

4-29-69
 1052-6-11 Comment

TELONE

Clean, Clear, Non-Hazardous Clinging
 SOIL FUMIGANT

CONTROLS MANY PLANT PARASITIC NEMATODES AND OTHER SOIL PESTS IN CROPLANDS

Active Ingredients: 100%
 1,1-Dichloroethane and Related Chlorinated Hydrocarbons
 U.S.D.A. Registration No.

GENERAL INFORMATION

Use TELONE only as a preplanting soil fumigant to control nematodes such as meadow (lesion), root-knot, citrus, burrowing, ring, spiral, sting, pin, stubby root, styler, dagger and cyst formers (golden and sugar beet) and certain others, also to control wireworms and garden (cutworm) symphylans. Fumigate land to be planted to the crops listed below under the conditions and at the rates indicated under DIRECTIONS FOR USE, DOSAGE RECOMMENDATIONS and PRECAUTIONS.

Vegetable Crops:

asparagus beans broccoli brussels sprouts cabbage cantaloupe carrots	cauliflower celery collards corn cowpeas cucumbers egg plant endive garlic	horseradish kale kohlrabi leeks lettuce melons mustard greens okra onions	parsnips peas peppers potatoes pumpkins radishes rutabaga salsify	shallots spinach squash (summer) squash (winter) sweet potatoes swiss chard tomatoes turnips watermelons
--	--	---	--	--

Field Crops:

alfalfa barley birdsfoot trefoil buckwheat clover corn cotton	flax grasses hops lespedeza millet oats	pasture grass peanut popcorn rice rye safflower sorghum	soybeans sugar beets sugar cane tobacco vetch wheat
---	--	---	--

Citrus Fruit Tree Planting Sites:
 grapefruit, kumquats, lemons, limes, oranges, tangerines, tangelos

Deciduous Fruit and Nut Tree Planting Sites:
 almonds, apples, apricots, cashew nuts, cherries, chestnuts, dates, figs, filberts, hazelnuts, hickory nuts, nectarines, olives, peaches, pears, pecans, persimmons, pineapple, plums, pomegranates, quince, walnuts

Bush and Vine Planting Sites:
 blackberries, blueberries, bayberries, cranberries, currants, dewberries, gooseberries, grapes, huckleberries, loganberries, raspberries, strawberries, youngberries

Nursery Crops including floral plants, ornamentals, shrubs and bushes; forest, shade, fruit and nut trees and vine and bramble fruits of all types.

DIRECTIONS FOR USE

WHEN TO TREAT: Treat either in spring or fall, whenever soil conditions permit. For best results, with annual crops, treat soil each year. Do not use TELONE on extremely heavy clay soils. In northern states, late summer or early fall treatment (before October 15) is best for land to be planted to early spring crops. This is especially true where plants are to be set out, such as celery, tomatoes, nursery and orchard stock. Treat muck soils only in the early fall and plant in the spring. Early treatment permits planting a fall cover crop.

SOIL PREPARATION: For best fumigant penetration and sealing, plant remains should be worked into the soil long enough before treatment so that the roots are well rotted. The soil should be in good seedbed condition, free of clods and undecomposed plant material with the temperature between 40° and 80° F at the depth of injection, and with enough moisture for good seed germination. Deep tillage, 12 to 18 inches, often improves results. Treat loams and clay loams when fairly dry (water content, one-half of field capacity).

APPLICATION: For over-all application, either chisel (with chisels set 12 inches apart) or plow sole equipment may be used. For row application, use one chisel per row, or two chisels spaced 12 inches apart. Where 2 or more chisels are used per row apply at the same rate per chisel as for over-all. As the distance between rows is increased the amount of fumigant required per acre will decrease. Also when the distance between rows is decreased the amount required per acre will increase. Mark the treated strips by bedding or listing or by tractor wheel marks, and plant in the middle of the treated areas. Where only 1 chisel is used per row adjust the fumigant flow to distribute about 1 1/2 times as much per chisel as over all. When a single chisel is used, for best crop stands, place seed row 3 to 4 inches to one side of the fumigation chisel mark. Always inject the fumigant at least 6 to 8 inches below the

final soil surface. In wet or irrigated soil, treat at least 2 to 3 inches below the surface and plant in the middle of the treated strip.

