

NET CONTENTS

GALLONS

EPA Reg. No. 677-200

DACAMINE (R) 4D

Weed Killer

Contains 4.0 Pounds 2,4-D Acid Equivalent per Gallon

ACTIVE INGREDIENT:

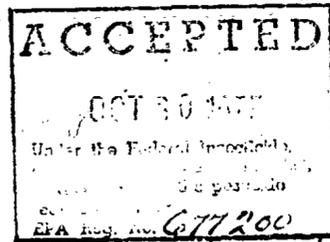
N-Oleyl-1,3-propylenediamine salt of 2,4-Dichlorophenoxyacetic Acid*	31.6%
2,4-Dichlorophenoxyacetic Acid	25.4%

INERT INGREDIENTS:	43.0%
TOTAL	100.0%

*Equivalent of 2,4-Dichlorophenoxyacetic Acid	42.3%
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Licensed under United States Patent No. 2,900,411

18 pt. type - CAUTION: KEEP OUT OF REACH OF CHILDREN - 12 pt. type
SEE SIDE PANEL FOR ADDITIONAL CAUTIONS



DIAMOND SHAMROCK

AGRICULTURAL CHEMICALS DIVISION • DIAMOND SHAMROCK CORPORATION

CLEVELAND, OHIO 44114

READ ENTIRE LABEL BEFORE USING THIS PRODUCT

GENERAL INFORMATION

DACAMINE 4D is an oil-soluble diamine form of 2,4-D which is formulated to be used only with water. It combines the advantages of both the ester and amine forms of 2,4-D. DACAMINE 4D contains both the non-volatile features of amines and the effectiveness of esters. It is designed to control weeds in croplands, pear and apple orchards and lawn areas. The following is a partial list of weeds controlled by DACAMINE 4D.

ARTEMISIA (common mugwort)
CANADA THISTLE
FIELD BINDWEED (creeping jenny)
HORSE NETTLE

LEAFY SPURGE
MILKWEED
RUSSIAN KNAPWEED
YARROW

Annual chickweed
Beggartick
Bitterweed
Blackeyed Susan
Broomweed
Buckhorn plantain
Bull thistle
Burdock
Carpetweed
Chicory
Cocklebur
Coffeebean
Croton
Curly dock
Curly indigo
Dandelion
Dayflower
Fanweed
Fiddleneck
Flower-of-an-hour
Gooseweed

Hemp
Henbit
Ironweed
Jimsonweed
Knotweed
Kochia
Lambsquarters
Mallows
Marestail
Marshelder
Mexicanweed
Morningglory
Mustard
Nettle, stinging
Pennycress
Pennywort
Peppergrass
Pigweed
Plantain
Poison ivy
Poorjoe

Puncturevine
Ragweed (common,
giant, western)
Shepherdspurse
Slender aster
Snow-on-the-mountain
Sour dock
Spike rush
Spurge
Star thistle
Sumac
Sunflower
Tarweed
Velvetleaf
Wild carrot
Wild cucumber
Wild lettuce
Wild parsnip
Wild radish
Willow
Wintercress
Yankeeweed

NOTE: Local conditions, crop varieties and application regulations vary and may affect use of this herbicide. Consult local agricultural experiment station or extension service weed specialists and state regulatory agencies for recommendations in your area.

Aerial application may be of use for control of weeds on certain crops. Applications should only be made by applicators experienced in the use of 2,4-D formulations. Regulations governing aerial application of herbicides are in effect in many states. Consult local regulatory agencies concerning requirements before making applications.

TREATING SMALL AREAS: One tablespoonful of DACAMINE 4D in 1 1/2 gallons of water is almost equal to 1 quart in 100 gallons.

NOTE: When stored at temperatures below freezing, it may be necessary to warm the contents to 45°F and mix thoroughly before using.

DIRECTIONS FOR USE

TIME OF APPLICATION: Best results are obtained when DACAMINE 4D is used on young weeds that are actively growing. Applications of lower listed rates to susceptible annual weeds usually will be satisfactory, but for perennial weeds and other conditions, such as in very dry areas where kill is difficult, use the higher rates. When used as a selective spray on crops, the stage of growth of the crop must be considered. Some woody plants and weeds are hard to kill and repeat applications may be necessary.

