



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

OFFICE OF CHEMICAL SAFETY
AND POLLUTION PREVENTION

Mary Howland
Technical Service Manager
1801 Highway 52 West
West Lafayette, IN 47906

DEC 21 2011

Subject: Chloropicrin
EPA Registration Number 5785-58
Phase 2 Red Mitigation Amendment dated May 31, 2011
Decision Number 458859

Dear Ms Howland:

The amended labeling referred to above, submitted in connection with reregistration of chloropicrin under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended is acceptable provided the following label revisions are made and the following conditions are met:

LABEL REVISIONS

1. On page 3 under Worker Safety Requirements, number 2, revise the sentence "If no such instructions for washables, use detergent. . ." to read "If no such instructions for washables exist, use detergent. . .".
2. On page 3 under Spill and Leak Procedures, revise the sentence "Such material should be dispose of on site or at an approved disposal facility." to read "Dispose of material at an approved waste disposal facility."
3. On page 5 under Storage and Disposal, make the following revisions:
 - a. Revise "Storage and Handling" to read "Pesticide Storage".
 - b. Revise "Disposal" to read "Pesticide Disposal".
 - c. Move the information "Return empty cylinders. . . for proper shipping instructions" which currently appears under the heading "Disposal" so that it appears below the new heading "Container Handling" and revise to read as follows: "Return empty cylinders according to the Great Lakes Chemical Corporation container return policy. Contact Great Lakes for policy details. Close cylinder valve by turning clockwise until hand tight. Disconnect lines. Replace safety caps and bonnet. Return partial cylinders only after consulting Great Lakes Chemical Corporation for proper shipping instructions."
4. On page 6 under Statement of Warranty and Liability, delete the sentence "The directions for use of this product are believed to be adequate and should be followed carefully."

CONDITIONS

1. EPA has determined that the risk mitigation measures on the revised label for this product are necessary to adequately protect human health and the environment. Therefore, pursuant to 40 CFR § 152.130(d), EPA has decided that no product bearing previously approved labeling may be sold or distributed (released for shipment) by its registrant after December 1, 2012. Wherever state approval is required for sale or distribution of this product with this new labeling, EPA strongly encourages you to submit an application to the state authority as soon as possible. You should be aware that the Agency does not intend to modify the December 1, 2012 deadline because of any failure to obtain state approvals.
2. Submit one copy of the final printed label that incorporates the required changes before the product is released for shipment.

One copy of the label stamped "Accepted with comments" is enclosed for your records. If you have any questions, you may contact me via email, waller.mary@epa.gov or by phone at (703) 308-9354.

Sincerely,



Mary L. Waller
Product Manager (21)
Fungicides Branch
Registration Division (7504P)

Enclosure

CHLOROPICRIN

For formulation into a fumigant used for pre-plant soil fumigation of agricultural fields and commercial greenhouses; tree replant; and remedial wood treatment.

ACTIVE INGREDIENTS:.....	By Wt.
Chloropicrin.....	99%
OTHER INGREDIENTS:	1%
	Total 100%

One gallon of Chloropicrin weighs 14 pounds.

**ACCEPTED
with COMMENTS
In EPA Letter Dated:**

12/21/2011

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

5785-58



**DANGER • PELIGRO • POISON
KEEP OUT OF REACH OF CHILDREN**



PRECAUCIÓN AL USUARIO: 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).

FIRST AID	
If inhaled	<ul style="list-style-type: none"> • 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. • Do not give anything by mouth to an unconscious person. • In all cases of overexposure, get medical attention immediately. Take person to a doctor or emergency treatment facility.
If on skin or clothing	<ul style="list-style-type: none"> • Immediately remove contaminated clothing, shoes, and any other item on skin. • Rinse skin immediately with plenty of water for 15-20 minutes. • In all cases of overexposure, get medical attention immediately. Take person to a doctor or emergency treatment facility.
If in eyes	<ul style="list-style-type: none"> • 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. • In all cases of overexposure, get medical attention immediately. Take person to a doctor or emergency treatment facility.
HOT LINE NUMBER	
Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact 1-800-949-5167 for emergency treatment information.	
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

EPA REG. NO. 5785-58

EPA EST. NO. 5785-AR-01



P.O. BOX 2200
WEST LAFAYETTE, IN 47996-2200 U.S.A.

**PRECAUTIONARY STATEMENTS
HAZARDS TO HUMANS AND DOMESTIC ANIMALS
DANGER • PELIGRO**

Poisonous liquid and vapor. Inhalation of vapors may be fatal. Chloropicrin is readily identifiable by smell. Exposure to very low concentrations of vapor will cause irritation of eyes, nose, and throat. Continued exposure after irritation, or higher concentrations may cause painful irritation to the 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.

PERSONAL PROTECTIVE EQUIPMENT (PPE). Some materials that are chemical-resistant to this product are listed below. If you want more options, follow the instructions for category H on an EPA Chemical resistance category selection chart.

Workers with potential to be directly exposed must wear:

Loose-fitting or well ventilated clothing

Socks and chemical resistant footwear

Chemical-resistant gloves, such as barrier laminate and Viton when handling liquid

Chemical-resistant apron, when handling liquid

Protective eyewear, when handling liquid

When a respirator is not required, protect the eyes from liquid by wearing a full face shield (goggles are not recommended).

No respirator is required if the air concentration level of chloropicrin in the working area is measured to be less than **0.1 ppm**.

Full face mask respirators are required under the following circumstances:

--if the air concentration level exceeds 0.1 ppm at any time, workers with direct exposure potential 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-14G) OR (c) a NIOSH approved respirator with an organic vapor (OV) cartridge or canister with any R, P, or HE prefilter.

