

PH 32 8622-43

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

OCT 10 1991

AmeriBrom, Inc.
52 Vanderbilt Avenue
New York, NY 10017

Attn: Allen Tillman

Subject: Metapicrin
EPA Registration No. 8622-43
Your Amendment of April 23, 1991

The above dated amendment, a proposal to expand the use directions, use patterns, and to add a listing of pests controlled to the label of this product, has been reviewed and the following comments apply.

The labeling referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, is acceptable subject to the comments listed below. A stamped copy is enclosed for your records. Five copies of the finished labeling must be submitted before you release the product for shipment.

- In the use directions which detail the dosages recommended for specific crops, change "Strawberries: 300-500 lbs./acre" to read: "Strawberries cropland: 320-500 lbs./acre".

If you should have any questions concerning this letter, you may call Robert Travaglini on (703) 557-6909.

Sincerely,

Ruth G. Douglas
Acting Product Manager (32)
Antimicrobial Program Branch
Registration Division (H7504C)

| CONCURRENCES | | | | | | | |
|--------------|-------------|--|--|--|--|--|--|
| SYMBOL | | | | | | | |
| SURNAME | | | | | | | |
| DATE | OCT 10 1991 | | | | | | |

PP 80 8622 112

Dept

RESTRICTED USE PESTICIDE

For retail sale to and use only by Certified Applicators or persons under their direct supervision, and only for those uses covered by the Certified Applicator's certification.

METAPICRIN

For soil, space and vault fumigants

| | |
|----------------------------|-------------------------|
| ACTIVE INGREDIENTS: | By Wt. |
| CHLOROPICRIN | 99.0% |
| INERT INGREDIENT: | 1.0% |
| | TOTAL . . . 100% |

ACUTELY TOXIC CHEMICAL

13.8 lbs. Active Ingredient per gal. (LIQUID IN CYLINDER)

KEEP OUT OF REACH OF CHILDREN

DANGER  **PELIGRO**

POISON

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

STATEMENT OF PRACTICAL TREATMENT

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

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

If on skin — Immediately remove all contaminated clothing, shoes, and other items covering 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.

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EPA REG. NO. 8622-43-AA
NET WEIGHT

- EPA EST. NO. 10163-AZ-1
- EPA EST. NO. 15298-IS-01
- EPA EST. NO. 29516-FL-04
- EPA EST. NO. 29516-NC-01

Distributed by:

AmeriBrom, Inc.

52 VANDERBILT AVE.,
NEW YORK, N.Y. 10017
TELEPHONE: (212) 286-4000
FAX: (212) 286-4475

IN CASE OF EMERGENCY CONTACT:

Chemtrec (800) 424-9300

OR

AmeriBrom West

**Call Collect: (805) 988-9749
(212) 286-4000 (N.Y.)**

Net contents: _____ LBS./ _____ KGS. 2/91

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. Wash all contaminated clothing with soap and water before re-use. Do not re-use contaminated clothing or shoes until free of chemical odor. 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 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.

NOTICE 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, oceans, or public waters unless this product is specifically identified and addressed in an NPDES permit. Do not discharge effluent containing this product to sewer systems without previously notifying the sewage treatment plant authority. For guidance contact your State Water Board or Regional Office of the EPA.

PHYSICAL 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.

DIRECTIONS FOR USE

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

PROTECTIVE CLOTHING: Wear full-body clothing that is cleaned after each wearing or disposable protective clothing. Use gloves and apron that are resistant to chloropicrin. If full-face respiratory protection is not required, wear goggles or full-face shield for eye protection when handling liquid.

PESTICIDE STORAGE, HANDLING AND DISPOSAL

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

DO NOT CONTAMINATE WATER, FOOD OR FEED BY STORAGE: Store cylinders upright, secured to a rack or wall to prevent tipping. Cylinders should not be subjected to rough handling or mechanical shock such as dropping, bumping, or 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.

Persons moving or handling containers should wear protective clothing. Open container only in a well-ventilated area wearing protective clothing, and respiratory protection if necessary.

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.

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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.

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.

Respirator Protection: If the concentrations of chloropicrin in the working area, as measured by a direct-reading detector device (e.g. Draeger, etc.) does not exceed 0.1 ppm (0.7 mg/m³), no respiratory protection is required.

If the concentrations is exceeded at any time, all persons in the working area must wear protective clothing and a NIOSH/MSHA approved self-contained breathing apparatus (SCBA) or combination air-supplied/SCBA respirator.

When used for fumigation of enclosed spaces where no commodities are or will be stored, (house and structures, warehouses, vaults, chambers, greenhouses, trucks, vans, boxcars, ships and other transport vehicles), two persons trained in the use of this product must be present at all times during introduction of the fumigant, testing and aerations periods.