PREPARATION OF THE SPRAY: Fill the spray tank with half the required amount of water. Then add the recommended amount of DACAMINE 4D with agitation and continue filling the spray tank with balance of water. Keep agitator running when filling spray tank and during spray operations. Use enough water per acre to give uniform coverage. The amount of water required for low-volume applications may vary. For ground application, when weeds are 1 to 3 inches tall, use 15 to 25 gallons of water per acre. When weeds are taller than 3 inches, use 25 to 50 gallons of water per acre. For aerial application, when weeds are 1 to 3 inches tall, use 5 to 10 gallons of water per acre. When weeds are taller than 3 inches, use 10 to 15 gallons of water per acre. For high volume applications, 100 gallons or more of water will be needed for good coverage. In any case, use the same amount of DACAMINE 4D as recommended below.

SMALL GRAINS (Wheat, Barley, Rye): Apply DACAMINE 4D in sufficient water for uniform coverage on small grains when fully tillered or stooled (4 to 8 inches tall) but before head emerges from the "boot." Crop injury may result if applied earlier than "tiller" or later than "boot" stage. DO NOT use on grains undersown with legumes such as alfalfa or clovers except where some legume injury can be tolerated. DO NOT graze or feed forage from treated fields within 2 weeks after treatment. See chart for recommended rates. For late season use to control large succulent weeds, apply 1 to 2 pints per acre in sufficient water for uniform coverage on small grain from dough stage to harvest--use only when weeds threaten to interfere with harvest operations. DO NOT use treated straw for livestock feed.

RICE: Apply DACAMINE 4D when the rice is in the late tillering stage, but before it has started to joint. This should be when the rice seedlings are about 6 to 10 weeks old. Damage to rice may occur if DACAMINE 4D is applied after rice is 12 weeks old. Treatment after flooding is usually safer than treatment before flooding. See chart for recommended rates.

CORN: POSTEMERGENCE--Apply DACAMINE 4D from emergence to tasseling. When spraying corn above 10 inches in height, use nozzle extensions (corn drops), directing the spray at base of the corn plant. DO NOT apply from tasseling to dough stage. Avoid cultivation soon after treatment when corn may be brittle. Hybrids vary in tolerance to 2,4-D. Consult local agricultural experiment stations or extension service weed specialists regarding the use of 2,4-D on your specific hybrid. See chart for recommended rates.

SORGHUM: Apply DACAMINE 4D when sorghum plants are 6 to 12 inches tall and secondary roots are well established. Use drop nozzles when crop is over 10 inches tall. DO NOT apply from flowering to dough stage. See chart for recommended rates.

SUGAR CANE: Apply as a postemergence application in spring after cane emerges and through layby. See chart for recommended rates.

Crop (See Detailed Directions above)	Amount of DACAMINE 4D per Acre	
	For Average Conditions	For Dry Conditions as in Western States*
Wheat, Barley, Rye		
Annual weeds	1/2 to 1 pint	1 to 2 pints
Perennial weeds	1 pint	1-1/4 to 2 pints
Rice	1 to 2 pints	
Corn		
Postemergence	1/2 pint	1/2 to 3/4 pint
Sorghum		
Postemergence	1/2 pint	1/2 to 3/4 pint
Sugar Cane	1 to 2 quarts	

*Arizona, California, Idaho, Montana, Nevada, Oregon, Utah, Washington and Wyoming

FORAGE CROPS: (Pastures and Rangelands) To control many broadleaved weeds in pastures, meadows and rangelands, use 1 quart per acre of DACAMINE 4D in sufficient water to provide for uniform application. Treat pastures when weeds are growing actively. DO NOT apply when grass is in "boot" to "milk" stage. DO NOT apply to newly seeded pastures until grass is well established, or after heading begins. Most legumes are usually injured or killed at the rates recommended. For control of wild garlic and wild onion in pastures, apply 2 to 3 quarts per acre in very early spring and repeat annually until weeds are eradicated. DO NOT graze dairy animals on treated areas within 7 days after application.

