

Reg # 8536-09

PM-32

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

DEC 16 1994

TOM DUAFALA  
SOIL CHEMICALS CORP.  
P.O. BOX 782  
HOLLISTER, CA. 95024

OFFICE OF  
PREVENTION, PESTICIDES AND  
TOXIC SUBSTANCES

Subject: Label Amendment Submission of 6/27/94 in Response to PR Notice 93-7  
EPA Reg. No. 8536-09  
PIC-BROM 50

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

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Page 2

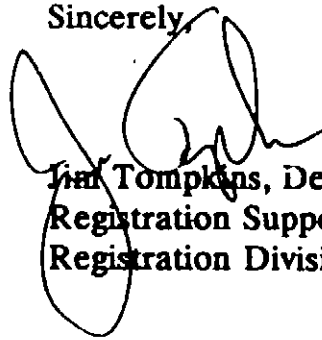
Submit the final printed labeling via the U.S. Postal Service to:

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

Dr. Tom Duafala  
Soil Chemical Corporation

Comments for: EPA REG. NO. 8536-09  
PIC-BROM 50

The following specific comments pertain to your WPS labeling submission concerning the product cited above:

Under "PRECAUTIONARY STATEMENTS" ADD "AND DOMESTIC ANIMALS" TO "HAZARDS TO HUMANS"

Under PERSONAL PROTECTIVE EQUIPMENT

Applicators and other handlers must wear:

Modify current "Full-face shield or safety glasses with brow and temple shields (DO NOT wear goggles)" to read "Full-face shield or safety glasses with brow and temple shields when handling liquid product (DO NOT wear goggles)".

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**RESTRICTED USE PESTICIDE  
DUE TO ACUTE TOXICITY**

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

**PIC-BROM 50  
PREPLANT SOIL FUMIGANT**

ACTIVE INGREDIENTS:	
METHYL BROMIDE	50%
CHLOROPICRIN	50%
INERT INGREDIENTS:	0%
TOTAL	100%

This product weighs 14.4 pounds per gallon.

ACCEPTED  
with COMMENTS  
In EPA Letter Dated

DEC 16 1994

Under the Federal Insecticide,  
Fungicide, and Rodenticide Act  
is amended, for the pesticide  
registered under EPA Reg. No.  
8536-09

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 TO 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. Give oxygen if needed. Do not give anything by mouth to any unconscious person. Seek medical attention.

**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:** Early symptoms of overexposure are dizziness, headache, nausea and vomiting, weakness, and collapse. Lung edema may develop in 2 to 48 hours after exposure, accompanied by cardiac irregularities; these effects are the usual cause of death. Repeated overexposure can result in blurred vision, staggering gait, and mental imbalance, with probable recovery after a period of no exposure. Blood bromide levels suggest the occurrence, but not the degree, of exposure. Treatment is symptomatic.

See Side Panel For Additional Precautionary Statements.



Soil  
Chemicals  
Corporation  
**PRODUCTS**

P.O. BOX 782 - HOLLISTER, CA 95024

E.P.A. EST. 8536-CA-1,2,3,4;FL-1  
E.P.A. REG NO. 8536-09

NET CONTENTS ..... LBS.

PRECAUTIONARY STATEMENTS  
HAZARD TO HUMANS  
AND DOMESTIC ANIMALS:

**D A N G E R**

EXTREMELY HAZARDOUS LIQUID AND  
VAPOR UNDER PRESSURE.  
INHALATION MAY BE FATAL OR CAUSE  
SERIOUS ACUTE ILLNESS OR DELAYED  
LUNG OR NERVOUS SYSTEM INJURY.  
DO NOT BREATHE VAPORS.  
LIQUID OR EXCESSIVE 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 WHICH MAY  
BE IRRITATING TO THE UPPER RESPIRATORY TRACT,  
AND EVEN AT LOW LEVELS CAN CAUSE PAINFUL  
IRRITATION TO THE EYES, PRODUCING TEARING.  
IF THESE SYMPTOMS OCCUR, LEAVE THE FUMI-  
GATION AREA IMMEDIATELY. EARLY SYMPTOMS OF  
CHLOROPICRIN OVEREXPOSURE ARE LACHRYMATION,  
RESPIRATORY DISTRESS AND VOMITING.

**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 brow and temple shields (DO NOT wear goggles).  
When the acceptable air concentration level is above 5 ppm and a respirator is  
required, protect the eyes by wearing a full-face respirator.

