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# TELONE\*

1,3-Dichloropropene and related chlorinated aliphatics

## SOIL FUMIGANT

### for Preplant Treatment of Crop Lands to Control Plant Parasitic Nematodes and Certain Other Soil Pests

#### GENERAL INFORMATION

Use TELONE soil fumigant only as a preplanting soil treatment to control plant parasitic nematodes (root-knot, meadow (lesion) citrus cyst-formers, golden sugar beet, soybean, burrowing, ring, spiral, sting, pin, stubby root, stylt, dagger, and certain others); also to control wireworm and garden centipedes (symphylans). Fumigate land to be planted to the crops listed below by applying TELONE under the conditions and at the rates recommended under DIRECTION FOR USE, DOSAGE AND USE RECOMMENDATIONS and USE PRECAUTIONS. Read the entire label before using TELONE.

#### Vegetable Crops:

broccoli	cauliflower	horseradish	parsnips	shallots
cucumbers	celery	kale	peas	spinach
eggplant	collards	kohlrabi	peppers	squash (summer)
green beans	corn	leeks	pimientos	squash (winter)
green peppers	cowpeas	lettuce	potatoes	sweet potatoes
head cabbages	cucumbers	melons	pumpkins	swiss chard
okra	eggplant	mustard greens	radishes	tomatoes
potatoes	endive	okra	rutabaga	turnips
spinach	garlic	onions	salsify	watermelons

#### Field Crops:

alfalfa	flax	oats	sorghum
barley	grasses	pasture grass	soybeans
beans	hops	peanuts	sugar beets
corn	rye	popcorn	sugar cane
cotton	safflower	rice	tobacco
clover		rye	velvet
oats		wheat	

#### Citrus Fruit Tree Planting Sites:

citrus	oranges	tangelos
lemons	limes	limebines

#### Deciduous Fruit and Nut Tree Planting Sites:

apples	dates	olives	plums
cherries	figs	peaches	pomegranates
peaches	pears	pears	prunes
peaches	pears	pears	quince
peaches	pears	pears	walnuts
peaches	pears	pears	

#### Bush and Vine Planting Sites:

blackberries	raspberries	strawberries	youngberries
blueberries	elderberries	raspberries	
blackberries	raspberries	strawberries	
blackberries	raspberries	strawberries	

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

#### DIRECTIONS FOR USE

**WHEN TO TREAT:** Apply TELONE either in the spring or fall, whenever soil type and conditions permit. For best results with annual crops, treat the soil each year. In northern states, the summer or early fall treatment (before October 15) is best for land to be planted to early spring crops. For transplanted crops such as celery, tomatoes, and nursery and orchard stock, apply the treatment permits planting a full cover crop. **Note:** Treat muck soils only after they have been plowed and plowed as late as possible in the spring. Treat fine textured (clay) soils after they have been plowed and plowed as late as possible in the spring. Treat any type of soil after it has been plowed and plowed as late as possible in the spring.

#### ACTIVE INGREDIENTS:

1,3-Dichloropropene and related chlorinated aliphatics 99%

#### INERT INGREDIENTS:

1%

**AERATION AND PREPARATION OF SOIL BEFORE PLANTING:** At the end of the exposure period allow the soil to aerate completely before planting the crop. Aeration is usually complete when the odor of TELONE is no longer evident. Under optimum soil and weather conditions, allow a week of aeration for each 10 gallons of TELONE applied per acre. When TELONE is used for treating deep-rooted trees or shrubs, allow a 3 to 6 months aeration period before planting. To further aerate, especially if heavy rains or low temperatures occur during the exposure period, work the soil to the depth of the treatment zone. After the treatment is complete, work the soil to the depth of the treatment zone. This is especially desirable in northern states after fumigation of truck beds.

#### DOSAGE AND USE RECOMMENDATIONS to Control Nematodes, Symphylans, and Wireworms:

Crops (consult list of individual crops under General Information)	Type of Treatment	Soil Type	Dosage		
			Gallons Per Acre <sup>1</sup>	Fl Oz / 1000 ft. Row Per Chisel	
Shallow-Rooted Plants Field Crops Field Crops Field Crops Grasses and Turf Small Fruits Vegetables Ornamentals	Row (2")	Mineral	6 1/2	42 to 87	
	Row (2")	M. & C. Part	11 to 16	70 to 105	
Strawberries	Overall for Broadcast	Mineral	12 to 25	35 to 55	
	Overall	M. & C. Part	3 to 48	94 to 141	
Sugar Beets Root Beet Nematode	Row (2")	Mineral	7	77	
Sugar Beet Nematode	Overall	Mineral	15 to 20	44 to 59	
	Overall	Mineral	15 to 25	44 to 73	
Pineapple	Row	Mineral	30 to 50		
Citrus - Florida	Overall	Mineral	40	118	
<b>Overall, Gallons Per Acre to Penetrate Various Depths</b>					
Nursery and Field	Mineral Soils	3 ft	4 ft	5 ft	6 ft
Citrus Fruit Trees	Sand	20	28	36	44
Deciduous Fruit Trees	Forest Trees	20	28	36	44