--if the air concentration level exceeds 4 ppm at any time, workers with direct exposure potential must wear, (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).

AIR CONCENTRATION LEVEL:

The acceptable air concentration level for persons exposed to chloropicrin is **0.1 ppm (0.7 mg/M³)**. If the air concentration level exceeds **0.1 ppm**, an air purifying respirator must be worn. If the air concentration level exceeds **4 ppm**, an air-supplying respirator must be worn. The air concentration level is measured by a direct reading detection device such as a Matheson-Kitagawa.

WORKER SAFETY REQUIREMENTS:

1. Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product. Do not reuse them.
2. Clean PPE after each day's use. Air-expose reusable PPE and work clothing outside until free of all traces of fumigant. Then follow PPE manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE and work clothing separately from other laundry.

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. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.
- Supply your physician with information on chloropicrin, which is available from Great Lakes Chemical Corporation.

ENVIRONMENTAL HAZARDS

This pesticide is toxic to mammals, birds, fish, and aquatic invertebrates. 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 Pollutant Discharge Elimination System (NPDES) permit and the permitting authority has been notified in writing prior to discharge. Do not discharge effluent containing this product to sewer systems without previously notifying the local sewage treatment plant authority. For guidance, contact your State Water Board or Regional Office of the EPA.

SPILL AND LEAK PROCEDURES

Evacuate everyone from the immediate area of the spill or leak. For entry into affected area to correct problem, wear the personal protective equipment (including prescribed respirator) specified in the Hazards to Humans section of this labeling. Move leaking or damaged containers outdoors or to an isolated location. Observe strict safety precautions. Work upwind, if possible. Allow spilled 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 spill or leak area by any other person until the concentration of chloropicrin is measured to be less than **0.1 ppm**.

PHYSICAL AND 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 nonflammable liquid.

DIRECTIONS FOR USE

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

Only protected workers may be in the area during processing with this product. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

Registration by the Environmental Protection Agency is required before the end-use product may be lawfully distributed in interstate commerce.

Only for formulation into a fumigant for the following uses: pre-plant soil fumigant in agricultural fields and commercial greenhouses; tree replant; and remedial wood treatment.

The following uses have been cancelled and must be deleted from end-use product labels: mushroom casing soil, potting soil, small area seed beds using handheld application devices, and structural greenhouse and/or enclosed space fumigation.

Chloropicrin cannot be formulated into end-use products labeled for pre-plant or pre-transplant uses unless the end-use registrant makes available to certified applicators who purchase or apply the end-use product a registrant developed training program approved by EPA. The training program must provide information on (1) how to correctly apply the fumigant, including how to comply with new label requirements; (2) how to protect handlers and bystanders; (3) how to determine buffer zone distances; (4) how to complete an FMP and the post-application summary; (5) how to determine when weather and other site-specific factors are not favorable for fumigant application; (6) how to comply with required GAPs and how to document compliance with GAPs in the FMP; and (7) how to develop and implement emergency response plans. The registrant developed training program must be made available at least annually to the certified applicators. The end-use registrant must be able to provide, upon request, the names, addresses, and certified applicator license and/or certificate number of persons who successfully complete the registrant developed training program.

Chloropicrin cannot be formulated into end-use products labeled for pre-plant or pre-transplant uses unless the end-use registrant ensures Buffer Zone signs suitable for posting buffer zones or templates for the buffer zones signs are available to its downstream distributors/customers who in turn will provide the signs at the point of sale. Templates may be downloaded from http://www.epa.gov/pesticides/reregistration/soil_fumigants/index.htm

The Buffer Zone sign must meet the following standards:

- Signs must remain legible during the entire posting period, and must meet the general standards outlined in the WPS for sign size, text size, and legibility (see 40 CFR §170.120).

Contents of Sign



-- "DO NOT ENTER/NO ENTRE,"
 -- "Chloropicrin [Name of Product] Fumigant BUFFER ZONE,"
 -- space for contact information for the certified applicator in charge of the fumigation"

[Note to registrant: When products have more than one active ingredient, include both ingredients on the sign.]

This product may be used to formulate products for any additional use(s) not listed on the MUP label if the formulator, user group, or grower has complied with U.S. EPA submission requirements regarding support of such use(s).

STORAGE AND DISPOSAL

Do not contaminate water, food, or feed by storage or disposal.
STORAGE AND HANDLING. Store upright in a cool, dry, well-ventilated area under lock and key. Do not remove safety caps until just prior to use. Persons opening containers must wear the personal protective equipment (including prescribed respirator) specified in the Hazards to Humans and Domestic Animals section of this labeling. Open container only in a well-ventilated area.

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. Return empty cylinders according to the Great Lakes Chemical Corporation container return policy. Contact Great Lakes for policy details. Close cylinder valve by turning clockwise until hand tight. Disconnect lines. Replace safety caps and bonnet. Return partial cylinders only after consulting Great Lakes Chemical Corporation for proper shipping instructions.

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STATEMENT OF WARRANTY AND LIABILITY

The directions for use of this product are believed to be adequate and should be followed carefully.

Seller warrants that this product complies with the specifications expressed in this label. SELLER MAKES NO OTHER WARRANTIES; AND DISCLAIMS ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO WARRANTIES OF MERCHANTABILITY AND FITNESS FOR THE INTENDED PURPOSE. To the extent consistent with applicable law, Seller's liability for default, breach, or failure under this label shall be limited to the amount of the purchase price. To the extent consistent with applicable law, Seller shall have no liability for consequential damages.

CHLRPIC-1 REV. AR-58-K

NET WT. _____

LOT NUMBER _____