

IMPERIAL

ACCEPTED
OCT 19 1982
Under the Federal Insecticide,
Fungicide, and Rodenticide Act,
as amended, for the pesticide
registered under
EPA Reg. No. 407-416

5% DACTHAL^R

ACTIVE INGREDIENT:

Dimethyl tetrachloroterephthalate*

5.0%

INERT INGREDIENTS:

95.0%

100.0%

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

R REGISTERED TRADEMARK DIAMOND SHAMROCK CORPORATION

KEEP OUT OF REACH OF CHILDREN

CAUTION

See side panel for additional precautionary statements

MANUFACTURED BY:

IMPERIAL INC.
SHENANDOAH, IOWA 51601

EPA REG. NO. 407-
EPA Est. 407-1A-1

NET CONTENTS _____

BEST DOCUMENT AVAILABLE

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION

Harmful if swallowed

Avoid contact with skin, eyes and clothing. Wash thoroughly after handling. In case of contact, flush eyes with water for 15 minutes. For skin, wash with plenty of soap and water. Get medical attention if irritation persists

ENVIRONMENTAL HAZARDS

Keep out of lakes, ponds or streams.

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- DO NOT contaminate water, food, feed, seed or other pesticides by storage, disposal or cleaning of equipment. Store in a dry place.

DISPOSAL - Pesticide spray mixture or rinsate that cannot be used or chemically reprocessed should be disposed of in a landfill approved for pesticides or buried in a safe place away from water supplies. Dispose of containers in an incinerator or landfill approved for pesticide containers or bury in a safe place.

Open dumping is prohibited.

Consult federal, state or local disposal authorities for approved alternative procedures such as limited open burning.

5% DACTHAL^R

A selective preemergence herbicide for control of annual grasses and certain broadleaved weeds in home flower and vegetable gardens and ornamental turf.

READ ENTIRE LABEL CAREFULLY AND USE ONLY AS DIRECTED.

GENERAL INFORMATION:

5% DACTHAL^R is a granular formulation for use as a preemergence application for control of crabgrass and other annual grasses and certain broadleaved weeds on mineral soils. This product is recommended for use on TURF; HOME FLOWER GARDENS; NURSERY STOCK; STRAWBERRIES; SEEDS: beans (dry and snap), broccoli, brussels sprouts, cabbage, cauliflower, caryds, cucumbers, garlic, kale, melons (cantaloupe, honeydew, watermelon), mustard

407-416

greens, onions, potatoes (whole and cut pieces), Southern peas (blackeyed), soybeans, squash (winter and summer), turnip 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, purslane and Florida pusley. This product is recommended at 160 to 180 pounds per acre. 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, nodding spurge, spotted spurge and prostrate spurge. A rate of 300 pounds per acre is recommended for control of annual bluegrass in turf. When this product is used at the recommended rate up to 3 months weed control can be expected. Bermudagrass, johnsongrass established from rhizomes, nutsedge, galinsoga wild mustard, ragweed, smartweed and velvetleaf have not been effectively controlled with this product.

Application should be made to a uniform weed-free soil surface within two to three days maximum following cultivation to prevent sub-surface 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 this product granules at prescribed rate. Settings may vary between spreaders because of condition and other factors.

This product 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

Amount 5% DACTHAL to Apply

If Rate per Acre is	100 sq. ft.	250 sq. ft.	1,000 sq. ft.
160 pounds per acre	6 oz.	15 oz.	3 lb. 11 oz.
180 pounds per acre	6-1/2 oz.	1 lb 1/3 oz.	4 lb. 2 oz.
210 pounds per acre	7-2/3 oz.	1 lb 3 oz.	4 lb. 13 oz.
300 pounds per acre	11 oz.	1 lb 12 oz.	6 lb. 14 oz.

If there is no rain within three or four days after this product is applied, sprinkler irrigation (1/2 to 1 inch of water) should be used for best 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, eggplants 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^R SHOULD BE MADE PRIOR TO WEED SEED GERMINATION.

