



# UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, DC 20460

OFFICE OF PREVENTION, PESTICIDES AND TOXIC SUBSTANCES

JUN 18 2008

Mardel Rose Belotinsky Soil Chemicals Corporation D/B/A Cardinal Products P.O. Box 782 Hollister, CA 95024-0782

Subject:

Pic-Brom 50

EPA Registration No. 8536-9

Your amendment dated March 15, 2007

EPA Decision No. 3777823

#### Dear Ms. Belotinsky:

The amended label referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide and Rodenticide Act as amended is acceptable provided the following changes are made:

- 1. Revise the ingredients statement to read "This product weighs 14.1 lbs. per gal.". If the CSF needs revision, please submit an amended CSF for review.
- 2. Remove the outer box which groups the signal word and the child hazard warning statement with the first aid instructions.
- 3. On page 3 in the Personal Protective Equipment section, revise the first bullet to read "Loose-fitting or well ventilated long-sleeved shirt and long pants or coveralls.".
- 4. On page 3 in the Personal Protective Equipment section, revise the fifth bullet to read "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**."
- 5. On page 4 under "Placarding of Fumigated Areas", revise the third from last sentence to read "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."

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- 6. On page 4 under "General Instructions", revise the first sentence to read "This furnigant is a highly hazardous material and may be used only by individuals trained in its proper use.".
- 7. On page 8 in the "Storage and Disposal" section, change the company name to "Soil Chemicals Corporation D/B/A Cardinal Professional Products". Change the heading "Storage and Handling" to "Pesticide Storage".

One copy of the label stamped "Accepted" is enclosed for your records. This label supersedes all labels previously accepted for this product. Please submit one copy of the final printed label before the product is released for shipment.

If you have any questions, please contact Robert Westin by phone at (703) 305-5721 or via email at westin.robert@epa.gov.

Sincerely,

Mary L. Waller
Mary L. Waller

Product Manager (21)

Fungicide Branch

Registration Division (7505P)

Enclosure

## RESTRICTED USE PESTICIDE DUE TO ACUTE TOXICITY

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

### Pic-Brom 50

ACCEPTED
with COMMENTS
In EPA Letter Dated

Preplant Soil Fumigant

JUN 1-8 2008 ACTIVE INGREDIENTS:

Under the Federal Insecticide,	Methyl Bromide	50.0%
Finitickie, and Rodenticide Act	Chloropicrin	49.7%
an amended, for the posticide TH registered made: EPA Reg. No.	ER INGREDIENTS:	0.3%
8536-9 TOT.	AL:	100.0%

This product weighs 13.93 lbs. per gal. @ 68° F.

#### 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.

	FIRST AID		
If inhaled:	Move person to fresh air. Keep warm.		
	• If person is not breathing, call 911 or an ambulance, then give artificial		
	respiration, preferably by mouth-to-mouth, if possible.		
	• Call a poison control center or doctor for further treatment advice.		
If on skin or	Take off contaminated clothing.		
clothing:	• Rinse skin immediately with plenty of water for 15-20 minutes.		
	Call a poison control center or doctor for treatment advice.		
If in eyes:	• Hold eye open and rinse slowly and gently with water for 15-20 minutes.		
•	• Remove contact lenses, if present, after the first 5 minutes, then continue		
	rinsing eye.		
	Call a poison control center or doctor for treatment advice.		
- T	distance information in case of an amazanay call tall free (1,800,424,0200)		

- For additional information in case of an emergency, call toll free (1-800-424-9300.)
- Have the product container or label with you when calling a poison control center or doctor, or going for treatment.

#### NOTE TO PHYSICIAN

Early symptoms of overexposure to methyl bromide 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 PANELS FOR ADDITIONAL PRECAUTIONARY STATEMENTS



### Cardinal Professional Products

P. O. Box 782 Hollister, CA 95024-0782

EPA Reg. No. 8536-9

EPA Est. 11220-CA-4; 11220-CA-8; 5785-CA-1

NET CONTENTS.....LBS.

### PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS:

### DANGER

- 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 FUMIGATION 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 level 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 or a Dräger tube/pump.

#### PERSONAL PROTECTIVE EQUIPMENT

Applicators and other handlers must wear:

- Loose-fitting or well ventilated long-sleeved shirt and long pants or equivalent, e.g., coveralls
- Shoes and socks
- Full-face shield or safety glasses with brow and temple shields when handling liquid product (Do NOT wear goggles.)
- When the air concentration level of chloropicrin is above 0.1 ppm and the air concentration level of methyl bromide 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 0.1 ppm or less AND the air concentration level of methyl bromide in the working area is 5 ppm or less.
- A respirator is required if the air concentration level of 0.1 ppm for chloropicrin OR 5 ppm for methyl bromide is exceeded at any time. The respirator must be one of the following types: (a) a supplied-air respirator (MSHA/NIOSH approval number prefix TC-19C) OR (b) a self-contained breathing apparatus (SCBA) (MSHA/NIOSH approval number prefix TC-13F). [NOTE: 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, and no respiratory protection will be 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

- Do not wear jewelry, gloves, goggles, tight clothing, rubber protective clothing, or rubber boots when handling. Methyl bromide and chloropicrin are heavier than air and can be trapped inside clothing and cause skin injury.
- If liquid fumigant splashes or spills on clothing, remove them at once, as fumes will be an intolerable source of irritation.
- 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.
- Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product. Do not reuse them.
- 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 on clothing. 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.

