



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460

JUN 29 1994

Dr. Tom Duafala  
Shadow Mountain Products Corporation  
P.O. Box 1327  
Hollister, CA 95024

OFFICE OF  
PREVENTION, PESTICIDES AND  
TOXIC SUBSTANCES

Subject: Label Amendment Submission of 05/6/94 in Response to PR Notice 93-7  
EPA Reg. No. 58266-02  
TRI-CLOR FUMIGANT

Dear Registrant:

The labeling cited above and submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), as amended, is accepted subject to the comments reflected on the enclosed sheet. A copy of your proposed labeling stamped "ACCEPTED WITH COMMENTS" is enclosed.

WHAT THIS ACCEPTANCE MEANS:

Based on your certification, the Agency has accepted the labeling changes that are necessary to comply with the Worker Protection Standard (WPS) labeling requirements of 40 CFR part 156, subpart K, described in PR Notices 93-7 and 93-11. Any other labeling changes submitted in connection with this amendment application but not directly related to compliance with the WPS have not been reviewed or accepted by the Agency. If you wish to make such changes, you must submit a separate amendment application proposing them. If your product is currently suspended, the acceptance of this labeling amendment does not affect the suspension in any way.

WHAT YOU NEED TO DO NEXT:

By the next label printing make all the specified changes to your labeling. Send to EPA one (1) copy of the final printed labeling:

- BEFORE selling or distributing any product bearing the final printed labeling
- AND
- WITHIN one year from date of this acceptance.



Recycled/Recyclable  
Printed with Soy/Canola Ink on paper that  
contains at least 50% recycled fiber

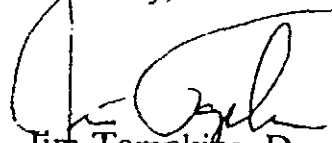
Submit the final printed labeling via the U.S. Postal Service to:

Document Processing Desk (FIN-LABEL)  
Office of Pesticide Programs (7505C)  
U.S. Environmental Protection Agency  
401 M Street, SW  
Washington, D.C. 20460-0001

Hand or courier deliveries of final printed labeling may be made to:

Document Processing Desk (FIN-LABEL)  
Office of Pesticide Programs  
Room 266A, Crystal Mall 2  
1921 Jefferson Davis Highway  
Arlington, VA 22202

Sincerely,



Jim Tompkins, Deputy Chief  
Registration Support Branch  
Registration Division (7505W)

Attachment

**PRECAUTIONARY STATEMENTS  
HAZARD TO HUMANS  
AND DOMESTIC ANIMALS:  
DANGER**

THIS FUMIGANT IS A HIGHLY HAZARDOUS MATERIAL AND MUST BE HANDLED WITH CARE ONLY BY THOSE INDIVIDUALS EXPERIENCED WITH ITS PROPER USE. CONSULT YOUR DEALER REPRESENTATIVE OR THE DISTRIBUTOR FOR CORRECT PROCEDURE BEFORE USING. READ AND FOLLOW ALL LABEL DIRECTIONS AND PRODUCT LITERATURE SPECIFIC TO YOUR REQUIREMENTS.

POISONOUS LIQUID AND VAPOR. INHALATION MAY BE FATAL. CHLOROPICRIN IS READILY IDENTIFIABLE BY SMELL. EXPOSURE TO VERY LOW CONCENTRATIONS OF VAPOR WILL CAUSE IRRITATION ON EYES, NOSE, AND THROAT. CONTINUED EXPOSURES AFTER IRRITATION IS EVIDENT OR HIGHER CONCENTRATIONS, MAY CAUSE PAINFUL IRRITATION TO EYES OR TEMPORARY BLINDNESS. LIQUID WILL CAUSE CHEMICAL BURNS TO SKIN OR EYES. DO NOT GET ON SKIN, IN EYES, OR ON CLOTHING. HARMFUL OR FATAL IF SWALLOWED.