No respirator is required if the air concentration level of 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 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, light 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. If liquid fumigant splashes or spills on clothing, remove them at once, as fumes will be  
an intolerable source of irritation.
3. 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. Discard clothing and other absorbent materials that have been drenched or heavily  
contaminated with this product. Do not reuse them.
5. 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.

**OBSERVE THE FOLLOWING PRECAUTIONS**  
**GENERAL PRECAUTIONS**

1. Do not get in eyes, on skin, or on clothing.
2. Do not spill or discharge contents outside of areas confined for treatment.
3. Comply with all local regulations and ordinances.
4. It is advisable to supply your physician with information on Chloropicrin and Methyl  
Bromide literature is available from your dealer or distributor.
5. 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.  
(See Note to Physician.)

See Precautions Continued in Third Column

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**PRECAUTIONS FOR SOIL FUMIGATION USE****PRIOR TO FUMIGATION:**

1. Comply with all local regulations and ordinances. Obtain an application permit from Agricultural Regulatory Agencies as required.
2. Never fumigate alone. It is imperative always to have an assistant and proper protective equipment in case of accidents.
3. 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.
4. Handle the fumigant in the open, with the operator "up wind" from the container where there is good ventilation.
5. Check fumigant pressure system for leaks before beginning operation.
6. Two trained persons must be present during introduction of the fumigant.
7. 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 of 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."
8. Field should be reasonably free of trash before starting the fumigation.
9. Post all treated areas with warning signs.

**DURING 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 area with plastic tarpaulin for a minimum of 48 hours when the injection depth is less than 10 inches.
2. Do not let injection shanks to turn at the end of a pass until fumigant has drained from system following closure of shutoff valve.
3. If trash is inadvertently pulled by the shanks to the ends of the field when fumigating, it must be covered by lifting the shanks, then covering the trash with polyethylene film before making the turn for the next pass.
4. 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 where exposures above the permissible exposure levels could occur.

**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 the tarpaulin.

**SPILL AND LEAK PROCEDURE.**

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 prescribed 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 spills to the National Response Center (800-424-8802) if the reportable quantity of 1000 lbs. is exceeded.

**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 ammonium salts and use only fertilizers containing nitrates until after the crops are well established and the soil temperature is above 65 degrees F. Liming highly acid soils before fumigation stimulates nitrification and reduces the possibility of ammonia toxicity.

**ENVIRONMENTAL HAZARD**

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.

**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 fumigant pressure system as corrosion will result. Diesel oil is satisfactory for this purpose.

**STORAGE AND DISPOSAL**

**STORAGE AND HANDLING:** Store in a secure manner either outdoors under ambient conditions or indoors in a well ventilated area. Post as a pesticide storage area. Do not contaminate water, food, or feed by storage. Persons moving, handling, or opening containers must wear the personal protective equipment (including prescribed respirators when necessary) specified in the Hazards to Humans section of this labeling. Open container only in a well-ventilated area. Store cylinders up, tight, secured to a rack or wall to prevent tipping. Cylinders should not be subjected to rough handling or mechanical shock such as dropping, bumping, dragging, or skidding. Do not use rope slings, hooks, lings, or similar devices to unhook cylinders. Transport cylinders using hand truck, fork truck or other device to which the cylinder can be firmly secured. Do not remove valve protection bonnet and safety cap until immediately before use. Replace safety cap and valve protection bonnet when cylinder is not in use. When cylinder is empty, close valve, screw safety cap onto valve outlet, and replace protection bonnet before returning to shipper. Only the registrant is authorized to refill cylinders. Do not use cylinders for any other purpose. Follow registrant's instructions for return of empty or partially empty cylinder.

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

Sol Chemicals Corporation	Sol Chemicals Corporation
8770 Highway 25	2060 East 220th Street
Hollister, CA 95023	Long Beach, CA 90810

and should be returned promptly by collect auto freight. Do not ship cylinders without safety caps or valve protection bonnets. When a cylinder is partially full and there is no further requirement for the product, contact the company for return instructions.

Storage and Disposal Continued in Next Column

**Storage and Disposal, Continued:**

**SHIPPING:** The fumigant is classified in the U.S. Department of Transportation Hazardous Materials Regulations as Chloropicrin and Methyl Bromide mixtures, 2.3, UN 1908, 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 and Methyl Bromide mixtures (inhalation hazard). Do not ship with foods, feeds, or clothing.

**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:

- skull and crossbones symbol
- "DANGER-FLAMMABLE"
- "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 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 AND the air concentration level of methyl bromide is measured to be less than 5 ppm. Signs must remain legible during the entire posting period. Warning signs are available from your dealer or distributor.