**Mint in Northwestern States:** Use 70 gallons of TELONE per chisel in an overall treatment in the spring, or pre-treatment of the damaging effects of Verticillium wilt and root rot. After treatment allow at least 7 to 8 weeks for the soil to aerate before planting. Consult local Agricultural Extension Service for the use of other products such as fumigants in the soil when using TELONE as an aid to reducing damage caused by nematodes.

#### USE PRECAUTION

**Important -- Note Carefully.** Fumigation may temporarily generate soil acids in the soil. To avoid damage to crops, fumigate at an application rate of 10 to 15 gallons per acre. Avoid injury to plant roots, ferns, and other soil organisms. Avoid application to citrus groves, especially in areas where fertilizer is applied and soil is saturated. Use only when the soil is well aerated and the soil is not saturated.

**Attention:** To avoid contamination of treated soil, do not use equipment that has been used in the treatment of soil. Do not use equipment that has been used in the treatment of soil. Do not use equipment that has been used in the treatment of soil. Do not use equipment that has been used in the treatment of soil.

**NOTICE:** General warning that the product is harmful to humans and animals. Do not use in residential areas. Do not use in areas where children or animals are present. Do not use in areas where children or animals are present. Do not use in areas where children or animals are present.

burrowing, ring, spiral, sting pin, stubby root, stilet, dagger, and certain beetles, and control wireworm and garden centipedes (symphylans). Fumigate land to be planted to the crops listed below by applying TELONE under the conditions, and at the rates recommended under DIRECTION FOR USE, DOSAGE AND USE RECOMMENDATIONS, and USE PRECAUTIONS. Read the entire label before using TELONE.

**Vegetable Crops:**

broccoli	egg flower	horseradish	parsnips	shallots
brussels sprouts	egg plant	kale	peas	spinach
cabbage	eggplant	kohlrabi	peppers	squash (summer)
carrots	endive	leeks	potatoes	squash (winter)
cauliflower	garlic	lettuce	sweet potatoes	swiss chard
cauliflower	onions	melons	tomatoes	turnips
celery	onions	mustard greens	rutabaga	watermelons
chicory	onions	okra	salsify	

**Field Crops:**

corn	oats	sorghum
soybeans	pasture grass	soybeans
peanuts	peanuts	sugar beets
potatoes	popcorn	sugar cane
rice	rice	tobacco
vetch	rye	vetch
wheat	safflower	wheat

**Citrus Fruit Tree Planting Sites:**

lemons	oranges	tangerines
limes	citrus	citrus

**Deciduous Fruit and Nut Tree Planting Sites:**

apples	peaches	plums
pears	peaches	pomegranates
cherries	pears	prunes
walnuts	pecans	quince
almonds	persimmons	walnuts
chestnuts	pineapple	

**Bush and Vine Planting Sites:**

blackberries	raspberries	strawberries	youngberries
blueberries	raspberries		
currants	raspberries		
elderberries	grapes		

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

**DIRECTIONS FOR USE**

**WHEN TO TREAT:** Apply TELONE either in the spring or fall, whenever soil type and conditions permit. For best results with annual crops, treat the soil each year. In northern states, the summer or early fall treatment (before October 15) is best for land to be planted to early spring crops, especially transplanted crops such as celery, tomatoes, and nursery and ornamental plants. For treatment permits planting a fall cover crop. **Note:** Treat muck soils only in the fall and only as late as possible in the season, to a fine textured (clay) soil, when they are a half or at the way point. Do not use TELONE to treat any type of soil when the soil is wet.