CHLOROPICRIN FUMIGANT HAS THE CAPACITY TO CAUSE MARKED IRRITATION TO THE UPPER RESPIRATORY TRACT, AND IS A STRONG LACHRYMATOR (TEAR PRODUCING EYE IRRITANT). LOW CONCENTRATIONS, BELOW THOSE NECESSARY TO CAUSE SERIOUS SYSTEMIC INTOXICATION, ARE CAPABLE OF CAUSING SEVERELY PAINFUL EYE IRRITATION, HENCE WILL NOT BE VOLUNTARILY TOLERATED. HOWEVER, THE EFFECT MAY BE SO POWERFUL THAT A PERSON MAY BECOME TEMPORARILY BLINDED AND PANIC-STRICKEN AND THAT IN TURN MAY LEAD TO ACCIDENTS.

**AIR CONCENTRATION LEVEL**

The acceptable air concentration level for persons exposed to chloropicrin is 0.1 ppm (0.7 mg/m<sup>3</sup>). 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**

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 category 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 air concentration level exceeds 0.1 ppm at any time, applicators and other handlers must wear (a) a respirator with an organic-vapor-removing cartridge with a prefilter 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-14C)

- If the air concentration level exceeds 4 ppm at any time, applicators and other handlers must wear (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**

1. Do not wear jewelry, gloves, goggles, tight clothing, rubber protective clothing, or rubber boots when handling. Chloropicrin 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 vented. 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 manufacturer's instructions for cleaning/maintaining protective eyewear, face shields 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.
  - Supply your physician with information on Chloropicrin, which is available from your Dealer Representative or the Distributor.

**PRECAUTIONS TO FOLLOW**

**PRIOR TO FUMIGATION:** (1) Before using fumigant, read and follow all directions on the label and in the product literature. (2) Comply with all local regulations and ordinances. Obtain an application permit from Agricultural Regulatory agencies as required. (3) It is advisable to supply your physician with information on chloropicrin, which is available from the company. (4) Obtain medical assistance at once in case of illness after exposure, and do not allow conditions which could accidentally cause further exposure until recovery is complete. (5) Never fumigate alone. It is imperative to always have an assistant and proper protection equipment, as listed below, to aid in case of accidents. (6) 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 work with the tractor and driver while fumigating. (7) Handle this fumigant in the open, when possible, with the operator "upwind" from the container where there is good ventilation. (8) Check the fumigant pressure system, when used, for leaks before beginning application. (9) A gas mask must be carried in each service vehicle. (10) Do not spill. If liquid fumigant splashes or soaks on shoes or clothing, remove them at once as fumes from the contaminated area will be an intolerable source of irritation. If the liquid contacts skin where rings or bandages are worn, remove them and wash the exposed skin with soap and water. Air expose shoes or clothing outside and do not wear until free of all traces of fumigant. (11) Always have adequate clean water available to wash the skin.

See Precautions Continued in Third Column

**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.

**TRI-COLOR  
FUMIGANT**

ACTIVE INGREDIENT:	CHLOROPICRIN	99%
INERT INGREDIENTS:		1%
TOTAL		100%

This product weighs 13.7 pounds per gallon.

ACCEPTED  
with COMMENTS  
In EPA Letter Dated

6/29/94

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

58266-02

**KEEP OUT OF REACH OF CHILDREN**

**DANGER**



**PELIGRO**

**POISON**

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

**IN ALL CASES OF OVEREXPOSURE  
GET MEDICAL ATTENTION IMMEDIATELY.  
TAKE PERSON TO A DOCTOR OR  
AN EMERGENCY TREATMENT FACILITY**

**STATEMENT OF PRACTICAL TREATMENT**

**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 any unconscious person.

**IF ON SKIN:** Immediately remove contaminated clothing, shoes, and other items covering the 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.

**NOTE TO PHYSICIAN:** Chloropicrin 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.

See Side Panel For Additional Precautionary Statements.

**SHADOW MOUNTAIN PRODUCTS  
CORPORATION**

P. O. BOX 1327 - HOLLISTER, CA 95024

E.P.A. EST. 11/27/84, 3,3,4,FL-1  
E.P.A. REG. NO. 58266-02

NET CONTENTS ..... 1 BS.

Precautions, etc.

