



Net Contents 55 Gallons/208.1 Liters



TESTED
50534-10
APR 12 1983
647-311



Diamond Shamrock

Dacthal Flowable Herbicide

Turf Care™

Selective Preemergence Herbicide for Professional Lawncare Use Only.

Contains 50% Dacthal (dimethyl tetrachloroterephthalate)

Active ingredient: Dimethyl tetrachloroterephthalate	54.92%
Inert ingredients:	45.08%
Total:	100.00%

Keep Out of Reach of Children

CAUTION

Read label carefully for complete directions.

Diamond Shamrock Corporation
Agricultural Chemicals Division
Cleveland, Ohio 44114
EPA Reg. No. 677-318

BEST DOCUMENT AVAILABLE

57534-10

**Precautionary Statements
Hazard to Humans and Domestic
Animals**

Caution

Harmful if swallowed or absorbed through the skin. Avoid contact with eyes, skin or clothing. Avoid breathing spray mist. Wear gloves and protective clothing when handling. Wash thoroughly after use.

If swallowed do not induce vomiting. If vomiting occurs spontaneously keep a way clear. Never give anything by mouth to an unconscious person. Seek medical attention.

In case of contact, flush eyes with plenty of water for at least 15 minutes. Seek medical attention.

Wash exposed skin gently with plenty of soap and water. If inhaled, remove person to fresh air.

Environmental Hazards

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

Storage and Disposal

Do not contaminate water, food or feed by storage or disposal. Open dumping is prohibited.

Pesticide Disposal: Pesticide spray materials or those that cannot be used according to label instructions must be disposed of according to Federal, State or local procedures under the Resource Conservation and Recovery Act.

Container Disposal: Do not reuse or refill this container. Triple rinse container and contents into another container for use or disposal. Do not reuse for food or other applications.

Warranty and Limitation of Damages

Seller warrants that the material described herein is as shown in the description and is free of any material defects. Seller makes no other express or implied warranty, including any of Merchantability, and no agent of Seller is authorized to do so except in writing with a specific reference to this warranty. This warranty is void where prohibited by law. This warranty is void where prohibited by law.

Dacthal Flowable Herbicide

A Selective Preemergence Herbicide for Professional Lawn Care Use Only

Read entire label carefully before and use only as directed.

General Information

Dacthal Flowable Herbicide is for use as a pre-emergence application for control of crabgrass and other annual grasses and certain broadleaf weeds on mineral soils in ornamental turf and nursery stock and as a post-emergence application for control of creeping speedwell (*Veronica filiformis*). Dacthal 6F is compatible with liquid nitrogen fertilizers commonly used by the lawn care industry.

The following weeds are grouped according to their susceptibility to **Dacthal Flowable Herbicide** applied as a pre-emergence treatment:

Susceptible (controlled at recommended rates): common lambsquarters, smooth crabgrass, large crabgrass, lowgrass, carpetweed, witchgrass, purslane, Florida pusley, yellow foxtail, green foxtail, common chickweed.

Moderately Susceptible (Maximum rates required for effective control): Redroot pigweed, sandbur, dodder, barnyardgrass, goosegrass, browntop panicum, groundcherry, annual bluegrass, johnsongrass (from seed), nuttall spurge, spotted spurge and prostrate spurge.

Tolerant: Velvetleaf, common ragweed, johnsongrass established from rhizomes, mustards, jimsonweed, galinsoga, smartweed, nutsedge.

Directions for Use

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

Preparation and application of the Spray: **Dacthal Flowable Herbicide** should be thoroughly mixed in the spray tank with water to provide for broadcast application of at least 20 gallons of water per acre, depending on equipment and local practices. In order to insure uniform suspension in the spray tank, **Dacthal Flowable Herbicide** should be added as the spray tank is being filled. Agitation should be maintained during filling and spraying to keep material in uniform suspension. Use nozzles suitable for applying wettable powder so that the spray can be uniformly distributed over turf or properly prepared soil surface. Any screen or strainer in spray equipment should be no finer than 50 mesh to prevent clogging. It is essential that the sprayer be properly calibrated before making applications. Standard knapsack type sprayers are recommended.

A minimum of one-fourth inch of water (either as rain or irrigation) is necessary to activate the **Dacthal Flowable Herbicide** and thereafter, for pre-emergence control of weeds, approximately 1 inch of water must be applied within 3 to 5 days of application. If rainfall or irrigation does not occur, the lawn should be watered daily but should not be allowed to become completely dry for weed seed germination.

