC-14G) or a NIOSH approved
 respirator with an organic vapor (OV) cartridge or canister with any N, R, P or HE prefilter.
- If the air concentration level exceeds 4 ppm at anytime, applicators and other handlers must (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).

WORK SAFETY REQUIREMENTS

- Do not wear jewelry, gloves, goggles, tight clothing, rubber protective clothing, or rubber boots when handling. Chloropicirin is heavier than air and can be trapped inside clothing and cause skin injury.
- 2. Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product. Do not reuse them.
- 3. Clean PPE after each day's use, 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.
- 4. Follow PPE manufacturers instructions for cleaning /maintaining protective eyewear, face shields and respirators.
- 5. Never fumigate alone.

Users should:

USER SAFETY RECOMMENDATIONS

- 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.

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,"
- "Chloropicrin 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 furnigated area until the signs are removed. Such signs must only be removed when the air concentration level of chloropicrin is measured to be less than 0.1 ppm. Signs must remain legible during entire posting period.

Only a certified applicator (or someone under his/her supervision) may remove warning signs at entrances to fumigated structures.

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 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 building/structure) from the start of application until 48 hours after application AND until the air concentration level of chloropicrin in the working area is measured to be less than 0.1 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 chloropicrin in their working area remains less than 0.1 ppm. If tarps are used for the application, non-handler entry is prohibited during tarp removal and until the air concentration is measured to be less than 0.1 ppm.

Outdoor Soil Furnigation: 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 Furnigation: Post the furnigant warning signs outside all entrances to the entire greenhouse (entire enclosed building/structure).

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 dry, cool, ventilated area under lock and key. Post as a pesticide storage area.

DO NOT CONTAMINATE WATER, FOOD OR FEED BY STORAGE OR DISPOSAL. Store cylinders upright, secured to a rack or wall to prevent tipping. The valve protection bonnet and safety cap should be removed only when furnigant is about to be removed from the cylinder. The safety cap and valve protection bonnet must be replaced when the cylinder is not in use. 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.

Person moving or handling containers must wear personal protective equipment (including prescribed respirator) specified in the Hazard to Humans section of this labeling. Open container only in a well-ventilated area

CONTAINER DISPOSAL: When cylinder is empty, close valve by turning clockwise until hand tight, screw 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.

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, 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.

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.

SPECIFIC DIRECTIONS FOR USE

SPECIFIC DIRECTIONS FOR USE

This furnigant 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.

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.

Do not furnigate with this product when soil temperature is below 50°F, at a depth of 6 inches.

SPILL AND LEAK PROCEDURES

Evacuate everyone from the immediate area of the spill or leak. For entry into affected area to correct problem, wear the personal protective equipment (including prescribed respirator) specified in the Hazards to Humans section of this labeling. Move leaking or damaged containers outdoors or to an isolated location. Observe strict safety precautions. Work upwind, if possible. Allow spilled furnigant to evaporate or to absorb onto vermiculite, dry sand, earth, or similar absorbent material. Such material should be disposed of on site or at an approved disposal facility. Only correctly trained and PPE-equipped handlers are permitted to perform such cleanup. Do not permit entry into the spill or leak area by any other person until the concentration of chloropicrin is measured to be less than 0.1 ppm.

SOIL FUMIGATION

Metapicrin may be used as a preplant soil fumigant for control of many economic soilborne pests if present in soil at time of treatment. Soil fumigation with Metapicrin provides control or suppression of plant-parasitic nematodes and disease causing organisms including the bacterial pathogen Pseudomonas solancearum, fungi in the genera Cylindrociadium, Fusaruim, Pyrenochaeta, Pythium, Rhizoctonia, Sclentina, Sclentina, Sclentina, and Verticillum, the clubroot oranism Plasmodiophora, and the soil pox organism Actinomyces ipomoea. Control of certain soil infesting insects such as cut worms, grubs, and wireworms may also be obtained as well as suppression of weeds if used with tarpaulin.

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, if used.

WHEN TO TREAT: Furnigate at least 14 days prior to planting whenever soil conditions are suitable. For best results, soil should be tilled to a fine, loose condition with soil temperature at depth of application between 60° F and 85° F. Do not furnigate when soil temperature is below 50°F. Soil should contain adequate moisture to support good seed germination. Fall treatment is suggested for fields that will be planted too early to allow for adequate soil temperatures.