**DURING FIELD**  
there is an atmosphere may drift to nearby minimum of 48 hours fumigant has drained pulled by the shanks the shanks, then cover next pass. (4) In case immediately stop the problem can be observed respiratory protection cylinders, be certain

**AFTER FIELD**  
animals out of the tree for applications in D. feed domestic animals. Examples are, but not has been fumigated

**NOTE CAREFUL**  
nitrogen and soluble fertilizer and fumigant matter. To avoid fumigation. To avoid fertilizers containing the crop is well established acid soils before fumigant toxicity.

**E**  
This fumigant is toxic into lakes, streams, equipment or disposal

Do not use containers alloys, as under certain metals. Do not permit corrosion will result.

**STORAGE:** Store pesticide storage area. Persons moving, handling equipment (including oiling, labeling, opening, etc.) must wear protective clothing. **RETURN OF CYLINDERS:** Shadow Mountain Products, 8770 Highway 101, Hollister, CA 95024

and should be returned the valve should be protected by a protection bonnet; rep without safety caps or there is no further instructions. (4) For other product or purpose. **SHIPPING:** This Hazardous Materials Hazard, Hazard Zone labeling are allowed. (Inhalation Hazard). **HANDLING:** (1) only when fumigant is protection bonnet must never be subjected to bumping, dragging, or devices should not be or similar device to transport the heavy

**SPILL OR LEAK**  
area of the spill or leak personal protective equipment to Humans section of an isolated location. Contaminated fumigant to avoid absorbent material. disposal facility. Only perform such cleanup until the concentration

**DISPOSAL:** Pesticide wastes are rinsate is a violation according to label instructions, Agency, or the Hazard guidance.

"It is a violation of Federal law to apply this product in a drift. Only protected handling to your State or Tribe, county

**PLACING**

The applicator (or supervisor) with signs bearing:  
• skull and crossbones  
• "DANGER/PELIGRO"  
• "Area under fumigation"  
• "Chloropicrin Fumigant"  
• The date and time of fumigation  
• Name, address, and telephone number  
Do not allow entry by unauthorized persons. Such signs must only be removed after 0.1 ppm. Signs applicator (or someone on fumigated structures.

#### Precautions, Continued:

**DURING FIELD FUMIGATION:** (1) 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 areas with plastic tarpaulin for a minimum of 48 hours. (2) Do not lift injection shanks to turn at end of a pass until the fumigant has drained from the system following closure of the shutoff valve. (3) Trash pulled by the shanks to the ends of the field when fumigating must be covered by lifting the shanks, then covering it with polyethylene film before making the turn for the next pass. (4) In case of the rupture of a hose or fitting while applying the fumigant, immediately stop the tractor and motor. Get off the tractor and get to a place where the problem can be observed without exposure to the fumes. Approach from upwind, with respiratory protection required and make necessary repairs. (5) When changing the cylinders, be certain they are turned off and the fumigant system is not under pressure.

**AFTER FIELD FUMIGATION:** (1) 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. (2) Do not feed domestic animals on crop residues unless an EPA tolerance exists for such use. Examples are, but not limited to, seeded or volunteer cover crops growing on soil which has been fumigated as a preplant treatment for a registered crop use.

**NOTE CAREFULLY:** Fumigation may temporarily raise the level of ammonia nitrogen and soluble salts in the soil. This is most likely to occur when heavy rates of fertilizer and fumigant are applied to soils that are either cold, wet, acid, or high in organic matter. To avoid injury to plant roots, fertilize as indicated by soil tests made after fumigation. To avoid ammonia injury and/or nitrate starvation to crops, avoid using fertilizers containing ammonia salts and use only fertilizers containing nitrates until after the crop is well established and the soil temperature is about 65 degrees F. Liming highly acid soils before fumigation stimulates nitrification and reduces the possibility of ammonia toxicity.

#### ENVIRONMENTAL HAZARD

This fumigant is toxic to fish and wildlife. It should not be discharged where it will drain into lakes, streams, ponds, or public water. Do not contaminate water by cleaning of equipment or disposal of wastes.

#### CHEMICAL HAZARD

Do not use containers or application equipment made of magnesium, aluminum, or their alloys, as under certain conditions this fumigant may be severely corrosive to such metals. Do not permit water to be used to clean the fumigant pressure system as corrosion will result. Diesel oil is satisfactory for this purpose.