**SOIL PREPARATION:** TELONE gives best results when conditions permit rapid diffusion of the fumigant into the soil, and the soil surface can be sealed to prevent excessive fumigant escaping during the exposure period. The soil should be in good seed bed condition, free of clods and undecomposed plant material, moisture at about one-half of field capacity, and temperature between 40 and 80 F at the depth of injection. If undercomposed plant debris is present, it should be plowed down and allowed to decompose before applying TELONE. To be deeper than 12 inches is necessary for good fumigant penetration in soils where a hard plow or moldboard is at low depth. Where deep tillage is used, the tillage equipment may often be modified to simultaneously apply the fumigant and thus avoid going over the field twice.

**APPLICATION:** TELONE may be applied either as an overall (broadcast) or row treatment, using suitable application equipment that will ensure placement of the fumigant at least 6 to 8 inches below the soil surface. For overall application use either plowsole or chisel application with the chisels spaced 12 inches apart. When the fumigant is injected at a depth of 12 inches or more, depth of the chisel spacing may be up to twice the application depth but should not exceed 30 inches. Application may be made in the same direction or in a change to the direction of the planting row, whichever is most convenient. For row application use chisel application with one chisel per row or two chisels spaced 12 inches apart to treat only the soil where the crop is to be planted. When one chisel per row is used, adjust the fumigant flow rate to distribute about 7 1/2 times more fumigant per chisel than is recommended for overall application. When two chisels are used per row, apply at the same flow rate per chisel as for overall. In both cases, the amount of fumigant required per acre will decrease as the distance between rows is increased and vice versa. At time of planting, seed should be placed directly over the furrow left by the applicator chisel. When a single chisel is used per row, place the seed 3 to 4 inches to one side of the chisel furrow; when two chisels are used, plant in the center of the area between the chisel furrows.

**SEALING:** Immediately after application, compact the soil surface to prevent excessive fumigant loss. After chisel application use a roller, cultipacker, or similar sealing device. After plowsole application, disk the land, then compact it by floating or tamping. Sealing after row application can be accomplished by the tractor wheel, by tamping, or by bedding so that the fumigant will be 12 to 14 inches below the top of the bed. When fumigating listed rows, seal in the furrow with rollers, press sealers, or by re-tiling.

**EXPOSURE PERIOD:** After application and sealing, leave the soil undisturbed for 7 to 14 days. A longer exposure period will be required if the soil becomes excessively cold or wet during the exposure period.

**INERT INGREDIENTS: 1%**

**AERATION AND PREPARATION OF SOIL BEFORE PLANTING:** At the end of the exposure period allow the soil to aerate completely before planting the crop. Aeration is usually complete when the odor of TELONE is no longer evident. Under optimum soil and weather conditions allow one week of aeration time for each 10 gallons of TELONE applied per acre. When TELONE is used for treating deep-rooted tree and shrub planting sites, a 3 to 6 month aeration period should be allowed. To be most effective, especially if heavy rains or low temperatures occur during the exposure period, work the soil to the depth of the treatment zone. After row treatment use a knife, soil scarifier, or similar bed-forming the soil, then, reducing possible recontamination of the treated soil. To hasten aeration after overall treatment, plow or deep cultivate to the depth of the treatment zone. This is especially desirable in northern states after fumigation in the fall.

**DOSAGE AND USE RECOMMENDATIONS to Control Nematodes, Symphylans, and Wireworms:**

Crops (consult list of Individual crops under General Information)	Type of Treatment	Soil Type	Dosage		
			Gallons Per Acre <sup>1</sup>	Fl Oz / 1000 Ft. Row Per Chisel	
Shallow Rooted Plants Field Crops Floral Crops Grasses and Turf Small Fruits Vegetables Ornamentals	Row (42")	Mineral	5 to 6	50 to 80	
	Overall or Broadcast <sup>2</sup>	Muck or Peat	12 to 16	120 to 165	
Strawberries	Overall	Mineral	12 to 20	35 to 50	
	Row (42")	Muck or Peat	32 to 48	94 to 141	
Sugar Beets Root Knot Nematode	Overall	Mineral	7	70	
	Row (42")	Mineral	15 to 20	44 to 59	
Sugar Beet Nematode	Overall	Mineral	11	120	
	Row (42")	Mineral	15 to 25	44 to 73	
Pineapple <sup>3</sup>	Row	Mineral	30 to 60		
Citrus - Florida <sup>4</sup>	Overall	Mineral	40	118	
<b>Overall: Gallons Per Acre to Penetrate Various Depths</b>					
Nursery and Field <sup>5</sup>	Mineral Soils	3 ft	4 ft	5 ft	6 ft
Citrus Fruit Trees	Sand	20	28	36	44
Deciduous Fruit Trees <sup>6</sup>	Sandy Loam	26	40	48	64
Forest Trees	Silt Loam	56	68	84	100
Grapes	Clay Loam	72	92	112	136
Nut Trees					
Ornamentals					
deep rooted <sup>7</sup>					