#### **ENVIRONMENTAL HAZARD**

- This pesticide is toxic to wildlife. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans or other waters unless in accordance with the requirements of a National Pollution Discharge Elimination System (NPDES) permit and the permitting authority has been notified in writing prior to discharge.
- Do not discharge effluent containing this product to sewer systems without previously notifying the local sewage treatment plant authority. For guidance contact your State Water Board or Regional Office of the EPA.

#### 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.

#### **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/PELIGRO"
- "Area under fumigation, DO NOT ENTER/NO ENTRE"
- "Methyl Bromide and Chloropicrin Fumigants in use"
- the date and time of fumigation
- 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 0.1 ppm or less AND the air concentration level of methyl bromide is 5 ppm or less. Signs must remain legible during the entire posting period. Warning signs are available from your dealer or distributor.

#### **GENERAL INSTRUCTIONS**

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 furnigant 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 furnigant.

#### 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 this labeling.

# 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.)

#### PRECAUTIONS FOR SOIL FUMIGATION USE

#### PRIOR TO FUMIGATION

- Comply with all local regulations and ordinances. Obtain an application permit from Agricultural Regulatory Agencies as required.
- Never fumigate alone. It is imperative always to have an assistant and proper protective equipment in case of accidents.

- Drivers of application equipment must advise other workers of all precautions and procedures. In addition, drivers must instruct their helpers in the mechanical operation of the tractor and how to safely work with the tractor and driver while furnigating.
- Handle this fumigant in the open, with the operator "up wind" from the container where there is good ventilation.
- Check furnigant pressure system for leaks before beginning operation.
- Two trained persons must be present during introduction of the fumigant.
- When fumigating soil from a tractor, 5 gallons of water must be carried on the tractor and placed where it is readily accessible. In addition to water available on the tractor, at least 5 gallons 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."
- Field should be reasonably free of trash and in good tilth before starting the fumigation.
- Post all treated areas with warning signs.

#### **DURING FUMIGATION**

- This fumigant should not be applied when there is an atmospheric inversion. Since uncomfortable concentrations of chloropicrin may drift to nearby areas, immediately cover treated area with plastic tarpaulin for a minimum of 48 hours when the shank injection depth is less than 10 inches.
- Do not lift injection shanks to turn at the end of a pass until fumigant has drained from system following closure of shutoff valve.
- If trash is inadvertently pulled by the shanks to the 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.
- 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 the tarpaulin, if a tarpaulin is used.
- Two trained persons must be present during removal of the tarpaulin, if used.

#### SPILL AND LEAK PROCEDURES

- In case of a rupture of hose or fitting while applying fumigant, immediately stop tractor and motor.
- Evacuate everyone from the immediate area of the spill or leak.
- Wear the personal protective equipment (including prescribed respirators) specified in the HAZARDS TO HUMANS section of this labeling for entry into affected area to correct problem.
- Approach from upwind to make necessary repairs.
- Do not enter area without the required PPE until the spill has evaporated or the leak has been fixed.

• Contaminated soil, water, and other cleanup debris is a toxic hazardous waste. Report spill to the National Response Center (800-424-8802) if the reportable quantity of 1000 lbs. is exceeded.

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 crop is well established and the soil temperature is above 65° F. Liming highly acid soils before fumigation stimulates nitrification and reduces the possibility of ammonia toxicity.

**GENERAL INFORMATION:** This furnigant is a preplant soil furnigant for control of soilborne pests as listed: Wireworms and nematodes, weed and grass seeds, Granville Wilt, Blackshank, and other diseases caused by certain species of *Rhizoctonia*, *Phythium*, *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 inches below the soil surface. To seal the fumigant after application, drag or cultipack immediately behind chisels or cover with a gas-tight tarpaulin.

**AERATION:** 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.

DOSAGE TABLE SOIL FUMIGATION USES		
LAND TO BE PLANTED TO	LBS./ACRE	
Strawberries	350 - 400	
Tomatoes	350 - 400	
Floral Crops	350 - 400	
Plant and Seed Beds	350 - 400	
*For production of replants only.		

#### STURAGE AND DISPUSAL

DO NOT CONTAMINA WATER, FOOD, OR FEED BY STO GE OR DISPOSAL. PESTICIDE 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. 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 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, 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. 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.

**PESTICIDE 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.

CONTAINER DISPOSAL: Return cylinders to Cardinal Professional Products, 8770 Highway 25, Hollister, CA 95023. Cylinders are the property of Cardinal Professional Products 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.

SHIPPING: This fumigant is classified in the U.S. Department of Transportation Hazardous Materials Regulations as Chloropicrin and Methyl Bromide Mixtures, 2.3, UN 1581, 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.

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

#### WARRANTY

Seller warrants that this product conforms to the chemical description on its label and is reasonably fit for the purposes stated on the label when used in accordance with directions under normal conditions of use. Neither this warranty nor any other warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE, express or implied, extends to the use of this product in a manner contrary to its label.