

RESTRICTED USE PESTICIDE

For retail sale to and use only by Certified Applicators or persons under their direct supervision and only for those uses covered by the Certified Applicator's certification.



Shell

D-D/PIC[®] Soil Fumigant

(CHLOROPICRIN MIXTURE)

A preplant soil fumigant for controlling many subterranean plant parasitic nematodes, wireworms, synchytrians and reduces the symptoms of soil infesting fungi such as Soil Rot (Soil Pox), Granville Wilt, Black Root Rot, Black Shank, Verticillium Wilt and Pyrenochaeta Terrestors (Pink Root of Onions). Aids in the control of peanut pod rot disease.

**KEEP CONTAINER AND CONTENTS AWAY
FROM HEAT OR OPEN FLAME**

ACTIVE INGREDIENTS

Chlorinated C₃ hydrocarbons including
1,3-dichloropropene, 1,2-dichloropropane
and related hydrocarbons
Chloropicrin

BY WEIGHT

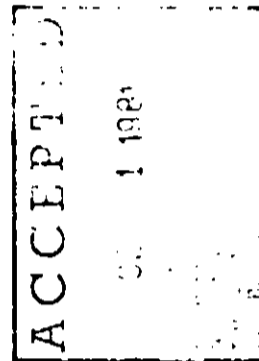
85%

15%

TOTAL

100%

(D-D PIC Soil Fumigant weighs 10.43 lbs. per gallon)
EPA Registration No. 201-350



KEEP OUT OF REACH OF CHILDREN

POISON



DANGER

**HAZARDOUS LIQUID AND VAPOR MAY BE
FATAL IF INHALED, ABSORBED THROUGH SKIN, OR SWALLOWED
CAUSES BURNS OF SKIN OR EYES
MAY PRODUCE KIDNEY AND LIVER DAMAGE UPON
PROLONGED EXPOSURE**

STATEMENT OF PRACTICAL TREATMENT

IF SWALLOWED. induce vomiting immediately by giving two glasses of water and sticking finger down throat. Call a physician. Never give anything by mouth to an unconscious person.

IF INHALED. remove to fresh air. If not breathing give artificial respiration, preferably mouth to mouth. If breathing is labored, give oxygen. Call a physician.

IF ON SKIN. immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes or boots. Call a physician. If water is not immediately available, remove excess chemical from skin with sorbent material such as a towel or dry soil, then proceed at once to a location where water is available.

IF IN EYES. immediately flush eyes with water for at least 15 minutes. Call a physician.

See Side Panel For Additional Precautionary Statement

NET CONTENTS _____

ACL 1609B 10-78

**SHELL CHEMICAL COMPANY, A DIVISION OF SHELL OIL COMPANY,
AGRICULTURAL CHEMICALS, HOUSTON, TEXAS 77001**

PRECAUTIONARY STATEMENTS

HAZARUS TO HUMANS AND DOMESTIC ANIMALS

DANGER

HAZARDOUS LIQUID AND VAPOR MAY BE FATAL IF INHALED, ABSORBED THROUGH SKIN OR SWALLOWED. CAUSES BURNS OF SKIN OR EYES MAY PRODUCE KIDNEY AND LIVER DAMAGE UPON PROLONGED EXPOSURE.

DO NOT INHALE

NIOSH or MESA approved respiratory equipment should be worn when liquid D-D/PIC is exposed to the atmosphere. A NIOSH/MESA approved half mask organic vapor respirator (such as MSA 460968 with a 464031 cartridge or Wilson 1721) should be worn during loading and maintenance operations where only small amounts of liquid or vapor are released. For loading and maintenance operations where sizeable amounts of liquid or vapor are released in unconfined spaces a NIOSH/MESA approved full facepiece (such as MSA 460560 with 464031 cartridge or a Wilson 1621) organic vapor cartridge respirator is recommended. When liquid D-D/PIC is exposed to the atmosphere in confined spaces where high concentrations may occur, where oxygen deficiency may occur, when handling large spills, and during fire fighting, a self-contained breathing apparatus is required. Cartridges should be replaced per manufacturer's instructions but should in no case be used if the odor of the product is present. Used cartridges should be destroyed immediately.