SEALING: Immediately after application, seal the soil with a roller, or a float roller, cultipacker, or similar sealing device. After sealing, the soil should be then compacted by listing or rolling. Sealing should be done by the tractor wheel, by listing or by bedding so that the fumigant will be sealed below the top of the bed. When fumigating listed rows, seal in the furrows by listing or press sealers.

EXPOSURE PERIOD: After application and compacting, leave soil undisturbed for 10 to 14 days. Wet soil retards diffusion of fumigant, requiring a longer exposure period.

AERATION AND PREPARATION OF SOIL BEFORE PLANTING: At the end of the exposure period, aerate the soil by plowing or deep cultivation. This is especially desirable in the areas after fall application in muck soils. On fumigated muck soil, plant as late as possible in the spring. Shallow rooted crops can usually be planted after about 7 to 10 days of aeration. Under optimum seedbed condition of soil composition, moisture and temperature one week of aeration time should be allowed for each 10 gallons of TELONE used per acre. For deep rooted shrubs and trees the aeration period should be 3 to 6 months. If heavy rains or low temperature occur during the exposure period, working the soil several times may be necessary to hasten aeration. Aeration is usually complete when the odor of the fumigant is no longer evident.

DOSAGE RECOMMENDATIONS

To Control Nematodes, Symphylans and Wireworms

Crops (consult list of individual crops under GENERAL INFORMATION)	Type of Treatment	Soil Type	Gallons Per Acre ¹	Linear Feet Per Pint Per Chisel
Shallow Rooted Plants: Field Crops Floral Crops Grasses and Turf Small Fruits Vegetables Ornamentals	Row (or Band) (42")	Mineral	6 to 8	260 to 195
		Muck or Peat	12 to 16	130 to 97
Strawberries	Over-all (or Broadcast)	Mineral	12 to 20 ²	455 to 273
		Muck or Peat	32 ³ to 48	170 to 114
Sugar Beets Root-Knot Nematode	Row (42")		7	223
	Over-all	Mineral	15 to 20	363 to 273
Sugar Beet Nematode	Row (42")		12	130
	Over-all		15 to 25	363 to 218
Pineapple ⁴	Row	Mineral	30 to 60
Citrus - Florida ⁵	Over-all	Mineral	40	136

Nursery and Field:

	Over-all: Gallons Per Acre to Penetrate Various Depths				
	Mineral Soils	3 ft.	4 ft.	5 ft.	6 ft.
Citrus Fruit Trees					
Deciduous Fruit Trees					
Forest Trees					
Grapes					
Nut Trees					
Ornamentals (deep rooted)					
	Sand	20	28	36	44
	Sandy Loam	36	40	48	64
	Silt Loam	56	68	84	100
	Clay Loam	72	92	112	136

¹ Use the higher rates in heavier soil.
² For cyst-forming nematodes increase dosage to 25 gallons (218 linear feet per pint per chisel).
³ For muck soils containing less than 30% organic matter use 25 gallons per acre.
⁴ For Hawaiian pineapple, application may be made at time of, or just before planting.
⁵ For burrowing nematode in citrus inject an 18 inch center 12 inches deep. Keep free of plants susceptible to burrowing nematodes for 2 years before replanting to citrus.

NOTE: To control symphylans (garden centipedes) use only over-all at 25 or more gallons per acre, and apply during late summer or early fall when the soil is warm. To control wireworms use dosages recommended for nematodes in over-all or broadcast treatments.