SOIL PREPARATION: For best fumigant penetration and soil sealing, plant remains should be worked into the soil long enough before treatment to allow for maximum decomposition. Deep tillage (e.g. 12 to 18 inches) often improves results. Till the soil to a very fine condition, leaving as few clods a possible. Optimum seedbed moisture is an essential factor for effective fumigation. Do not fumigate dry soil.

APPLICATION: For field application as an overall treatment, inject Metapicrin with a chisel type applicator having chisels spaced no more than 12 inches apart and injecting the furnigant 8 inches below the soil surface. To seal in furnigant after application, cover treated area with a plastic tarp. Alternate sealing methods include the use of a drag cultipacker, roller or float to firm the soil surface immediately behind chisels, or the application of water to wet the surface of soil 1 inch deep. For application as a row or bed treatment in the field, Metapicrin should be applied using one chisel shank per row to inject furnigant 8 inches below the original soil surface and sealed by listing a high, wide bed over the row or firming the bedded area with a bed-shaper. Furnigation of small areas or volumes of soil, potting mix or mushroom casing may be made by applying Metapicrins involving the use of a plastic tarpaulin remove the tarp after 48 hours of exposure. Refer to Table for dosage rates for specific crops. Do not plant treated soil for 15 days.

WHEN TO PLANT: The soil should not be disturbed for 14 days following treatment. Do not plant seeds or transplants until the fumigant odor has left the soil. Cool or wet weather following treatment will retard diffusion of the fumigant, requiring a longer exposure and aeration period. Should these condition occur, hasten aeration by working the bed to the depth of injection, taking care to avoid reinfestation of the fumigated zone with contaminated equipment and untreated soil. Aeration is usually complete when the odor of the fumigant is no longer evident.

METAPICRIN DOSAGE RATES AND METHOD OF APPLICATION

Crop	Manner of Sealing	Dosage
All crops* (Including greenhouse, nursery, and outside beds)	Cultipacking or water seal	485-1076 lbs./ A
	Plastic (A)	150-200 lbs./A
Greenhouse beds	Plastic (A)	3-4 cc/sg. ft.
Mushroom casing soil	Water plus plastic or wet newspapers	5-10 cc/cu. ft.
Potting soil	Water or plastic (A)	3-4 cc/ sq. ft.
Seedbeds-Celery (Florida)	Water or plastic (A)	1021 lbs. A or 6 cc/ sq. ft
Seedbeds (other)	Water or plastic (A)	3-4 cc/ sq. ft.
Seed flats	Plastic (A)	2-4 cc/ sq. ft. 10 cc/cu. ft.

(A) Best results are obtained by covering beds with tarpaulin or plastic cover for 48 hours after treatment. A water seal maintained for 48 hours in top inch soil may also be used. Keep tarpaulin on potting soil and seed flats for 48 hours.

*Suggested broadcast recommended rates for specific crops.

Preplant Soil Rate	Pounds/Acre
Strawberry cropiand	320-500

 Tomatoes.
 300-500

 Onions.
 200-400

 Eggplants.
 300-500

 Cucumbers.
 300-500

 Melons.
 300-500

 Sweet Potatoes.
 150-400

 Yams.
 150-400

 Tobacco.
 150-500

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.

After fumigation, fumigated areas must be aerated until the air concentration level of chloropicrin is measured to be less than 0.1 ppm. Until the acceptable air concentration level is reached, do not allow any person to enter the fumigated area unless he/she is wearing the specified personal protective equipment (including prescribed respirator) specified in the Hazards to Humans section of this labeling. In greenhouses, additional Worker Protection Standard restrictions apply.

APPLICATION OF METAPICRIN THROUGH DRIP IRRIGATION SYSTEM

DOSAGE: 100 to 300 pounds per treated acre. See crops listed in dosage table.

DILUTION RATE: Mix Metapicrin with surfactant prior to injection into drip line irrigation system. Mix at a ratio of 1:24 surfactant to Metapicrin by weight. Use any surfactant that is suitable and approved for this application.