- Use the higher rates in heavier soil.
- For cyst forming nematodes increase dosage to 25 gallons per acre (73 fl oz / 1000 ft row per chisel).
- For muck soils containing less than 30% organic matter use 25 gallons per acre.
- For Hawaii in pineapple, application may be made at time of or just before planting.
- For burrowing nematode in citrus inject on 18 inch centers, 12 inches deep. Keep free of plants susceptible to burrowing nematodes for 2 years before replanting to citrus.
- Row treatment is not recommended for potatoes in irrigated areas of west and northwestern states.
- Tree planting sites prepared by backhoeing may be treated by pouring 1 quart of TELONE into the hole during backhoeing. For best results prepare and treat sites in the fall and plant in the spring.
- Use TELONE as an aid in the control of bacterial canker and decline of peach trees by application as a preplant, overall treatment of light sandy soils at the rate of 32 to 48 gallons per acre (94 to 141 fl oz / 1000 ft row per chisel) preferably in the fall when the soil is warm (50-85 F at 5 inch depth) and moist. Inject the fumigant at a depth of 10 to 12 inches with chisels spaced on 12 inch centers. Follow directions for soil preparation, sealing, exposure, and aeration as specified elsewhere on this label.
- NOTE:** To control symphylans (garden centipedes) use only overall, at 25 or more gallons per acre, and apply during late summer or early fall when the soil is warm. To control wireworms use the higher dosages recommended for nematodes in overall 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 wilt in fields to be planted to white potatoes. Apply as an overall treatment according to the following tabular directions.

Time of treatment	Gallons per acre	Fl Oz / 1000 Ft. Row Per Chisel
Spring	16 to 21	110 to 140
Fall	20 to 40	110 to 140

**10 GALLONS DISTRIBUTED BY**

**THE GREAT WESTERN SUGAR COMPANY**  
P. O. Box 5308 • Denver, Colorado 80217

for the use of other practices such as flaming the stubble and when using TELONE as an aid to reducing damage caused by

**USE PRECAUTIONS**

**Important — Note carefully.** Fumigation may temporarily reduce soil fertility in the soil. This is most likely to occur when fumigant is applied to soils that are either cold, wet, or too acid. Avoid injury to plant roots. Fertilizers should be applied to avoid soil acidity. Apply fertilizer before planting or before the fertilizer containing ammonium salts and use only fertilizer the crops will tolerate and the soil temperature is above 60 F.

Certain crops, including cotton, sugarcane, and pineapple, are adversely affected when applied to them. When using TELONE, be sure the fumigant is applied to soils that are either cold, wet, or too acid. Avoid injury to plant roots. Fertilizers should be applied to avoid soil acidity. Apply fertilizer before planting or before the fertilizer containing ammonium salts and use only fertilizer the crops will tolerate and the soil temperature is above 60 F.

**Attention:** To avoid soil station of treated soil, do not use TELONE in areas where the soil is wet, cold, or too acid. Do not use equipment that is not designed for use with TELONE.

Some TELONE may be used in conjunction with other fumigants, pumps, or other transfer equipment made of aluminum, under certain conditions. TELONE may be severely corroded by acids, alkalis, and other materials. Do not use TELONE in contact with any other material. Do not use TELONE in contact with any other material. Do not use TELONE in contact with any other material. Do not use TELONE in contact with any other material.

To avoid injury to fish and other wildlife, do not use TELONE in or near water.

Protect ground and surface water and source of water by treating water supply. Containers should be disposed of per local regulations.

Use the fumigant only as specified on this label.

**NOTICE:** Seller warrants that this product conforms to its label at the time of purchase. Seller does not warrant that the product will perform as represented on the label. THE WARRANTY OR MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE IS LIMITED TO THE USE OF THIS PRODUCT IN ACCORDANCE WITH ABNORMAL CONDITIONS SPECIALLY LISTED IN THESE TERMS OF SALE. SELLER AND BUYER ASSUME THE RISK OF INADEQUATE VENTILATION. DO NOT BREATHE VAPOR.

**KEEP OUT OF REACH OF CHILDREN. HAZARDOUS LIQUID AND MAY BE FATAL IF INHALED, ABSORBED OR SWALLOWED. CAUSES BURNS ON SKIN.**

Do Not Get in Eyes, on Skin, or on Clothing. If in contact with the Circumstances When Handling, Stop after Handling and Before Eating and Drinking, Urinating and Air Contaminated Shoes Thoroughly Before Adequate Ventilation. Do Not Breathe Vapor.

