

PREPLANT APPLICATIONS

General Information

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"
- "Chloropicrin Fumigant 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 MEASURED TO BE 0.1 PPM OR LESS. SIGNS MUST BE 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. WARNING SIGNS ARE AVAILABLE FROM YOUR DEALER OR DISTRIBUTION.

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 0.1 ppm or less.

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 0.1 ppm or less. 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 0.1 ppm or less. If tarps are used for the application, non-handler entry is prohibited during tarp removal and until the air level is measured to be 0.1 ppm or less. 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 the 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 the 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 the 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.

PRECAUTIONS TO FOLLOW

- Before using fumigant, read and follow all directions on the label and in the product literature.
- Comply with all local regulations and ordinances. Obtain an application permit from Agricultural Regulatory agencies as required.
- 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.
- Never fumigate alone. It is imperative to always have an assistant and proper protection equipment, as listed below, to aid 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 work with the tractor and driver while fumigating.
- Handle this fumigant in the open, when possible, with the operator "upwind" from the container where there is good ventilation.
- Check the fumigant pressure system, when used, for leaks before beginning application.
- A gas mask must be carried in each service vehicle.
- Do not spill. If liquid fumigant splashes or spills 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.
- Always have adequate clean water available to wash the skin.
- This fumigant should not be applied when there is an atmospheric inversion, since uncomfortable concentrations of chloropicrin may drift to nearby areas.

- 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 used.
- Two trained persons must be present during removal of the tarpaulin.

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.

GENERAL PREPARATION AND INSTRUCTIONS:

1. Plan the application by calculating the amount of TRI-CLOR EC required at the appropriate rate for the crop, acreage and target pest.
2. TRI-CLOR EC must be applied through a drip irrigation system to wet the soil thoroughly in the area being treated. Drip emitters should be spaced 8-12" apart.
3. TRI-CLOR EC must be metered into the water supply line and then passed through a mixing device, such as a centrifugal pump or static mixer, to assure proper agitation.
4. Meter TRI-CLOR EC into the drip system according to the dosage desired. An adequate concentration of active ingredient must be present in order to be effective. At no time should the concentration of active ingredient exceed 1,500 ppm in the drip line. For example, a 300 pounds per acre rate would require 24,000 gallons of water per acre for 1,500 ppm.
5. Field conditions prior to application are as follows:

- A. Ground should be in seedbed condition, no clods larger than 1/2" in diameter.
 - B. Beds should be listed, shaped and ready for planting.
 - C. Soil moisture should when possible be at 50% of field capacity in the top 2-3" at time of TRI-CLOR EC application.
6. After application of TRI-CLOR EC you should continue to irrigate the area with untreated water to flush the irrigation system. Do not permit TRI-CLOR EC to remain in the irrigation system after the application is complete. The total volume of water, including the amount used for flushing the irrigation system, should not exceed 1.5 acre-inches (40,000 gallons) of water per acre.

USE PRECAUTIONS:

1. Apply this product only through drip (trickle) irrigation systems. Do not apply this product through any other type of irrigation system.
2. Crop injury, lack of effectiveness, or illegal pesticide residues in the crop can result from non-uniform distribution of treated water.
3. If you have questions about calibration, you should contact State Extension Service specialists, equipment manufacturers or other experts.
4. Do not connect an irrigation system (including greenhouse systems) used for pesticide application to a public water system unless the pesticide label-prescribed safety devices for public water systems are in place.
5. A person knowledgeable of the chemigation system and responsible for its operation, or under the supervision of the responsible person, shall shut the system down and make necessary adjustments should the need arise.
6. The system must contain a functional check valve, vacuum-relief valve, and low-pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from backflow.
7. The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.
8. The pesticide injection pipeline must also contain a functional, normally closed,

solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.

9. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.

10. The irrigation line or water pump must include a functional pressure switch which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.

11. Use a metering system, such as a positive displacement injection pump (e.g., diaphragm pump), a positive pressure system, or a Venturi system, effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.

12. Posting of areas to be chemigated is required when: 1) any part of the treated area is within 300 feet of sensitive areas such as residential areas, labor camps, businesses, day care centers, hospitals, in-patient clinics, nursing homes, or any public areas such as schools, parks, playgrounds, or other public facilities not including public roads, or 2) when the chemigated area is open to the public, such as golf courses or retail greenhouses. Posting must conform to the following requirements. Treated areas shall be posted with signs at all usual points of entry and along likely routes of approach from the listed sensitive areas. When there are no usual points of entry, signs must be posted in the corners of the treated areas and in any other location affording maximum visibility to sensitive areas. The printed side of the sign should face away from the treated area towards the sensitive areas. The signs shall be printed in English. Signs must be posted prior to application and must remain posted until foliage has dried and soil surface water has disappeared. Signs may remain in place indefinitely as long as they are composed of materials to prevent deterioration and maintain legibility for the duration of the posting period. All words shall consist of letters at least 2-1/2 inches tall, and all letters and the symbol shall be a color which sharply contrasts with their immediate background. At the top of the signs shall be the words KEEP OUT, followed by an octagonal stop sign symbol at least 8 inches in diameter containing the word STOP. Below the symbol shall be the words PESTICIDES IN IRRIGATION WATER.

AERATION:

Do not disturb treated soil for at least 2 weeks. Wet soil retards diffusion of the fumigant thus requiring a longer aeration period. Aeration is usually complete when the odor of the fumigant is no longer evident.

GREENHOUSES

[Not for use in California.]

The use of chloropicrin in enclosed spaces presents a potential hazard to humans and plant life. Before fumigation, train all personnel involved in fumigation (including use of safety equipment). When used for fumigation of enclosed spaces, two persons trained in the use of this product must be present during introduction of the fumigant, initiation of aeration, and after aeration when testing for reentry. Follow PRECAUTIONS. Follow directions for row application with doors open, and

fans running. After application and tarping, secure and post the structure to prevent unprotected persons and domestic animals from entering. After the exposure period, open doors and turn on fans prior to removing tarpaulins.

Do not allow any person to enter the fumigated structure without the appropriate protective equipment during the time of injection of the fumigant until acceptable air concentration level readings are obtained using an approved detector. To maintain adequate safety standards, the following equipment must be present and accessible on the site during the entire fumigation operation: (1) one or more self-contained breathing apparatus; (2) one or more replacement air bottles per breathing apparatus; and (3) one or more halide leak detectors.

After Fumigation:

At the end of the exposure period, remove all seals and open all doors and windows that are operational. Allow for complete ventilation. Use ventilation fans whenever possible to remove fumigant from dead air pockets. Follow exactly the instructions in the entry restriction section of the Agricultural Use Requirements box.”

Limitations, Restrictions, and Exceptions

APPLICATION OF TRI-CLOR EC THROUGH DRIP LINE

TRI-CLOR EC is a fumigant for the control of soil-borne pests, 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 fruit, nut, vegetable, field, floral and nursery crops. This product may be applied under permanent plastic mulch or with open beds. If applied to open beds the drip line must be at least 6 inches below the bed surface.

Method

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Timings

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