**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, 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. **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 the labeling.

**GENERAL INSTRUCTIONS**

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.

**GENERAL INFORMATION:** This fumigant is a preplant soil fumigant for control of soil-borne pests as listed. Wireworms and nematodes, weed and grass seeds, granville wilt, blackshank, and other diseases caused by certain species of *Rhizoctonia*, *Pythium*, *Fusarium*, and *Phytophthora*. It is to be used in soil to be planted to the crops listed below.

**SOIL PREPARATION:** Prior to application, the soil should be in condition for planting and with sufficient moisture to support seed germination.

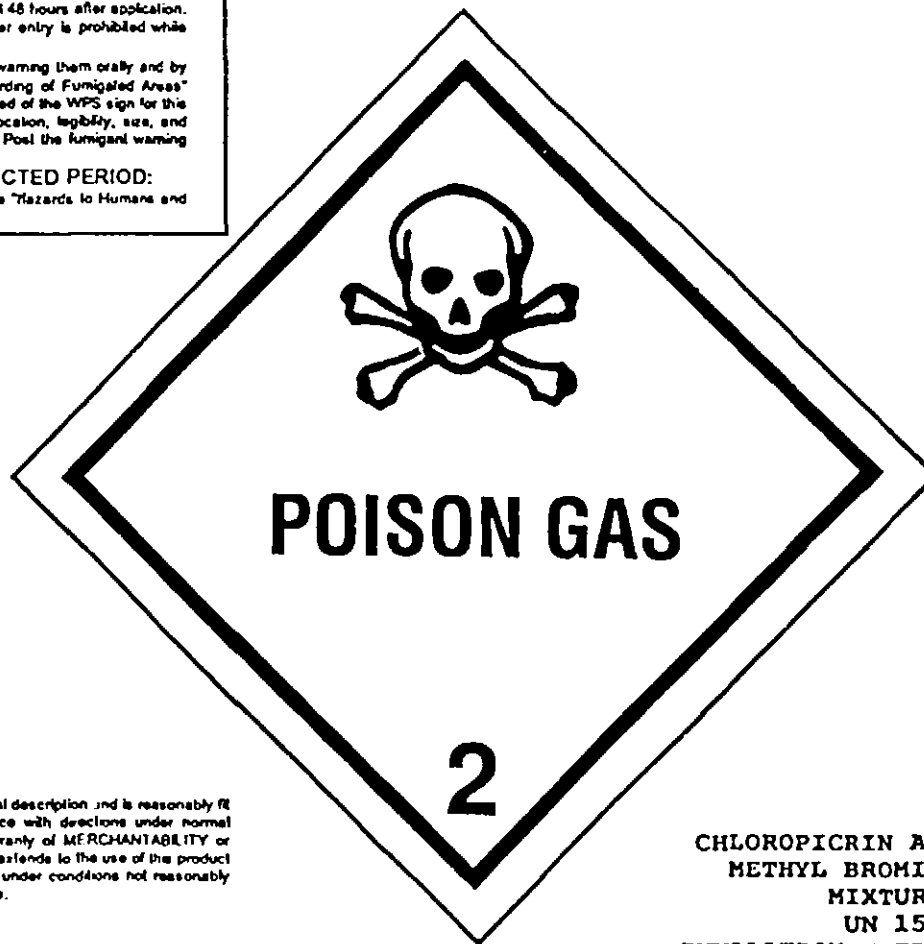
**APPLICATION:** Apply this fumigant by means of chisels spaced from 12" to 18" apart and at a depth of 6" to 8" below soil surface. To seal fumigant after application, cover with a gas-tight tarpaulin.

**DOSAGE TABLE - SOIL FUMIGATION USES**

Land To Be Planted To:	Lbs. Per Acre
Strawberries	350 - 400
Tomatoes	350 - 400
Floral Crops	350 - 400
Plant & Seed Beds*	350 - 400

\* For production of replants only.

**ALERTATION:** Remove tarpaulin after 48 hours. Allow the soil to aerate for two weeks before planting. If odors of fumigant persist beyond this two-week period, disc or plow the soil to help aeration.



**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 instructions, or under abnormal conditions, or under conditions not reasonably foreseeable to seller, and buyer assumes the risk of any such use.

CA APRIL, 1994

**CHLOROPICRIN AND  
METHYL BROMIDE  
MIXTURES  
UN 1581  
INHALATION HAZARD**