White Potatoes in Northwestern States: Use TELONE as a spring or preferably a fall treatment to control quackgrass and for suppression of the damaging effects of Verticillium

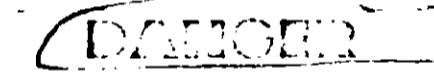
Certain applications of TELONE may be made in the presence of certain types of plants, such as citrus seedlings, Carnustia, and other plants which have shown no effect from the fumigant. This suggests that additional fumigant may be necessary in some cases to obtain a satisfactory effect in these situations.

CAUTION: To avoid entrance of the fumigant into the eyes, nose, or mouth, do not breathe the vapor. Do not use TELONE in the presence of open flames, sparks, or other sources of ignition. Do not use TELONE in the presence of fuel oil or kerosene. Immediately after use, DO NOT use WATER. Do not use TELONE in the presence of other pesticides, insecticides, or fumigants. Do not use TELONE in the presence of certain types of plants, such as citrus seedlings, Carnustia, and other plants which have shown no effect from the fumigant. This suggests that additional fumigant may be necessary in some cases to obtain a satisfactory effect in these situations.

Do not store near seeds, plants, fertilizers, or other pesticide chemicals. Do not contaminate feed or foodstuffs.

To avoid injury to fish and other wild life, do not spill or empty fumigant into streams, ponds or other bodies of water.

Rinse equipment and containers and dispose of wastes by burying in non-crop lands away from water supplies. Containers should be disposed of by punching holes in them and burying with wastes.



KEEP OUT OF THE REACH OF CHILDREN

MAY BE FATAL IF INHALED, ABSORBED THROUGH SKIN OR SWALLOWED • CAUSES BURN OF SKIN ON CONTACT WITH COMBUSTIBLE LIQUID

Wear Eye Protection Appropriate to the Circumstances When Handling This Material • Wash Thoroughly after Handling and Before Eating and Smoking • Wash Contaminated Clothing and Air Contaminated Shoes Thoroughly Before Re-use • Keep Away from Heat and Open Flame • Use Only with Adequate Ventilation • Do Not Breathe Vapor.

In case of contact, immediately remove contaminated clothing and shoes and wash skin with soap and plenty of water; for eyes, flush with flowing water for at least 15 minutes and get medical attention.

In case of spillage indoors, have available a self-contained breathing apparatus or a mask or respirator of a type passed by the United States Department of Agriculture for chlorinated C₂ hydrocarbons.

If inhaled, remove to fresh air. Use artificial respiration if breathing has stopped. Get immediate medical attention. Keep patient absolutely quiet.

If swallowed, call a doctor. Induce vomiting by giving an emetic such as 2 tablespoons of table salt in a glass of warm water.

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 this 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.

© Telone® Trademark of The Dow Chemical Company

MANUFACTURED FOR OR DISTRIBUTED BY
 ROCKWOOD CHEMICAL COMPANY
 P.O. BOX 34, BRAWLEY, CALIFORNIA 92227

ACCEPTED WITH COMMENTS

TELENE

FUNGICIDE

FOR CONTROL OF NEMATODES, SYMPHYLIDS AND WIREWORMS

TELENE is a systemic fungicide which is effective against a wide range of soil-borne fungi and nematodes. It is particularly effective against the nematodes which cause root-knot, stunt, and other diseases of citrus, sugarcane, and other crops. TELENE is also effective against wireworms and other soil-dwelling insects.

Crop	Rate (lb. per acre)	Application Method
Citrus	1.0	Band or Broadcast
Sugarcane	1.0	Band or Broadcast
Other Crops	1.0	Band or Broadcast

Crop	Rate (lb. per acre)	Application Method
Field Crops	1.0	Band or Broadcast
Ornamentals	1.0	Band or Broadcast
Nursery Crops	1.0	Band or Broadcast

Crop	Rate (lb. per acre)	Application Method
Field Crops	1.0	Band or Broadcast
Ornamentals	1.0	Band or Broadcast
Nursery Crops	1.0	Band or Broadcast

DIRECTIONS FOR USE

WHEN TO TREAT: TELENE should be applied to soil before planting or during the early stages of plant growth. It is most effective when applied to soil before planting.