**COMBUSTIBLE. DO NOT USE, POUR, SPILL OR STORE NEAR**

**IN CASE OF CONTACT:** immediately remove contaminated clothing and wash with plenty of water. FOR EYES: Flush with flowing water for at least 15 minutes.

**IN CASE OF SKIN CONTACT:** Wash with plenty of water. If irritation persists, consult a physician. If swallowed: Drink plenty of water. Do not induce vomiting unless advised by a physician. If you experience any symptoms, consult a physician.

EPA Registration No. 8399 S

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Cameraman's Note  
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# TELONE\*

## SOIL FUMIGANT

for Preplant Treatment of Crop Lands to Control Plant Parasitic Nematodes and Certain Other Soil Pests

### GENERAL INFORMATION

Preplanting soil treatment to control plant parasitic nematodes (cyst formers on den sugar beet, soybean, by root, cyst, dagger and certain others), also to control other soil pests (such as wireworms, cutworms, and certain others) on land to be planted to the following crops under the conditions and at the rates recommended under PREPARATION AND USE RECOMMENDATIONS and USE PRECAUTIONS.

asparagus	carrots	spinach
beans	peas	squash (summer)
broccoli	peppers	squash (winter)
cucumbers	pimentos	sweet potatoes
eggplants	potatoes	swiss chard
lettuce	pumpkins	tomatoes
onions	radishes	turnips
peas	rutabaga	watermelons
peppers	safron	

oats	sorghum
pasture grass	soybeans
peanuts	sugar beets
popcorn	sugar cane
rice	tobacco
rye	vegetables
safflower	wheat

**Planting Sites:**

apples	plums
peaches	pomegranates
pears	prunes
pecans	quince
persimmons	walnuts
pineapple	

blackberries	raspberries
blueberries	strawberries
cherryberries	
cranberries	
elderberries	
gooseberries	
huckleberries	
loganberries	
mulberries	
strawberries	

ornamentals, shrubs and bushes, forest, shade, fruit trees of all types

### CONDITIONS FOR USE

Apply in the spring or fall, whenever soil type and con- ditional crops, treat the soil each year. In northern states, before October 15 is best for land to be planted to winter crops such as celery, tomatoes, and nursery and field crops planted a fall cover crop. **Note:** Treat muck soils to as deep as possible in the spring, treat fine textured (clay)

**ACTIVE INGREDIENTS:**  
1,3-Dichloropropene and related chlorinated aliphatics 99%  
**INERT INGREDIENTS:** 1%

**AERATION AND PREPARATION OF SOIL BEFORE PLANTING:** At the end of the exposure period allow the soil to aerate completely before planting the crop. Aeration is usually complete when the odor of TELONE is no longer evident. Under optimum soil and weather conditions, a 4 to 6 week aeration time for each 10 gallons of TELONE applied per acre. When TELONE is used for treatment of treated tree and shrub plantings, a 3 to 6 month aeration period should be allowed. In high humidity areas, especially if heavy rains or low temperatures occur during the exposure period, work the soil to the depth of the treatment zone. After row treatment, work like chisel in the bed without turning the soil, this reduces possibility of recontamination of the treated soil. In broadcast applications after overall treatment, plow or deep cultivate to the depth of the treatment zone. This is especially desirable in northern states after fall fumigation of muck soils.

### DOSAGE AND USE RECOMMENDATIONS to Control Nematodes, Syniphylans, and Wireworms:

Crops (consult list of Individual crops under General Information)	Type of Treatment	Soil Type	Dosage		
			Gallons Per Acre	Fl Oz /1000 ft Row Per Chisel	
Shallow Planted Plants Field Crops Fruit Crops Grasses and Turf Small Fruits Vegetables Ornamentals	Row (42")	Mineral	6 to 8	42 to 82	
	Row (42")	Muck or Peat	11 to 16	123 to 165	
Strawberries	Overall (for Broadcast)	Mineral	12 to 20	35 to 59	
	Overall	Muck or Peat	32 to 48	94 to 141	
Sugar Beets Root Rot Nematode	Row (42")		7	72	
	Overall	Mineral	15 to 20	44 to 59	
Sugar Beet Nematode	Row (42")		11	102	
	Overall		15 to 25	44 to 73	
Pineapple	Row	Mineral	30 to 50		
Citrus - Florida	Overall	Mineral	40	118	
<b>Overall, Gallons Per Acre to Penetrate Various Depths</b>					
Nursery and Field	Mineral Soils	3 ft	4 ft	5 ft	6 ft
		20	28	36	44
Citrus Fruit Trees Deciduous Fruit Trees Forest Trees	Sand	3 ft	4 ft	5 ft	6 ft
		20	28	36	44

