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HERBICIDE

For Use in Flower and Vegetable Gardens and Ornamental Turf

ACTIVE INGREDIENT:

KEEP OUT OF REACH OF CEILDREN (12 point type)
CAUTION (18 point type)
See Back Panel For Additional Precautionary Statements

EPA Reg. No. 1386-Net Contents 9\_\_\_-11-82 EPA Est. No. 5 Pounds Product No.

DACTHAL® - Reg. T.M. of Diamond Shamrock, Corp.



Universal cooperatives, inc Minneapolis, Minnesota 55420

## PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS CAUTION

Harmful if swallowed. Avoid contact with skin, eyes, and clothing. Wash thoroughly after handling.

## STATEMENT OF PRACTICAL TREATMENT

If Swallowed: Call a physician or Poison Control Center immediately. Drink one or two glasses of water and induce voniting by touching the back of throat with finger. Do not induce voniting or give anything by mouth to an unconscious person. If on Skin: Wash with soap and water. If in Eyes: Flush eyes with water for 15 minutes.

## ENVIRONMENTAL EAZARDS

Do not apply directly to water. Do not contaminate water by cleaning of equipment or disposal of wastes.

General Information

DACTHAL S-G is a 5% granular formulation for use as a preemergence application for control of crapgrass and other annual grasses and certain broadleaved weeds on mineral soils. DACTHAL S-G is recommended for use on Turf; Home Flower Gardens; Nursery Stock; Strawberries; Seeded: peans (dry and snap), broccoli, brussels sprouts, cabbage, cauliflower, collards, cucumbers, garlic, kale, melons (cantaloupe, honeydew, watermelon), mustard greens, onions, potatoes (whole and cut pieces). Southern peas (blackeyed), soybeans, squash (winter and summer), arnip greens and turnips. Transplants: broccoli, brussels sprouts, cabbage, cauliflower, eggplant, garlic, peppers, onions, sweet potatoes, tomatoes and yams.

For the control of grasses and some broadleaved weed species, such as smooth and large crabgrass, green foxtail, yellow foxtail, lovegrass, witchgrass, carpetweed, common chickweed. lambsquarters, purstane and Florida pusley, DACTHAL 5-6 is recommended at 160 to 180 pounds per sore. A slightly higher rate of application (up to 210 pounds per acre) of this product may be required for control of barnyardgrass. ground cherry, dodder, browntop, panicum, goosegrass, johnsongrass from seed, redroot pigweed, noddling spurge, spotted spurge and prestrate spurge. A rate of 300 pounds per acre is recommended for control of annual bluegrass in turf. When DACTHAL 5-G is used at the recommended rate, up to 3 months weed control can be excepted. Bermudagrass, johnsongrass established from rhizomes, nutsedge, galinsoga, wild mustard, ragweed, smartweed and velvetleaf have not been effectively controlled with DACTHAL 5-G.

Application should be made to a uniform weed-free soil surface within two to three days maximum following cultivation to prevent subsurface germinating weeds from becoming established. Disturbing the soil surface following application will reduce effectiveness. Rates of application can be reduced by banding. Lawn spreaders should be properly calibrated prior to use to deliver DACTHAL 5-6 granules at prescribed rate. Settings may vary between spreaders because of condition and other factors.

DACTHAL 5-can also be applied by the shaker can method. The ideal way of doing this is to measure off the area to be treated into small plots and then evenly sprinkle the prescribed quantity of DACTHAL granules over this area.

Conversion Table - Acre to Smaller Areas

If Rate per Acre is	Amount of Dacthal 5-6 to Apply	
	250 sq. ft.	1000 sq. ft.
15% pounds per acre	G tb. 15 oz.	3 tb. 11 cz.
160 pounds per acre	110. 1/2 02	415. 202
270 pounds per acre	1 lb. 3 oz.	4 15, 13 02,
301 paines per acre	1 15 12 02	6 lb 14 oz

If there is no rain within three of four days after DACTHAL 5-6 application, sprinkler irrigation (% to 1 inch of water) should be used for test results.