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

PLACARDING OF FUMIGATED AREA

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

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

Only a certified applicator or someone under his/her supervision may remove placards, and only when the concentration of Chloropicrin in the treated site is below 0.1 ppm.

Aeration and Reentry: After fumigation, treated areas must be aerated until the level of chloropicrin is below 0.1 ppm. Do not allow entry into the treated area by any person before this time unless provided with a respiratory protection device (SCBA or combination air-supplied/SCBA).

Spill and Leak Procedures: Evacuate immediate area of spill or leak. Use Self-Contained Breathing Apparatus – Positive Pressure (SCBA-PP) or air supplied respirator for entry into affected area to correct problem. Move leaking or damaged containers outdoors or to an isolated location, observing strict safety precautions. Work upwind if possible. Allow spilled material to evaporate, or absorb onto vermiculated, dry sand, earth or similar absorbent material which may be disposed of on site, or at an approved disposal facility. Do not permit entry into spill area or cleanup area by unprotected persons until concentration of Chloropicrin is determined to be less than 0.1 ppm.

SEE ATTACHED ADDITION

of
soil.



ACCEPTED
with COMMENTS
to EPA Letter D-1-84

DEC 1 1984

Under the Federal Insecticide,
Fungicide, and Rodenticide Act as
amended, the pesticide
registered under EPA Reg. No.
8662-43

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SPACE AND VAULT FUMIGATION DIRECTIONS

When using METAPICRIN as a space, greenhouse or vault fumigation, the applicator must placard or post all entrances to the fumigated area with signs bearing the information previously listed under "Placarding of Fumigated Areas."

A. SPACE FUMIGATION (not containing raw agricultural commodities): For control of mites, cockroaches, silverfish and fungi, use 1 pound of METAPICRIN per 1000 cubic feet. Increase dosage 1/4 to 1/2 pounds per 1000 cubic feet when absorbent materials are present. Do not treat empty spaces where commodities will be stored.

APPLICATION INFORMATION: Prior to application, all windows, doors and other openings should be sealed to make the building gas tight. Temperature at time of application should be 80 F. or higher. Introduce METAPICRIN into a shallow pan or onto burlap sacks or similar absorbent material located inside the structure. Use fans to hasten evaporation of METAPICRIN AND TO KEEP FUMIGANT IN CIRCULATION. Ventilate area thoroughly for 12 to 24 hours before resuming operations. Fans, dryness, and high temperature speed aeration.

B. VAULT FUMIGATION: For the control of fleas, mites, silverfish, cockroaches, and moths in furniture and clothing, use 1 to 2 pounds of METAPICRIN. In heavily loaded vaults, increase dosage rates by an additional 1 pound per 1000 cubic feet. Do not fumigate grain or commodities.

APPLICATION INFORMATION: Introduce the desired amount of METAPICRIN into a shallow pan or onto burlap sacks or similar absorbent material located inside the structure or vault. Use fans to hasten evaporation of METAPICRIN and to keep fumigant in circulation. Exposure time is 24 hours. Ventilate by opening doors and using fans for 12 to 24 hours prior to reentry.

C. WARNING AGENT: METAPICRIN may be used for clearing structures prior to fumigating with methyl bromide or sulfuryl fluoride. Prepare structure for fumigation and seal all except one entrance. When building is evacuated, seal the last entrance and start the fans. Check seals for tightness. Five or ten minutes later, introduce methyl bromide or sulfuryl fluoride.



**Chloropicrin,
Liquid
UN 1580**

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INHALATION HAZARD

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.

suppression of weeds if used with a tarpaulin.

WHEN TO TREAT: Fumigate 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 Deg. F and 85 Deg. F. Do not fumigate when soil temperature is below 50 Deg. 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 as 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 fumigant 6-8 inches below the soil surface. To seal in fumigant 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 fumigant 6-8 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. Fumigation of small areas or volumes of soil, potting mix or mushroom casing may be made by applying Metapicrin with a probe type point-injection device to a 6-8 inch depth in a grid pattern with injection points on a 12-inch spacing. For all applications involving the use of a plastic tarpaulin remove the tarp after 24-48 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 conditions 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.

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/sq. 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 a tarpaulin or plastic cover for 24 hours after treatment. A water seal maintained for 24 hours in top inch soil may also be used. Keep tarpaulin on potting soil and seed flats for 24 hours.

*Suggested broadcast recommended rates for specific crops.

| Preplant Soil Rate | Pounds/acre |
|--------------------|-------------|
| Strawberries | 150-500 |
| 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.

ACCEPTED
with COMMENTS
in EPA Lab

OCT 10 1991

Under the Fungicide, Insecticide, and Plant Growth Regulator Act, amended 1972, registered under EPA Reg. No. 8662-43