**Mint in Northwestern States:** Use 75 gallons of TELONE per acre (2000 lbs. of 3.75% row per acre) in an overall treatment in the spring, or preplanting in the fall. To avoid the damaging effects of Verticillium wilt disease, planting and the use of fungicides for preplanting. After treatment, allow at least 7 to 8 weeks for the odor of TELONE to have left the soil before planting. Consult local Agricultural Experiment Station authorities for the use of other practices such as plowing the stubble, weed control, and other practices when using TELONE as an aid to reducing damage caused by Verticillium wilt.

### USE PRECAUTIONS

**Important -- Note carefully.** Fumigation may temporarily taste the soil. A strong odor generated soon after the soil is treated. This odor may be reduced by turning the soil and fumigant will disappear. Do not use TELONE in areas where it is prohibited. To avoid injury to plant roots, fumigant should be applied in the soil, not on the surface. To avoid damage to plants, do not plant immediately after fumigation. Do not use TELONE in areas where it is prohibited. Do not use TELONE in areas where it is prohibited. Do not use TELONE in areas where it is prohibited.

General crops including citrus, sugarcane, and other crops, are treated to control nematodes and other soil pests. Do not use TELONE in areas where it is prohibited. Do not use TELONE in areas where it is prohibited. Do not use TELONE in areas where it is prohibited.

**Attention:** To avoid recontamination of treated soil, do not use any equipment that has been used in the treated area. Do not use any equipment that has been used in the treated area.

Some TELONE soil fumigant is very corrosive under certain conditions. Do not use TELONE in areas where it is prohibited. Do not use TELONE in areas where it is prohibited. Do not use TELONE in areas where it is prohibited.

Take care to follow instructions with regard to the use of TELONE in areas where it is prohibited. Do not use TELONE in areas where it is prohibited.

Please consult with your local agricultural extension office for more information on the use of TELONE in areas where it is prohibited. Do not use TELONE in areas where it is prohibited.

Use of TELONE in areas where it is prohibited. Do not use TELONE in areas where it is prohibited.

**NOTICE:** Seller warrants that the product conforms to the label and does not contain any hazardous materials. Seller does not warrant that the product is safe for use in areas where it is prohibited. Seller does not warrant that the product is safe for use in areas where it is prohibited.

ubby root, stylet dagger, and certain others]; also to dities (symphyllans), Fumigate land to be planted to the NE under the conditions, and at the rates recommended **AGE AND USE RECOMMENDATIONS** and **USE PRE-CAUTIONS** of TELONE.

horseradish	parsnips	shallots
kale	peas	spinach
kohlrabi	peppers	squash (summer)
leeks	pimentos	squash (winter)
lettuce	potatoes	sweet potatoes
melons	pumpkins	swiss chard
mustard greens	rutabagas	tomatoes
okra	rutabaga	turnips
onions	sausage	watermelons

oats	sorghum
pasture grass	soybeans
peanuts	sugar beets
pumpkin	sugar cane
rice	tobacco
rye	vegetables
safflower	wheat

oranges	tangerines	plums
tangerines		pomegranates
olives		prunes
peaches		quince
pears		walnuts
pecans		
persimmons		
pineapple		

blackberries	youngberries
chickpeas	
raspberries	
strawberries	

nts, ornamentals, shrubs and bushes, forest, shade, fruit fruits of all types.

### DIRECTIONS FOR USE

Use in the spring or fall, whenever soil type and con- annual crops, treat the soil each year. In northern states, at before October 15) is best for land to be planted to planted crops such as celery, tomatoes, and nursery and permits planting a fall cover crop. **Note:** Treat muck soils late as possible in the spring; treat fine textured (clay) the willow. Do not use TELONE to treat any type of

best results when conditions permit rapid diffusion of the soil surface can be sealed to prevent excessive fumigant seepage should be in good seed bed condition (free of clods) moisture at about one-half of field capacity, and tem- the depth of injection. If under-composed plant debris is and allowed to decompose before applying TELONE necessary for rapid fumigant penetration in soils where a depth of 18 inches is used, the tillage equipment should apply the fumigant and thus avoid going over the