DIRECTIONS FOR USE

ORNAMENTAL 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 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 bluegrass (*Poa annua*) and other erratic or late-germinating grasses and weeds in northern states, a late summer or early fall application before weed seed germination of 300 pounds per acre of this product should supplement the early spring application. Earlier applications are required in southern United States. Consult agricultural experiment station or extension service weed 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 this product may be made to new turfgrass 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 this product. 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^R is not recommended for use on putting-greens. DACTHAL^R is not recommended on bentgrasses when mowed at putting-green heights. DO NOT apply to Dichondra.

FLOWER GARDENS: Apply after establishment and conditions are favorable for good plant growth, or as a supplemental application at the rate of 180 lb this product 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 ORNAMENTAL PLANTINGS: Apply at lining out, late fall or early spring at the rate of 180 lb. this product 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. This product is specifically recommended for weed control on the following nursery and ornamental plantings:

Abelia	Cypress	Juniper
Ageratum	Dahlia	Lantana
Alyssum	Delphinium	Larkspur, candle
Andromeda, Jap.	Deutzia	Lavender, cotton
Arborvitae	Dogwood	Lilac
Ash	Elacagnus	Lily
Aster	Elm	Locust
Azalea	Euonymus	Lupine
Babysbreath	Evening Primrose	Magnolia
Barberry	Feverfew	Marguerite, golden
Bellflower	Fir	Marigold
Birch	Forget-me-not	Mockorange

407-416

Bleedingheart
 Bloodleaf
 Boxwood
 Bugloss
 Camellia
 Candytufts
 Chestnut
 Chrysanthemum
 Cinquefoil
 Coleus
 Columbine
 Coneflower, purple
 Coreopsis
 Coralbells
 Cosmos
 Cotoneaster
 Cottonwood
 Crabapple
 Cuphea
 Redbud
 Rhododendron
 Rose
 Russian olive
 Sage, scarlet
 Snapdragon
 Spiderwort, Va.
 Spirea
 Spruce

Forsythia
 Four-O'Clock
 Foxglove
 Gaillardia
 Geranium
 Gladiolus
 Golddust
 Goldentuft
 Gum
 Hawthorn
 Heath, pink
 Holly
 Hydrangea
 Honeysuckle
 Iris
 Ivy, Baltic
 Ivy, Boston
 Ivy, English
 Ivy, Wilson
 Stonecrop
 Strawflower
 Sundrops
 Sunflower
 Sweet pea
 Sycamore
 Tree peony
 Tulip tree
 Viburnum

Morningglory
 Moss, rose
 Mother-of-thyme
 Mountain Laurel
 Mourning Bride
 Nasturtium
 Oak
 Orpine
 Pachistima
 Pachysandra
 Peony
 Petunia
 Pine
 Pittosporum
 Podocarpus
 Poker plant
 Poplar
 Privet
 Privet, variegated
 Violet, African
 Walnut
 Weigelia
 Willow
 Wormwood
 Yarrow, fernleaf
 Yew
 Zinnia

DO NOT USE on the following plants:

Bugleweed
 Button pink
 Carnation

Geum
 Germander
 Mesembryanthemum

Pansy
 Phlox
 Sweet William
 Tolanthera

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 rate of 160 to 210 lb this product per acre. DACTHAL granules can be applied directly over transplants without injury. If weeds have emerged, crops should be clean cultivated or weeded prior to application.

BEANS (dry or green), BELLPEPPER, PEAS (blackeyed), SOYBEANS: Apply uniformly to the soil at time of seeding at rate of 160 to 210 lb this product per acre.

SEEDED CUCUMBERS, SQUASH (winter and summer), MELONS (cantaloupe, watermelon, honeydew): Apply uniformly to the soil at rate of 160 to 210 lb (5%) 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 weeds have emerged.

COLLARDS, KALE, MUSTARD GREENS, TURNIPS (greens and roots): Apply uniformly to the soil at rate of 160 to 210 lb this product per acre at time of seeding.

467-46

GARLIC AND ONIONS: Apply uniformly to soil at seeding, or transplanting, and on onions at layby at rate of 160 to 210 lb. 5% 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. 5% 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. 5% 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 the soil at rate of 160 to 210 lb. 5% 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 directions and under conditions favorable to good plant growth. This product 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 this product 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.

WARRANTY: Seller warrants that the product conforms to its chemical description and is reasonably fit for the purpose stated on the label, when used in accordance with the 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.