#### STORAGE AND DISPOSAL

**STORAGE:** Store in a cool, dry, well-ventilated area under lock and key. Post as a pesticide storage area. Do not contaminate water, food, or feed by storage or disposal. Persons moving, handling, or opening containers must wear the personal protective equipment (including prescribed respirator) specified in the Hazards to Humans section of this labeling. Open container only in a well-ventilated area.

**RETURN OF CYLINDERS:** Cylinders are the property of:

Shadow Mountain Products 1029 Railroad Street  
170 Highway 25 Corona, CA 91720  
Lester, CA 95023

and should be returned promptly by collect auto freight. (1) When a cylinder is empty, the valve should be closed, the safety cap screwed onto the valve outlet, and the protection bonnet replaced prior to its return to the shipper. (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 company for return instructions. (4) Containers should never be refilled by the consumer or used for any other product or purpose.

**SHIPPING:** This fumigant is classified in the U.S. Department of Transportation Hazardous Materials Regulations as Chloropicrin, 6.1, UN 1580, PG 1, Poison-Inhalation Hazard, Hazard Zone B and no exemptions from specifications, packaging, marking, or labeling are allowed. Describe empty cylinders as having last contained Chloropicrin (Inhalation Hazard). Do not ship with foods, feeds, or clothing.

**HANDLING:** (1) The valve protection bonnet and safety cap should be removed only when fumigant 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. (2) Cylinders should never be subjected to rough handling or to abnormal mechanical shock such as dropping, bumping, dragging, or sliding. (3) Ropes, slings, hooks, lugs, and similar handling devices should not be used for unloading cylinders. (4) A suitable hand truck, fork truck, or similar device to which the cylinders can be firmly secured should be used for transporting the heavier cylinders.

**SPILL OR LEAK PROCEDURE:** 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 fumigant 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.

**DISPOSAL:** Do not contaminate water, food, or feed by storage or disposal. Pesticide wastes are toxic. Improper disposal of excess pesticide, spray mixture, or rinsate 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.

#### DIRECTIONS FOR USE

It is a violation of Federal Law to use this product in any 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:

- A skull and crossbones symbol
- "DANGER PELIGRO"
- "Area under fumigation, DO NOT ENTER NO ENTRY"
- "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 fumigated 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 the 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, restricted-entry intervals, and notification to workers. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard (WPS). No instructions elsewhere on this labeling relieve users from complying with the requirements of the WPS.

**ENTRY RESTRICTIONS:** Greenhouse Space Fumigation: Entry (including early entry that would otherwise be permitted under the WPS) by any person—other than a correctly trained and equipped handler who is performing a handling task permitted by the WPS—is PROHIBITED in the entire greenhouse (entire enclosed structure/building) from the start of application until aeration reduces the air concentration level of chloropicrin in the working area to less than 0.1 ppm. 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 the 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 level is measured to be less than 0.1 ppm. Outdoor Soil Fumigation: Entry (including early entry that would otherwise be permitted under the WPS) by any person—other than a correctly trained and equipped handler who is performing a handling task permitted on this labeling—is PROHIBITED from the start of application, until 48 hours after application. In addition, if tarps are used for the application, non-handler entry is prohibited while tarps are being removed.

**NOTIFICATION:** Notify workers of the application by warning them orally and by posting fumigant warning signs, as described in the "Placarding of Fumigated Areas" section of this labeling. Post the fumigant warning sign instead of the WPS sign for this application, but follow all WPS requirements pertaining to location, legibility, size, and timing of posting and removal. Greenhouses—Soil or Space Fumigation: Post the fumigant warning signs outside all entrances to the entire greenhouse (entire enclosed building/structure). Outdoor Soil Fumigation: Post the fumigant warning signs at entrances to treated areas.