applied either as an **overall (broadcast)** or **row treatment**, but that will ensure placement of the fumigant at least surface. **For overall application** use either plowshare or spaced 12 inches apart. When the fumigant is injected at a depth of 12 inches, spacing may be up to twice the applica- inches. Application may be made in the same direction the planting row, whichever is most convenient. **For row** with one chisel per row or two chisels spaced 12 inches the crop is to be planted. When one chisel per row is used, distribute about 1 1/2 times more fumigant per chisel than is on. When two chisels are used per row, apply at the same In both cases, the amount of fumigant required per acre when rows is increased and vice versa. At time of planting, apply over the furrow left by the applicator chisel. When a the seed 3 to 4 inches to one side of the chisel furrow; the center of the area between the chisel furrows

tion, compact the soil surface to prevent excessive fumi- Use a roller, cultchaker, or similar seating device. After and then compact it by floating or rolling. Sealing after led by the tractor wheel, by treading, or by bedding so that is below the top of the bed. When fumigating listed rows, use press sealers or by re-tilling.

ation and sealing, leave the soil undisturbed for 7 to 14 h required if the soil becomes excessively cold or wet

### INERT INGREDIENTS: 1%

**AERATION AND PREPARATION OF SOIL BEFORE PLANTING:** At the end of the exposure period allow the soil to aerate completely before planting the crop. Aeration is usually complete when the odor of TELONE is no longer evident. Under optimum soil and weather conditions allow one week of aeration time for each 10 gallons of TELONE applied per acre. When TELONE is used for treating deep-rooted trees and shrub planting, allow 3 to 6 months aeration time to be allowed. To hasten aeration, especially if heavy rains or low temperatures occur during the exposure period, work the soil to the depth of the treatment zone. After the treatment, allow the crop to be established in the bed without turning the soil. The treated soil will be available to the depth of the treatment zone. This is especially desirable in northern states after fall fumigation treatments.

### DOSAGE AND USE RECOMMENDATIONS to Control Nematodes, Symphyllans, and Wireworms:

Crops (consult list of Individual crops under General Information)	Type of Treatment	Soil Type	Dosage		
			Gallons Per Acre <sup>1</sup>	Fl. Oz. 1000 ft. Row Per Chisel	
Shallow-Rooted Plants Field Crops Row Crops Grasses and Turf Small Fruits Vegetables Ornamentals	Row (42")	Mineral	6	32 to 48	
	Overall for Broadcast <sup>2</sup>	Muck or Peat	32 to 48	94 to 141	
Strawberries	Overall	Mineral	32 to 48	94 to 141	
Sugar Beets Root Knot Nematode	Row (42")		7	72	
Sugar Beet Nematode	Overall	Mineral	15 to 20	44 to 59	
	Row (42")		11	103	
	Overall		15 to 25	44 to 73	
Pineapple <sup>3</sup>	Row	Mineral	30 to 60	—	
Citrus - Florida <sup>4</sup>	Overall	Mineral	40	118	
<b>Overall, Gallons Per Acre to Penetrate Various Depths</b>					
Nursery and Field <sup>5</sup>	Mineral Soils	3 ft.	4 ft.	5 ft.	6 ft.
Citrus Fruit Trees	Sand	20	36	44	—
Deciduous Fruit Trees <sup>6</sup> Forest Trees Grapes	Sandy Loam	16	16	48	64
Nut Trees	Silt Loam	15	68	84	110
Ornamentals (deep rooted)	Clay Loam	12	92	112	136

- Use the higher rates in heavier soil.
- For cyst-forming nematodes increase dosage to 25 gallons per acre (73 fl. oz. / 1000 ft. row per chisel).
- For muck soils containing less than 30% organic matter use 25 gallons per acre.
- For Hawaii pineapple, application may be made at time of or just before planting.
- For burrowing nematode in citrus inject on 18 inch centers, 12 inches deep. Keep tree free of plants susceptible to burrowing nematodes for 2 years before replanting to citrus.
- Row treatment is not recommended for potatoes in irrigated areas of west and northwestern states.
- Tree planting sites prepared by backfilling may be treated by pouring 1 quart of TELONE into the hole during backfilling. For best results prepare and treat sites in the fall and plant in the spring.
- Use TELONE as an aid in the control of bacterial canker and decline of peach trees by application as a pre-plant, overall treatment of light sandy soils at the rate of 32 to 48 gallons per acre (94 to 141 fl. oz. / 1000 ft. row per chisel) preferably in the fall when the soil is warm (70-80 F. at 6 inch depth) and must inject the fumigant at a depth of 10 to 12 inches with chisels spaced on 12 inch centers. Follow directions for soil preparation, sealing, exposure, and aeration as specified elsewhere on this label.