SOIL PREPARATION: TELENE should be applied to soil before planting or during the early stages of plant growth. It is most effective when applied to soil before planting.

APPLICATION: TELENE should be applied to soil before planting or during the early stages of plant growth. It is most effective when applied to soil before planting.

EXPOSURE PERIOD

After application and covering, leave soil undisturbed for 2 to 14 days. Water to retain surface of fumigant requiring a top dress of soil.

AERATION AND PREPARATION OF SOIL BEFORE PLANTING

After the end of the exposure period, aerate the soil by plowing or deep cultivation. This is essential in heavy soils after full application in muck soils. On fumigant residue, avoid the use of heavy machinery in the spring. Shallow rotted crops can usually be cut and plowed under 7 to 10 days after planting. Under optimum soil conditions, soil temperature should be maintained between one and one and a half degrees Fahrenheit for each 10 gallons of TELENE used per acre. For deep rotted crops and heavy soil, the aeration should be 3 to 6 months if heavy rains or low temperature occur during the exposure period. Working the soil several times may be necessary to hasten aeration. Aeration is usually complete when the odor of the fumigant is no longer evident.

DOSAGE RECOMMENDATIONS

To Control Nematodes, Symphyliids and Wireworms

Crop (least amount of land treated)	Type of Treatment	Soil Type	Gallons Per Acre	Linear Feet Per Pint Per Chisel	
Shallow Rooted Plants (less than 142 ft)	Row or Band	Mineral	6 to 7	250 to 195	
Field Crops	Row or Band	Muck or Peat	12 to 15	130 to 97	
Grasses and Turf	Overhead	Mineral	12 to 15	455 to 273	
Small Fruits	Overhead (for Broadcast)	Muck or Peat	31 to 42	175 to 114	
Ornamentals	Overhead	Muck or Peat	31 to 42	175 to 114	
Sugarcane	Row	Mineral	7	221	
Row 42 ft	Overhead	Mineral	15 to 20	363 to 273	
Sugarcane	Row	Mineral	12	130	
Row 142 ft	Overhead	Mineral	15 to 20	363 to 273	
Pineapples	Row	Mineral	30 to 40	136	
Citrus (Florida)	Overhead	Mineral	40	136	
Nursery and Field	Overhead	Gallon Per Acre	Per Pint	Value of Crop	
Citrus Fruit Trees	Mineral Soils	3 ft	4 ft	5 ft	6 ft
Citrus Fruit Trees	Sand	20	28	36	44
Forest Trees	Sandy Loam	36	40	48	64
Grasses	Silt Loam	56	60	84	106
Nut Trees	Clay Loam	72	92	112	131
Ornamentals (except citrus)	Clay Loam	72	92	112	131

Use the higher rate for heavy soils. For sandy soils, use the lower rate. For heavy soils, use the higher rate. For sandy soils, use the lower rate.

NOTE: TELENE is a systemic fungicide which is effective against a wide range of soil-borne fungi and nematodes. It is particularly effective against the nematodes which cause root-knot, stunt, and other diseases of citrus, sugarcane, and other crops.

White Pests in Northern States: Use TELENE as a soil fumigant for control of white pests in Northern States.

Wilt in citrus trees is caused by a soil-borne fungus. The wilt is caused by a soil-borne fungus.

TELENE is a systemic fungicide which is effective against a wide range of soil-borne fungi and nematodes. It is particularly effective against the nematodes which cause root-knot, stunt, and other diseases of citrus, sugarcane, and other crops.

USE PRECAUTIONS

In the use of TELENE, it is essential that the soil be covered after application. The soil should be covered with a layer of soil or mulch. The soil should be covered with a layer of soil or mulch.