**PPE FOR ENTRY DURING 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.

#### GENERAL INSTRUCTIONS-

THIS FUMIGANT IS A HIGHLY HAZARDOUS MATERIAL AND SHOULD BE USED ONLY BY PERSONS TRAINED IN ITS PROPER USE. BEFORE USING, READ AND FOLLOW ALL LABEL PRECAUTIONS AND DIRECTIONS. ALL PERSONS WORKING WITH THIS FUMIGANT SHOULD BE TRAINED IN THE HAZARDS, THE USE OF REQUIRED RESPIRATOR EQUIPMENT, DETECTOR DEVICES, EMERGENCY PROCEDURES, AND THE PROPER USE OF THE FUMIGANT.

#### SOIL FUMIGATION

Chloropicrin is a preplant fumigant for the control of soil-borne pests as listed: such as, wireworms and nematodes, and diseases caused by certain species of *Phythium*, *Phytophthora*, *Fusarium*, and *Verticillium*. It is to be used in soil to be planted to the crops listed below. Prior to application, the soil should be in condition for planting and with sufficient moisture to support seed germination.

**APPLICATION:** Apply this fumigant by means of chisels spaced no more than 12 inches apart and at a depth of 8 inches below soil surface. To seal in fumigant after application, drag or culpack immediately behind chisels, or wet down treated area to a depth of 1 inch, or cover treated area with a plastic tarpaulin. If plastic tarpaulin is used, it should be removed after 48 hours. Do not apply to areas adjacent to fields where valuable crops are growing nor adjacent to buildings inhabited by humans or livestock. Fumigation of small volumes of soil or mushroom casing soil may be made by injecting chloropicrin 6-8 inches deep in a grid pattern not to exceed 12 inch spacing.

#### RECOMMENDED DOSAGES\* PREPLANT SOIL FUMIGATION

LAND TO BE PLANTED TO:	POUNDS PER ACRE
Floral Crops, Nursery Crops	SC3
Plant & Seed Beds	300-500
Eggplant, Cucumbers, Melons, Tomatoes	300-500
Sweet Potatoes, Yams	150-400
Onions	200-400
Strawberries	150-500
All Other Crops	150-500
Mushrooms Casing Soil**	5-10 cc/cu.ft.
Planting Soil	3-4 cc/sq.ft.
Seed Beds	3-5 cc/sq.ft.

\* If treated area is covered with a plastic tarpaulin immediately after application, dosage may be reduced by 33%.

\*\* In the case of Mushroom soil, seal with water plus plastic or wet newspapers. 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.

**EXPOSURE AND AERATION:** After application, leave the soil undisturbed for 10 to 14 days. Wet soil retards diffusion of the fumigant, thus requiring a longer exposure period. At the end of the exposure period, aerate the soil by plowing or deep cultivation. If heavy rains accompanied by low temperatures occur during the exposure period, working the soil several times is essential for thorough aeration. Aeration is usually complete when the odor of the fumigant is no longer evident.

#### FUMIGATION

When used for fumigation of enclosures, greenhouses, trucks, etc., trained in the use of this product must test, and aeration periods. Do not transport of raw agricultural commodities the air concentration level of fumigant acceptable air concentration level in area unless he/she is wearing the respirator specified in the Hazards to Humans section of the Worker Protection Standard restriction.

**SPACE FUMIGATION:** (N) cockroaches, silverfish, and lung dosage 1 1/4 to 1 1/2 pounds per 1 APPLICATION INFORMATION: Pre be sealed to make the building gas F or higher. Introduce Chloropicrin material located inside the structure fumigant in circulation. Ventilate temperatures speed aeration.

**VAULT FUMIGATION:** For in furniture and clothing use 1 to dosage rates by an additional 1 pound APPLICATION INFORMATION: In or onto burlap sacks or similar absorbent material to hasten evaporation of Chloropicrin. Ventilate by opening doors and windows.

#### TREATMENT OF WOOD AND GLUE-LAMINATED INTERNAL WOOD

Carefully pour or inject Chloropicrin treated wood plug. When pouring avoid splashing any liquid into the pattern by drilling each hole 6 inches by 90 degrees. Drill holes at a steep angle if a treating hole intersects an internal above and, if possible, below the ground level. Fill and plug the lower holes per treated structural timber.

Pole Circumference 0 Less Than 32"

32" - 45"

More Than 45"

For piles treated near the cutoff to Preserver's Assn. Standard MA to laminated boards, use at least 0.00 treating holes into the top laminate holes to minimize strength reduction chemical vapor. Do not treat in appropriate containers available at injecting the fumigant.