DO NOT GET ON SKIN

When handling or working with D-D/PIC wear clean body covering including polyethylene or neoprene gloves and heavy (greater than 3 mil thickness) polyethylene, neoprene or rubber footwear. Leather goods offer no protection. Wash and aerate all clothing and gear thoroughly after use or immediately following significant contamination. Never wear clothing, footwear or gear having an odor of D-D/PIC. If accidentally contaminated, thin rubber and leather items must be disposed of by burying in soil. Do not reuse.

DO NOT GET IN EYES

Wear eye protection such as chemical work goggles when handling D-D/PIC.

DO NOT SWALLOW

Do not use the mouth to siphon D-D/PIC from containers or to blow out clogged lines, nozzles, etc. Wash thoroughly after handling and before eating or smoking.

ENVIRONMENTAL HAZARDS

To avoid injury to fish and other wildlife, do not spill or empty containers into streams, ponds or any other body of water. Do not contaminate water by cleaning of equipment or disposal of wastes.

PHYSICAL OR CHEMICAL HAZARDS

FLAMMABLE

Do not use, pour, spill or store near heat or open flame. Do not cut or weld container.

DIRECTIONS FOR USE

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

STORAGE AND DISPOSAL

STORAGE

Store in a tightly-closed container in a cool place away from dwellings. Do not allow contamination of seeds, plants, fertilizers or other pesticide chemicals. Do not contaminate food, feedstuffs, drugs or domestic water supplies. In outside storage, store drums on sides to avoid accumulation of rain water in top or bottom recessed areas.

DISPOSAL

Rinse equipment and containers and dispose of wastes, including spills or rinsates, in a landfill approved for pesticides or by burying in noncropland away from domestic water supplies. Punch holes in containers before disposal. Dispose of empty containers in approved landfill or bury in a safe place. Consult Federal, State and local disposal authorities for approved alternative procedures.

DO NOT REUSE CONTAINER

DO NOT CUT OR WELD CONTAINER

PRECAUTIONS IN USING

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 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 test following fumigation. To avoid ammonia injury, nitrate starvation, or both to crops, avoid using fertilizers containing ammonium salts and use only fertilizers containing nitrates until after the crop is well established and the soil temperature is above 65°F. Certain crops, including cotton, sugarcane and pineapple, are tolerant to ammonia, and the above rule does not apply to them. Liming highly acid soils before fumigation stimulates nitrification and reduces the possibility of ammonia toxicity.

Do not store in or use containers or equipment made of aluminum, magnesium or their alloys. Store in cool place away from dwellings. After use, always empty and clean applicator thoroughly with kerosene or fuel oil. Avoid using water in equipment.

Avoid reinfesting treated soil. Do not irrigation water, transplants, tools, seed pieces or crop remains that could carry soilborne pests from infested land. Clean equipment carefully before using.

GENERAL DIRECTIONS

Use D-D PIC Soil Fumigant only as a pre-plant treatment to control NEMATODES such as meadow nematode, root-knot, citrus root-rowing ring, spiral, sting, pear, stubby root, stylet dagger and cyst formers (golden and sugar beets), also wireworms, gall-former, tipedes, symphylans, to vegetables such as beans, beets, carrots, celery, cole crops (cauliflower, cabbage, etc.), corn, cucurbit (cucumbers, melons, etc.), lettuce, onions, parsnips, peas, peppers, spinach, sweet potatoes, white potatoes, tomatoes, turnips, and field crops such as cotton, mint, peanuts, sugar beets, and tobacco, and other high value crops such as floral crops, pineapple, strawberries, citrus and deciduous orchard planting sites, ornamentals and forest nursery crops. For best results with annual crops, treat soil each year. Do not use on extremely heavy clay soil. DISEASE - For the control of Black Shank, Black Root Rot and Granville Wilt in tobacco, use 12 gallons per acre in the row (42" apart) and for broadcast treatment use 28 to 32 gallons per acre. For the control of Soil Rot (Soil Pox) in sweet potatoes use 12 gallons per acre in row treatment where rows are 42" apart and 28 to 32 gallons per acre broadcast treatment. For the control of Verticillium Wilt of white potatoes and mint and Pink Root of onions, use a broadcast treatment of 28-32 gallons per acre. As an aid in controlling peanut pod rot disease, apply 3-6 gallons per acre on 36-inch centers using a single chisel and injecting to an 8 inch depth.