LAWNS, GOLF COURSES AND SIMILAR TURF: Apply 1-1/2 to 2 pints of DACAMINE 4D per acre in 100 gallons of water or sufficient water to provide adequate uniform coverage. For treating small areas, use 1-1/2 tablespoonsful of DACAMINE 4D in 2 gallons of water per 1,000 sq. ft. Do not apply during periods of drought. Do not apply DACAMINE 4D to newly seeded turf until grasses are well established and after making at least two mowings. Bare areas can be reseeded in 3 to 6 weeks. Bentgrass varieties vary in tolerance to DACAMINE 4D under different conditions of growth. Use rates no higher than 2 pints per acre on bentgrass and apply only where experience has shown application to be safe. Injury may result if applied to St. Augustinegrass, centipedegrass, carpetgrass, clovers and Dichondra.

PEAR AND APPLE ORCHARDS: Apply at rate of 1 to 2 quarts DACAMINE 4D per acre in sufficient water to give good coverage and thorough wetting of weeds. Use the higher rate for control of perennial weeds. Repeat applications may be necessary to control some woody plants and perennial weeds. DO NOT apply to bare ground areas as injury may result. When bare areas do occur, spot treat by directly spraying only at undesirable plants. DO NOT apply immediately before irrigation. Withhold irrigation for three (3) days following application. Best results are obtained when applied within two (2) days following irrigation and when weeds are growing actively. DO NOT allow spray or spray drift to

contact foliage, fruit, stems or trunks of fruit trees. Use low pressure and coarse nozzles, and spray on still days to minimize drift.

WOODY PLANT CONTROL: To control 2,4-D susceptible plants such as alder, buckbrush, elderberry, sumac and willow in waste areas or non-crop land, such as powerlines and highway rights-of-way, vacant lots and fence rows, use 4 to 6 quarts in 100 gallons of water in spring and early summer. For treating small areas, use 1-1/2 to 2 ounces of DACAMINE 4D in one gallon of water. Wet thoroughly all parts of the plants, including foliage and stems to point of run-off. Do not treat during periods of severe drought or in early fall when leaves have lost their healthy green color. Hard-to-kill species may need retreatment the following season.

GENERAL WEED CONTROL: On vacant lots, roadsides, and along fence rows and around buildings, use 1 to 2 quarts of DACAMINE 4D in 100 gallons of water per acre. Thoroughly wet all foliage to run-off. Applications should be made to weeds in an early and active stage of growth.

CAUTION

Harmful if swallowed or absorbed through the skin.

CAUSES IRRITATION OF EYES AND SKIN.

DO NOT get in eyes. In case of contact, flush eyes with plenty of water for at least 15 minutes and get medical attention.

DO NOT allow contact with skin or clothing. Wash exposed skin with plenty of soap and water.

DO NOT store near fertilizers, seeds, insecticides or fungicides.

Rinse out sprayer and container after use and properly dispose of wastes in non-crop areas away from water supplies.

DO NOT use the same spray equipment for applying other materials to plants, as injury will result.

DO NOT contaminate water used for irrigation or domestic purposes.

Avoid spray drift to 2,4-D susceptible plants such as cotton, tomatoes, flowers, grapes, fruit trees and ornamentals. Coarse sprays are less likely to drift.

Spray only on still days with low pressure, coarse spray and lowered booms.

DO NOT reuse empty containers. Return to drum reconditioner or destroy by perforating or crushing and burying in a safe place away from water supplies.

WARRANTY AND LIMITATION OF DAMAGES

SELLER warrants that this material 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, and BUYER assumes the risk of any use contrary to such directions. SELLER makes no other express or implied warranty, including any other express or implied warranty of FITNESS or of MERCHANTABILITY, and no agent of SELLER is authorized to do so except in writing with a specific reference to this warranty. In no event shall SELLER's liability for any breach of warranty exceed the purchase price of the material as to which a claim is made.