Chloropicrin may be used for clear fluoride. Prepare structure for fum 10,000 - 15,000 cubic feet of space entrance and start the fans. Check bromide or sulfur fluoride.

TRI will

#### WARRANTY

**NOTICE:** Seller warrants that the product conforms to its chemical description and is reasonably fit for the purposes stated on the label when used in accordance with directions under normal conditions of use, but neither this warranty nor any other warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE, express or implied, extends to the use of the product contrary to label instruction, or under abnormal conditions, or under conditions not reasonably foreseeable to seller, and buyer assumes the risk of any such use.

CA April 1994

## 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 the product that are covered by the Worker Protection Standard (WPS). No instructions elsewhere on this labeling relieve users from complying with the requirements of the WPS.

**ENTRY RESTRICTIONS: Greenhouse Space Fumigation:** Entry (including early entry that would otherwise be permitted under the WPS) by any person—other than a correctly trained and equipped handler who is performing a handling task permitted by the WPS—is PROHIBITED in the entire greenhouse (entire enclosed structure/building) from the start of application until aeration reduces the air concentration level of chloropicrin in the working area to less than 0.1 ppm. **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 the 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 level is measured to be less than 0.1 ppm. **Outdoor Soil Fumigation:** Entry (including early entry that would otherwise be permitted under the WPS) by any person—other than a correctly trained and equipped handler who is performing a handling task permitted on this labeling—is PROHIBITED from the start of application until 48 hours after application. In addition, if tarps are used for the application, non-handler entry is prohibited while tarps are being removed.

**NOTIFICATION:** Notify workers of the application by warning them orally and by posting fumigant warning signs, as described in the "Placarding of Fumigated Areas" section of this labeling. Post the fumigant warning sign instead of the WPS sign for this application, but follow all WPS requirements pertaining to location, legibility, size, and timing of posting and removal. **Greenhouses—Soil or Space Fumigation:** Post the fumigant warning signs outside all entrances to the entire greenhouse (entire enclosed building/structure). **Outdoor Soil Fumigation:** Post the fumigant warning signs at entrances to treated areas.

### PPE FOR ENTRY DURING 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.

## GENERAL INSTRUCTIONS-

THIS FUMIGANT IS A HIGHLY HAZARDOUS MATERIAL AND SHOULD BE USED ONLY BY PERSONS TRAINED IN ITS PROPER USE. BEFORE USING, READ AND FOLLOW ALL LABEL PRECAUTIONS AND DIRECTIONS. ALL PERSONS WORKING WITH THIS FUMIGANT SHOULD BE TRAINED IN THE HAZARDS, THE USE OF REQUIRED RESPIRATOR EQUIPMENT, DETECTOR DEVICES, EMERGENCY PROCEDURES, AND THE PROPER USE OF THE FUMIGANT.

## SOIL FUMIGATION

Chloropicrin is a preplant fumigant for the control of soil-borne pests as listed: such as, wireworms and nematodes, and diseases caused by certain species of *Phythora*, *Phytophthora*, *Fusarium*, and *Verticillium*. It is to be used in soil to be planted to the crops listed below. Prior to application, the soil should be in condition for planting and with sufficient moisture to support seed germination.

**APPLICATION:** Apply this fumigant by means of chaser spaced no more than 12 inches apart and at a depth of 8 inches below soil surface. To seal in fumigant after application, drag or cutback immediately behind chaser, or wet down treated area to a depth of 1 inch, or cover treated area with a plastic tarpaulin. If plastic tarpaulin is used, it should be removed after 48 hours. Do not apply to areas adjacent to fields where valuable crops are growing nor adjacent to buildings inhabited by humans or livestock. Fumigation of small volumes of soil or mushrooms casing soil may be made by injecting chloropicrin 6 - 8 inches deep in a grid pattern not to exceed 12 inch spacing.