**(NOTE:** To control symphyllans (garden centipedes) use only overall at 25 or more gallons per acre, and apply during late summer or early fall when the soil is warm. To control wireworms use the higher dosages recommended for nematodes in overall 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 wilt in fields to be planted to white potatoes. Apply as an overall treatment according to the following tabular directions:

Time of treatment	Gallons per acre	Fl. Oz. 1000 Ft. Row Per Chisel
Spring	25 to 40	64 to 86
Fall	30 to 45	86 to 118

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has left the soil before planting. Consult local Agricultural Experiment Station authorities for the use of other practices such as tilling the stubble, weed control, and cultural practices when using TELONE as an aid to reducing damage caused by Verticillium wilt.

### USE PRECAUTIONS

**Important — 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 fumigant and fumigant are applied to soils that are either cold and wet, or that are high in organic matter. To avoid injury to plant roots, fertilize with ammonium sulfate or ammonium nitrate immediately after fumigation. To avoid ammonia injury or salt stress, do not apply nitrogen or phosphorus fertilizers containing ammonium salts and use only light amounts of potassium fertilizers immediately after the crop is well established. Do not apply nitrogen fertilizers immediately after fumigation.

Certain crops, including citrus, are extremely sensitive to soil salinity and ammonia toxicity. To avoid injury to these crops, apply the fumigant to soils that are either cold and wet, or that are high in organic matter. To avoid ammonia injury or salt stress, do not apply nitrogen or phosphorus fertilizers containing ammonium salts and use only light amounts of potassium fertilizers immediately after the crop is well established. Do not apply nitrogen fertilizers immediately after fumigation.

**Attention:** To avoid contamination of treated crops, do not use fumigation equipment that has been used for other purposes.

Some fumigant materials are highly corrosive. Do not use equipment pumps or other transfer equipment made of aluminum, magnesium, or other metals under certain conditions. TELONE may be severely corrosive to such materials. Test the equipment to be used to determine its compatibility with TELONE. Do not use equipment with highly polished surfaces. Do not use TELONE in contact with highly polished surfaces. Do not use TELONE in contact with highly polished surfaces.

To avoid injury to mammals, birds, and domestic animals, keep TELONE and fumigant containers well sealed.

Prevent contact and contamination and disposal of water by any means. Avoid contact with water bodies. Containers should be cleaned by washing with water and disposing of the washings with care.

Use this product only as directed on this label.

**NOTICE:** Seller warrants that the product conforms to its label's description and is suitable for the purposes stated on the label. Seller warrants that the product is free from adulteration or contamination. **BUT NEITHER THE WARRANTY NOR THE MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, EXCEPT AS EXPRESSLY STATED TO THE CONTRARY, SHALL BE IMPLIED OR IN ANY MANNER EXTENDED OR ENLARGED BY ANY COURSE OF DEALING OR USAGE OF TRADE. THE USER OF THIS PRODUCT ASSUMES THE RISK OF ANY SUCH LOSS.**



**KEEP OUT OF REACH OF CHILDREN  
HAZARDOUS LIQUID AND VAPOR  
MAY BE FATAL IF INHALED, ABSORBED THROUGH SKIN  
OR SWALLOWED  
CAUSES BURNS OF SKIN OR EYES**

**Do Not Get in Eyes, on Skin, or on Clothing. Wear Eye Protection Appropriate to the Circumstances When Handling This Material. Avoid Inhalation after Handling and Before Eating and Drinking. Wash Carefully and Thoroughly and Air-Contaminated Spaces Thoroughly Before Reuse. Use Only with Adequate Ventilation. Do Not Breathe Vapor.**

**COMBUSTIBLE  
DO NOT USE, POUR, SPILL, OR STORE NEAR HEAT OR OPEN FLAME**

**IN CASE OF CONTACT:** Immediately remove contaminated clothing and shoes and flush 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 INHALATION:** Move away to fresh air. Do not use mouth-to-mouth respiration. If breathing is difficult, use a fresh air respirator. **IF SWALLOWED:** Do not induce vomiting. Give 1-2 glasses of water. **IF SWALLOWED:** Do not induce vomiting. Give 1-2 glasses of water.