GENERAL PREPARATION AND INSTRUCTIONS:

- 1. Plan the application by calculating the amount of Metapicrin required at the appropriate rate for the crop, treated area and target pest.
- 2. Metapicrin must be applied via a closed injection system into the drip irrigation system to accomplish wetting of the soil in the area being treated. Drip emitters should be spaced no more than 8-12 inches apart.
- 3. Surfactant may be metered into the supply line for Metapicrin and then passed through a similar mixing device, such as a pump or static mixer, to assure proper agitation. The mixture of Metapicrin and surfactant must be metered into the water supply and passed through a similar mixing device to assure proper agitation before it is distributed into the drip irrigation system.
- 4. Meter mixture of Metapicrin and surfactant into the drip system according to the dosage desired. An adequate concentration of Metapicrin must be present in order to be effective. At no time should the concentration of Metapicrin exceed 1,000 ppm by weight in the irrigation water. For example, a 300 pound per acre Metapicrin application rate would require 36,000 gallons of water per treated acre to deliver a 1,000 ppm concentration.
- 5. Soil conditions prior to application are as follows:
 - A. Ground should be in seed-bed condition
 - B. Beds must be listed, shaped and ready for planting.
 - C. Soil moisture must be at least 50% of field capacity in the top 2-3 inches at time of Metapicrin application.
- 6. After application of Metapicrin continue to flow untreated water to flush the irrigation system. Do not permit Metapicrin to remain in the irrigation system after the application is complete. The total volume of water, including the amount used for flushing the irrigation system, should completely wet the soil to be treated. It should not exceed 2 inches of water depth over the treated area.

USE PRECAUTIONS

- 1. Apply this product only through drip (trickle) irrigation systems. Do not apply this product through any other type of irrigation system.
- 2. Crop injury, lack of effectiveness, or illegal pesticide residues in the crop can result from non-uniform distribution of treated water.
- If you have any questions about calibration, you should contact State Extension Service specialists, equipment manufactures or other experts.
- 4 Do not connect an irrigation system (including greenhouse systems) used for pesticides application to a public water system unless the pesticides label-prescribed safety devices for public water system are in place.

Public water system means a system for the provision to the public of piped water for human consumption if such system has at least 15 service connections or regularly serves an average of at least 25 individuals daily at least 60 days out of the year.

Chemigation systems connected to public water systems must contain a functional, reduced-pressure zone, back flow preventer (RPZ) or the functional equivalent in the water supply line upstream from the point of pesticide introduction. As an option to the RPZ, the water from the public water system should be discharged into a reservoir tank prior to pesticide introduction. There shall be a complete physical break (air gap) between the flow outlet end of the fill pipe and the top or overflow rim of the reservoir tank of at least twice the inside diameter of the fill pipe.

- 5 A person knowledgeable of the chemigation system and responsible for its operation, or under the supervision of the responsible person, shall shut the system down and make necessary adjustments should the need arise.
- The system must contain a functional check valve, vacuum relief valve, and low pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from backflow.
- 7. The pesticide injection pipeline must contain a functional, automatic, quick closing check value to prevent the flow of fluid back toward the injection pump or tank.
- 8. The pesticide injection pipeline must contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.

- 9. The system must contain functional interlocking controls to automatically shut off the pesticides injection pump when the water flow stops.
- 10. The irrigation line or water pumps must include a functional pressure switch which will stop the water flow or pump motor when the water pressure decreases to the point where pesticides distributions are adversely affected.
- 11. Systems must use a metering pump such as a positive displacement injection pump (e.g. diaphragm pump) or a pressurized injection system which is effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.
- 12. Posting of areas to be chemigated is required when: (a) any part of the treated area is within 300 feet of sensitive areas such as residential areas, labor camps, businesses, day care centers, hospitals, in-patient clinics, nursing homes, or any public areas such as schools, parks, playgrounds, or other public facilities not including public roads, or (b) when the chemigated area is open to the public, such as golf courses or retail greenhouses.

Posting must conform to the following requirements. Treated areas shall be posted with signs at all usual points of entry and along likely routes of approach from the listed sensitive area. When there are no usual points of entry, signs must be posted in the corners of the treated areas and in any other locations affording maximum visibility to sensitive areas. The printed side of the sign should face away from the treated area towards the sensitive area. The signs shall be printed in English. Signs must be posted prior to application and must remain posted until foliage has dried and soil surface water has disappeared. Signs may remain in place indefinitely as long as they are composed of materials to prevent deterioration and maintain legibility for the duration of the posting period.

All words shall consist of letters at least 2 ½ inches tall, and all letters and the symbol shall be a color which sharply contrasts with their immediate background. At the top of the sign shall be the words KEEP OUT, followed by an octagonal stop sign symbol at least 8 inches in diameter containing the work STOP. Below the symbol shall be the words PESTICIDES IN IRRIGATION WATER.

AERATION: Do not disturb treated soil for at least 2 weeks. Wet soil retards diffusion of chloropicrin, thus requiring a longer exposure period. Aeration is usually complete when the odor of the Metapicrin is no longer evident.

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.