### RECOMMENDED DOSAGES\* PREPLANT SOIL FUMIGATION

LAND TO BE PLANTED TO:	POUNDS PER ACRE
Floral Crops, Nursery Crops	500
Plant & Seed Beds	300 - 500
Eggplant, Cucumbers, Melons, Tomatoes	300 - 500
Sweet Potatoes, Yams	150 - 400
Onions	200 - 400
Strawberries	150 - 500
All Other Crops	150 - 500
Mushrooms Casing Soil**	5-10 cwt/cu.ft.
Potting Soil	3-4 cwt/cu.ft.
Seed Beds	3-6 cwt/cu.ft.

\* If treated area is covered with a plastic tarpaulin immediately after application, dosage may be reduced by 33%.

\*\* In the case of Mushroom soil, seal with water plus plastic or wet newspapers.

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.

**EXPOSURE AND AERATION:** After application, leave the soil undisturbed for 10 to 14 days. Wet soil retards diffusion of the fumigant, thus requiring a longer exposure period. At the end of the exposure period, aerate the soil by plowing or deep cultivation. If heavy rains accompanied by low temperatures occur during the exposure period, working the soil several times is essential for thorough aeration. Aeration is usually complete when the odor of the fumigant is no longer evident.

## FUMIGATION OF ENCLOSED SPACES

When used for fumigation of enclosed spaces (houses and other structures, warehouses, vaults, chambers, greenhouses, trucks, vans, boxcars, ships, or 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 aeration periods. Do not fumigate areas which may be used for the storage or transport of raw agricultural commodities. 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 into 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.

**SPACE FUMIGATION:** (Not containing raw agricultural commodities) For control of mites, cockroaches, silverfish, and fungi use 1 pound of Chloropicrin per 1000 cubic feet. Increase dosage 1 1/4 to 1 1/2 pounds per 1000 cubic feet when absorbent materials are present.

**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 60 degrees F or higher. Introduce Chloropicrin into a shallow pan, or onto burlap sacks, or similar absorbent material located inside the structure. Use fans to hasten evaporation of Chloropicrin and to keep fumigant in circulation. Ventilate area thoroughly for 12 to 24 hours. Fans, dryness and high temperatures speed aeration.

**VAULT FUMIGATION:** For the control of fleas, mites, silverfish, cockroaches, and moths in furniture and clothing use 1 to 2 pounds of Chloropicrin. In heavily loaded vaults, increase dosage rates by an additional 1 pound per 1000 cubic feet.

**APPLICATION INFORMATION:** Introduce the desired amount of Chloropicrin into a shallow pan or onto burlap sacks or similar absorbent material located inside the structure or vault. Use fans to hasten evaporation of Chloropicrin 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 re-entry.

## TREATMENT OF WOOD, TIMBERS, POLES, PILES AND AND GLUE-LAMINATED BEAMS FOR CONTROL OF INTERNAL WOOD DECAY BY FUNGI AND INSECTS

Carefully pour or inject Chloropicrin into drilled holes, then plug the holes with a 2 1/2 inch - 3 inch treated wood plug. When pouring or injecting fumigant and plugging holes, wear safety goggles to avoid splashing any liquid into the eyes. Holes in poles and piles should be positioned in a spiral pattern by drilling each hole 6 inches - 12 inches vertically from the preceding hole and rotating it by 90 degrees. Drill holes at a steep downward angle and avoid drilling through seasoning checks. If a treating hole intersects an internal rot pocket, plug that hole and drill new hole into solid wood above and, if possible, below the rot. For in-ground poles the first hole should be drilled at the ground level. Fit and plug the lowest hole before drilling next higher hole. The suggested number of holes per treated structural timber and dosage are indicated in the following table:

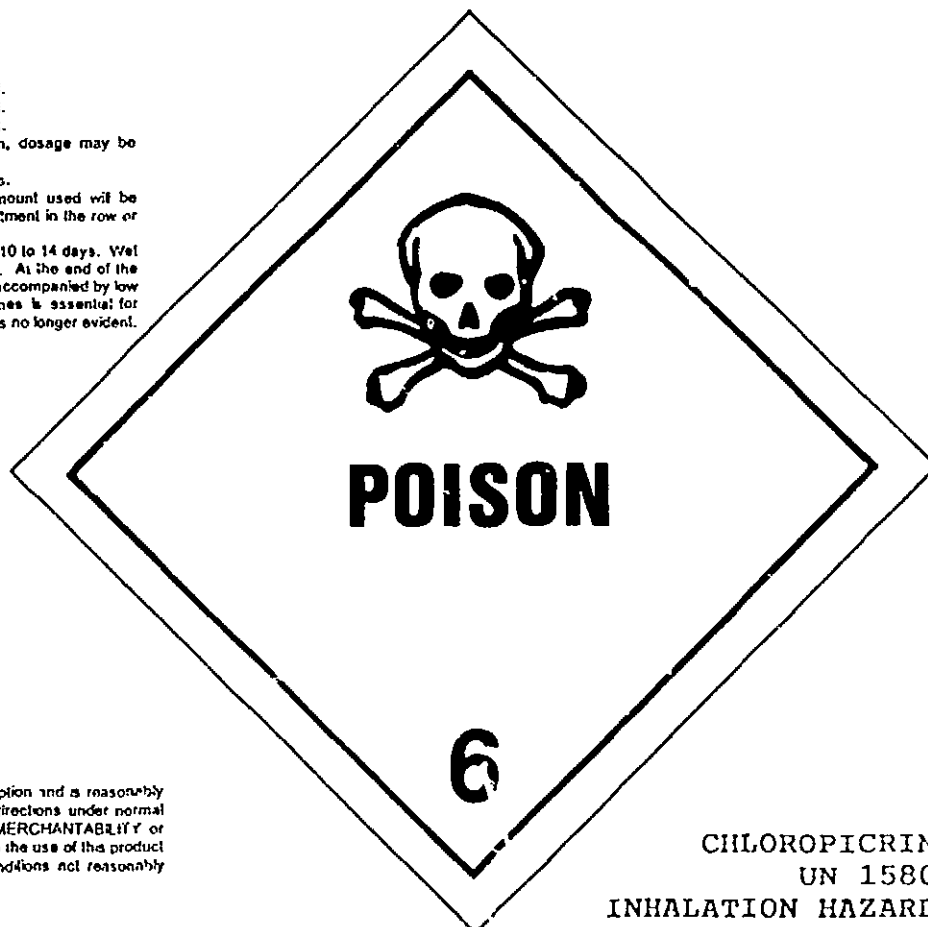
Pole Circumference	Hole Diameter	Length Of Hole	Holes Per Pole	Pints of Fumigant/Holes
Less than 32"	5/8"	15"	8	3/4
	5/8"	18"	5	3/4
	3/4"	15"	4	3/4
	3/4"	18"	8	1
32" - 45"	3/4"	18"	5	1
	3/4"	21"	4	1
	3/4"	24"	3	1
	7/8"	21"	3	1
More than 45"	1/4"	24"	8	2
	7/8"	21"	5	2
	7/8"	24"	4	2

For piles loaded near the cutoff tops, cap the cutoff as recommended by the American Wood Preserver's Assn. Standard MA to contain the chemical and prevent reinfection. To treat glue-laminated beams, use at least 0.06 pints of chemical per cubic foot of wood to be treated. Drill treating holes into the top laminate through all glue lines when treatment is necessary. Staple holes to minimize strength reductions of timbers. A vapor barrier wrap may be needed to confine chemical vapor. Do not treat inside an inhabited building. Have at least one gas mask with appropriate canisters available at the treating site. Wear protective gear and stand upwind when injecting the fumigant.

## WARNING AGENT

Chloropicrin 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. Use 1 ounce per 10,000 - 15,000 cubic feet of space to be fumigated. When building is evacuated, seal the entrance and start the fans. Check seals for tightness. Five to ten minutes later, introduce methyl bromide or sulfuryl fluoride.

TRI-CLOR is compatible when mixed with Chlorinated C3 Hydrocarbons



## WARRANTY

NOTICE: Seller warrants that the product conforms to its chemical description and is reasonably fit for the purposes stated on the label when used in accordance with directions under normal conditions of use, but neither the warranty nor any other warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE, express or implied, extends to the use of this product contrary to label instruction, or under abnormal conditions, or under conditions not reasonably foreseeable to seller, and buyer assumes the risk of any such use.

CA April, 1994

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