Replanting: Replanting crops other than those included on this label in DACTHAL treated soil within eight months of application may result in crop injury. If replanting is required because of an early crop failure, the planting of onions, seeded melons, potatoes, tomatoes, egoplants or peppers at this time may result in crop injury. However, all crops on this label may be planted following harvest of a DACTHAL treated crop. Any application of Dacthal should be made prior to weed seed germination.

Directions for Use

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

Omamental Turf: Apply uniformly to established turfgrass at the rate of 200 pounds per acre in the early spring before crabgrass and other annual grasses and broadleaved weed seeds germinate. Crabgrass seed germination usually coincides with the time Forsythia blossoms start to fall. One application applied in early spring before weed seed germination usually provides seasonal control. In areas which commonly experience stands of late-germinating crabgrass and other annual weedy grasses, a second application at half the regular rate can be safely made two months after the first application. In order to control annual blue-

grass (Poa annua) and other erratic or late-germinating grasses and weeds in northern states, a late summer or early fall application before weed seed permination of 300 pounds per acre of DACTHAL 5-6 should supplement the early spring application. Earlier applications are required in southern United States. Consult agri-ultural experiment station or extension service w. I specialist for date Poa annua seeds germinate in your area and make application at least two weeks prior to this date.

Early spring application of DACTHAL 5-6 may be made to new turigrass seedlings after the grasses have exhibited a uniform greening of the newly sprouted grass, preferably when 1 to 2 inches in height.

Where some spring seeding is necessary, there should be a delay of approximately 60 days after the application of most preemergence herbicides, including . DACTHAL 5-G This delay increases the survival of desirable grasses. Fall seeding of permanent grasses ~ can follow only a single application made either in early spring up to not less than within 60 days of seeding.

DACTHAL is not recommended for use on puttinggreens. DACTHAL is not recommended on bentgrasseswhen mowed at putting-green heights. DO NOT apply phondra.

Flower Gardens: Apply after establishment and conditions are favorable for good plant growth, or as a supplemental application at the rate of 180 lb. per acre. Apply to the soil following establishment or setting out of flower beds. Where possible this should be done early in the spring. Delayed or secondary applications, when needed, can be made at any time provided beds have been cultivated and are free of weeds. Weed control up to three months or more may be expected following proper application. See list of ornamentals.

Nursery Stock or Omamental Plantings: Apply at lining out, late fall or early spring at the rate of 180 lb. per acre. Applications should be made to soil recently cultivated to a uniform texture. These can be made immediately following lining-out of stock. With established plantings, application should be made following proper cultivation to remove existing weeds. Where possible, this should be done early in the spring. Late summer applications may prove beneficial for control of fall-germinating weeds, if made following cultivation. Weed control up to three months or more may be expected following proper application. DACTHAL 5-6 is specifically recommended for weed control on the following nursery and ornamental plantings:

Abelia Ageratum Alyssum Andromeda, Jap. Arborvitae Ash Azalea Gabysbreath Barberry Bellflower Birch Bleedingheart Bloodleaf Boxwood Bugioss Camellia Candytutts Chesinut Chrysanthemum Cinquetoil Coleus

Columbine Constlower, purple Coreopsis Corabells Cosmos Cotoneaster Cottonwood Crabapie Cuph∈a Cypress Dahlia Delphintum Deutzia **Do**≎wood Elacagnus Euchymus Evening primrose Feveriew Forget-me-no: Forsythia

Four-O'Clock Foxglove Gaillardia Geranium Gladiolus Golddust Goldeniuft Gum Hawthorn Heath, pink Holly Hydrangea Honeysuckie **Iris** Ivy. Battic Ivy. Boston Ivy, English tvy. Wilson Juniper Lantana Larkspur, candie

Lavendercotton

Lilac Peenv Lily Petunia Locust Pine Lupine Pictosporum Magnolia Marguerite, golden Marigo!d Poplar Mockorange Privet Morningelory Moss, rose Mother-of-Thyme Mountain Laurel Rose Mourning Bride Nasturtium

Orpine

**Pachistima** 

Pachysandra

Podocarous Poker plant Privat, variedated Recoud Rhododendron Russian olive Sage, scariet Shābdragon Şp cerwart, Va Spirea Spruce

Stosecrop Strawflower Sundrops Sunflower Sweet pea Sycamore Tree paony Tulip tree Viburnur Violet, African Wainut Weigelia Willow Wermweed Yarrow, femileat Zennia

Telanthera

DO NOT use on the following plants: Pansy Palox Bugleweed Geum Germander Button pink Carnation Sweet William Mesembryanthenum

Note: See General Information to determine proper rate for your weed complex.