Certain crops are not suitable for soil fumigation. Do not use TELENE on citrus trees, sugarcane, or other crops. Do not use TELENE on citrus trees, sugarcane, or other crops.

CAUTION

Do not store TELENE in areas where it may be accessible to children or animals. Do not store TELENE in areas where it may be accessible to children or animals.

Do not store TELENE in areas where it may be accessible to children or animals. Do not store TELENE in areas where it may be accessible to children or animals.

Do not store TELENE in areas where it may be accessible to children or animals. Do not store TELENE in areas where it may be accessible to children or animals.

Do not store TELENE in areas where it may be accessible to children or animals. Do not store TELENE in areas where it may be accessible to children or animals.

Do not store TELENE in areas where it may be accessible to children or animals. Do not store TELENE in areas where it may be accessible to children or animals.

Do not store TELENE in areas where it may be accessible to children or animals. Do not store TELENE in areas where it may be accessible to children or animals.

Do not store TELENE in areas where it may be accessible to children or animals. Do not store TELENE in areas where it may be accessible to children or animals.

Do not store TELENE in areas where it may be accessible to children or animals. Do not store TELENE in areas where it may be accessible to children or animals.

Do not store TELENE in areas where it may be accessible to children or animals. Do not store TELENE in areas where it may be accessible to children or animals.

Do not store TELENE in areas where it may be accessible to children or animals. Do not store TELENE in areas where it may be accessible to children or animals.

Do not store TELENE in areas where it may be accessible to children or animals. Do not store TELENE in areas where it may be accessible to children or animals.

Do not store TELENE in areas where it may be accessible to children or animals. Do not store TELENE in areas where it may be accessible to children or animals.

Do not store TELENE in areas where it may be accessible to children or animals. Do not store TELENE in areas where it may be accessible to children or animals.

Do not store TELENE in areas where it may be accessible to children or animals. Do not store TELENE in areas where it may be accessible to children or animals.

Do not store TELENE in areas where it may be accessible to children or animals. Do not store TELENE in areas where it may be accessible to children or animals.

Do not store TELENE in areas where it may be accessible to children or animals. Do not store TELENE in areas where it may be accessible to children or animals.

Do not store TELENE in areas where it may be accessible to children or animals. Do not store TELENE in areas where it may be accessible to children or animals.

Do not store TELENE in areas where it may be accessible to children or animals. Do not store TELENE in areas where it may be accessible to children or animals.

Do not store TELENE in areas where it may be accessible to children or animals. Do not store TELENE in areas where it may be accessible to children or animals.

Do not store TELENE in areas where it may be accessible to children or animals. Do not store TELENE in areas where it may be accessible to children or animals.

Do not store TELENE in areas where it may be accessible to children or animals. Do not store TELENE in areas where it may be accessible to children or animals.

Do not store TELENE in areas where it may be accessible to children or animals. Do not store TELENE in areas where it may be accessible to children or animals.

Do not store TELENE in areas where it may be accessible to children or animals. Do not store TELENE in areas where it may be accessible to children or animals.

Do not store TELENE in areas where it may be accessible to children or animals. Do not store TELENE in areas where it may be accessible to children or animals.

Do not store TELENE in areas where it may be accessible to children or animals. Do not store TELENE in areas where it may be accessible to children or animals.

Do not store TELENE in areas where it may be accessible to children or animals. Do not store TELENE in areas where it may be accessible to children or animals.

Do not store TELENE in areas where it may be accessible to children or animals. Do not store TELENE in areas where it may be accessible to children or animals.

Do not store TELENE in areas where it may be accessible to children or animals. Do not store TELENE in areas where it may be accessible to children or animals.

Do not store TELENE in areas where it may be accessible to children or animals. Do not store TELENE in areas where it may be accessible to children or animals.

MANUFACTURED BY THE DOW CHEMICAL COMPANY