

# Summary of 1,3-Dichloropropene (1,3-D) and Chloropicrin Requirements

*Revised 11-1-2023.*

To assist county agricultural commissioners in determining the appropriate requirements for products that contain both 1,3-D and chloropicrin active ingredients, this table summarizes and compares the Department of Pesticide Regulation’s requirements and recommendations for 1,3-D and chloropicrin. This table includes those requirements that primarily protect residents and does not include all labeling requirements.

Requirement	1,3-D Regulations and Recommended Permit Conditions	Chloropicrin CA Labeling and Recommended Permit Conditions
Setback/buffer zone	Setback	Buffer zone
Location (area affected)	Surrounds occupied structure	Surrounds application block
Restrictions within area affected	Applications prohibited	Only handling and transit allowed
Distance	100 – 500 ft	25 – 2640 ft
Duration	7 days (168 hrs.)	48 hrs.
Seasons	Mar-Oct, Nov/Jan/Feb, Dec prohibited	None
Regions	1,3-D and chloropicrin have same Coastal and Inland designations	
Max application block	80 ac	40 ac, TIF* 60 ac
Max application rate (broadcast equivalent)	332 lbs./ac (1,3-D)	350 lbs./ac (chloropicrin)
Application time restrictions	None	1 hr. after sunrise and 3 hrs. prior to sunset, except TIF
Overlapping application criteria	2 or more applications separated by combined setback distance and less than 36 hrs., max 80 ac combined	2 or more applications separated by combined buffer distance and less than 36 hrs., max 40-60 ac combined
Notice of intent time and information	48 hours; start time, vacating agreements, township cap info	48 hours; start time
Fumigation method changes	Added 1224-nontarp/24-in 1225-tarp/24-in 1226-nontarp/24-in/strip 1227-nontarp/24-in/GPS 1250-40% TIF/18-in 1264-40% TIF/24-in  1290-other – prohibited	Added 1,3-D methods listed allowed but no chloropicrin regulatory changes (e.g., buffer zones for 24-in methods are the same as 18-in methods)  1290 already prohibited
Tree and grape fumigation methods	Allowed method at least 24 inches deep or uses TIF tarp	No specific methods required
Tree hole fumigations	Not allowed	Allowed, if label allows

<b>Requirement</b>	<b>1,3-D Regulations and Recommended Permit Conditions</b>	<b>Chloropicrin CA Labeling and Recommended Permit Conditions</b>
Minimum soil moisture	50% field capacity at 3-9 inches, except drip	50% field capacity at 9 inches for injection, 2-3 inches for drip (U.S. EPA label)
Approved TIF tarps	1,3-D list differs from chloropicrin	Chloropicrin list differs from 1,3-D
TIF tarp printing	1,3-D and chloropicrin have same requirements: tarp name and lot printed 2-3 inches in height, at least 1 foot from each edge, at an interval of 20-30 feet	
Minimum TIF tarp cutting period	10 days after application	9 days after application
Minimum TIF tarp removal period	1,3-D and chloropicrin are both 1 day after tarp cutting	
Tarp plan elements	1,3-D and chloropicrin have same requirements: (A) Tarp identification (B) Schedule for checking tarp (C) Responsible parties (D) Minimum damage repaired (E) Factors that trigger tarp repair (F) Method to cut tarp (G) Cutting date (H) Removal date	
Emergency preparedness and response measures	None	Monitoring or notification
Emergency response plan	None	Commissioner notified if implemented
Field reentry period	7 days	5 days or more depending on fumigation method
Annual township cap	136,000 adjusted total pounds	None

\*TIF = totally impermeable film tarp approved by DPR.