Broccoli, Brussels Sprouts. Cauliflower, Cabbage: Apply uniformly to the soil at seeding or transplanting at the rate of 160 to 210 lb. per acre. DACTHAL granules can be applied directly over transplants without injury. If weeds have emerged, crops should he clean cultivated or weeded prior to application.

Beans (dry or snap). Southern Peas (blackeyed), Sovbeans: Apply uniformly to the soil at time of seeding at rate of 160 to 210 lb. per acre.

Seeded Cucumbers, Squash (winter and summer). Melons (cantaloupe, watermelon, honeydew)! Apply uniformly to the soil at rate of 160 to 210 lb. per acre when plants have 4 to 5 true leaves, are well established and growing conditions are favorable for good plant growth. Crops should be cultivated or weeded prior to DACTHAL application if We is have emerged.

Collards, Kale, Mustard Greens, Turnips (greens and ots): Apply uniformly to the soil at rate of 160 to per acre at time of seeding.

Garlic and Onions: Apply uniformly to soil at seeding or transplanting, and on onions at layby at rate of 160 to 210 lb. per acre. DACTHAL can be applied directly over transplants without injury. A layby application can be made on onions up to 14 weeks after seeding or transplanting. Should weeds emerge prior to layby, the crop should be cultivated or weeded before application.

Potatoes (whole or cut pieces): Apply uniformly to the soil at rate of 160 to 210 lb. per acre at planting, drag-off or layby. If top of beds are to be dragged off, make application after drag-off. Layby application can be made up to 9 weeks after planting. If weeds have emerged at layby, the crop should be cultivated prior to application. The initial sprinkler irrigation should not exceed one inch. DACTHAL is not recommended for use on potatoes in California.

Sweet Potatoes and Yams: Apply uniformly to the soil at rate of 160 to 210 lb. per acre at time of transplanting or layby. DACTHAL can be applied directly over transplants without injury. Layby application can be made up to 6 weeks after transplanting. If weeds have emerged, the crop should be cultivated or weeded prior to making the DACTHAL application.

Tomatoes, Eggplant, Peppers: Application uniformly to 's soil at rate of 160 to 210 lb. per acre

should be confined to a period 4 to 6 weeks after transplanting. Plants should be well established and growing conditions favorable for good plant growth. DACTHAL can be applied directly over the plants without injury. If weeds have emerged, the crop should be cultivated or weeded prior to making the DACTHAL application.

Strawberries: New plantings—Apply uniformly to soil at rate of 180 lb. per acre at time of transplanting. Established plantings—Apply in early fall and early spring at rate of 160 to 180 lb. per acre to control fall and early spring germinating weeds. DO NOT apply after first bloom through harvest. These applications can be made directly over plants without injury.

Special Precautions: DO NOT feed treated foliage to livestock or graze treated areas. Applied according to ections and under conditions favorable to good plant growth. DACTHAL 5-6 will not harm crops for which its use is recommended; however, conditions such as high salt concentration, seedling disease, cold weather, deep planting, excessive moisture or drought may injure or weaken crops normally tolerant to DACTHAL 5-6 thereby increasing the possibility of herbicide damage. Under any of these conditions, one or more of the following may result: delayed crop development, reduced yields, or reduced quality.

BEST DOOR

STORAGE AND DISPOSAL (12 point type)

Do not contaminate water, feed, or feed by storage or disposal. Do not reuse empty bag. Wrap bag and put in trash collection.

\*Use as preemergence herbicide patented under U.S. Pat. No. 2,923,634