WHEN TO TREAT

Treat in spring or fall or whenever soil conditions are suitable. Soil temperature 6 inches deep should be between 40 and 80° F. (Cold or wet soils retain fumigant longer. Dry or hot soils release fumigant too rapidly.) Fall treatment is suggested for land to be planted to early planted crops such as celery, tomatoes, and nursery stock. Early fall treatment allows planting a fall cover crop.

SOIL PREPARATION

For best fumigant penetration and oil sealing, plant remains should be worked into the soil long enough before treatment so that roots are well rotted. The soil should be in good seedbed condition, with enough moisture for good seed germination. Deep tillage 12 to 18 inches, often improves results.

APPLICATION

Over-all (Broadcast) Application: Apply with chisel or plow-sole equipment. Apply in uniform streams 10 to 12 inches apart and 6 to 8 inches deep in the soil. With chisel application, seal chisel channels with a drag, ring roller, or press wheel behind the applicator. With plow-sole applications, disc immediately to break clods and then seal with roller or drag.

Row (Band) Treatment: Adjust injection chisels to same spacing as planter. Inject at least 6 to 8 inches below the final soil surface. Seal with roller or drag. Plant directly in treated strips.

Citrus Replanting Sites: Space Chisels 18 to 20 inches wide and inject 12 to 14 inches deep over-all.

For Deciduous Orchards, Forest and Nursery Crop Planting Sites: Treat large areas over-all or in strips 10 feet wide. Inject 10 to 12 inches deep with spacings 12 inches apart. Seal by pressing soil with the foot.

WHEN TO PLANT

Under normal conditions, a waiting period of one week for each 10 gallons per acre of D-D PIC Soil Fumigant used is allowed. Allow additional time before planting if temperatures are below 60° F or if there has been heavy rain. Do not plant until the fumigant odor has left the soil.

If during the exposure period, there are heavy rains, followed by low temperatures, work the soil several times.

Soil treated with massive doses of fumigant before planting, such as for deep-rooted tree and shrub planting sites, requires a 3 to 6 months waiting period. Before planting, plow or open planting hole to thoroughly aerate soil.

Consult local State Agricultural Extension Service regarding local conditions.

NOTE: Symphylans (garden centipedes) and Wireworm Treatment:

Use D-D PIC to control symphylans (garden centipedes) and wireworms on beans, beets, carrots, cole crops, corn, onions, parsnips, peas, sweet potatoes, tomatoes, turnips, strawberries, peanuts and nursery crops. Symphylans - Use only over-all (broadcast) at 30 or more gallons per acre and apply during late summer or early fall when soil is warm. Wireworms - Use only over-all (broadcast) treatment at 25 or more gallons per acre.

DOSAGE RECOMMENDATIONS

Crop	Type of Treatment	Soil Type	Gallons Per Acre
Shallow Rooted Plants Field Crops Floral Crops Grasses and Turf Small Fruits Vegetables Ornamentals	Row (42")	Mineral	7 to 10
		Muck or peat	15 to 20
	Over-all (or broadcast)	Mineral	15 to 25
		Muck or peat	40 to 60
Strawberries	Over-all	Mineral	40 to 60
Tobacco	Row (42")	Mineral	12
Sugar Beets Root-knot Nematode	Row (42")	Sandy or Sandy loam	9
	Over-all		20 to 25
Sugar Beet Nematode	Row (42")		15
	Over-all		20 to 30
Pineapple	Row (42")	Mineral	40 to 60
Citrus-Florida*	Over-all	Sandy	60

Nursery and Field Citrus Fruit Trees Deciduous Fruit Trees Forest Trees Grapes Nut Trees Ornamentals (deep rooted)	10 Band (Over-all rate)	Overall Gallons Per Acre to Penetrate Various Depths				
		Mineral soils	3 ft	4 ft	5 ft	6 ft
		Sand	25	35	45	55
		Sandy loam	45	50	60	80
		Silt loam	70	85	105	125
		Clay loam	90	115	140	170

Use the higher rates in heavier soil
 or cyst-forming nematodes increase dosage to 30 gallons
 For muck soil containing less than 30% organic matter use 30 gallons per acre
 *For burrowing nematodes 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.

NOTICE OF WARRANTY

SHELL CHEMICAL COMPANY MAKES NO WARRANTY OF MERCHANTABILITY, FITNESS FOR ANY PURPOSE, OR OTHERWISE EXPRESS OR IMPLIED concerning this product or its uses which extend beyond the use of the product under normal conditions in accord with the statements made on this label.