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Ornamental Turf: Application at the rate of 7 qts. of **Dacthal Flowable Herbicide** 40 to 100 gallons of water per acre (1 pt. in 3 to 7 gals/3,000 sq. ft.) gives excellent control of crabgrass and other weeds as listed on this label. One application applied in early spring before weed seed germination usually provides season long control. Crabgrass seed germination usually coincides with the time when Forsythia blossoms start to fall. 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 10 quarts of **Dacthal Flowable Herbicide** in 40 to 100 gallons of water per acre (1 1/2 pts. in 3 to 7 gals/3,000 sq. ft.) should supplement the early spring application. Earlier applications are required in Southern States. Consult agricultural experiment station or extension service weed specialist for date *Poa annua* seed germinates in your area and make application at least two weeks prior to this date.

Early spring application of **Dacthal Flowable Herbicide** 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. Such **Dacthal Flowable Herbicide** application gives control of crabgrass without injury to newly emerged turf grasses. Fall sowing of permanent grasses can follow early spring applications of **Dacthal Flowable Herbicide**.

Where some spring seedling is necessary, there should be a delay of approximately 60 days after the application of **Dacthal**. This delay increases the survival of desirable grasses.

Dacthal Flowable Herbicide is not recommended for use on putting greens or on bentgrass mowed at putting green height.

Do not feed treated forage to livestock or graze treated areas.

For control of creeping speedwell (*Veronica filiformis*) apply 2 quarts of **Dacthal Flowable Herbicide** in 40 to 100 gallons of water per acre as a postemergence spray when creeping speedwell is growing vigorously. Spring or early fall applications are usually suitable, provided temperatures are between 65° and 90° F. and there is ample soil moisture. The rough coverage is essential. Delayed control of creeping speedwell is to be expected and will be manifested first by gradual loss of color and vigor.

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Directions for Use (Continued)
For Use on Turf

To Control	When to Apply	Rate of DACTHAL FLOWABLE HERBICIDE	Remarks
Established turf Crabgrass	Early spring, before crabgrass and other spring annual weeds begin to germinate.	7 qts. (acre or 1 pt. in 3 to 7 gal.)/3000 sq. ft.	Apply when Forsythia blossoms. A second application at half the recommended rate may be made 2 months after the first application if necessary.
Annual bluegrass (Poa annua)	Late summer or early fall, to coincide with the weed seed germination. Limited applications except in areas where the weed is severe and persistent may be desirable. Annual applications may be made if necessary. Repeat applications may be made in late fall and winter.	1 qt. (acre or 1 pt. in 3 to 3 1/2 gal.)/3000 sq. ft.	Should be used following an early spring application for crabgrass control.
Overseeding lawn crabgrass control	Apply Dacthal Flowable Herbicide prior to overseeding. Apply the herbicide at the same rate as for crabgrass control. Do not apply if the lawn is to be mowed frequently.	2 qts. (acre or 1 pt. in 3 to 3 1/2 gal.)/3000 sq. ft.	Apply in grass to obtain thorough coverage. Delayed or total crabgrass germination is to be expected. Crabgrass will be killed by a gradual loss of roots and energy.
Maintaining new Poa annua lawn crabgrass control	Maintain the lawn in good health. Apply Dacthal Flowable Herbicide at the same rate as for crabgrass control.	1 qt. (acre or 1 pt. in 3 to 3 1/2 gal.)/3000 sq. ft.	Apply in grass to obtain thorough coverage. Delayed or total crabgrass germination is to be expected. Crabgrass will be killed by a gradual loss of roots and energy.
Lawn weed control	Apply Dacthal Flowable Herbicide at the same rate as for crabgrass control.	1 qt. (acre or 1 pt. in 3 to 3 1/2 gal.)/3000 sq. ft.	Apply in grass to obtain thorough coverage. Delayed or total crabgrass germination is to be expected. Crabgrass will be killed by a gradual loss of roots and energy.

CAUTION: After Dacthal Flowable Herbicide treatment, wait approximately 60 days before any new seedling is undertaken.

Do not use on D. ciliaris.
See recommendation on cent and grasses for control of this species.

Ornamentals: Dacthal Flowable Herbicide can be applied to a wide range of ornamentals at the rate of 2 to 3 quarts (1.4 to 2.1 gal.)/3000 sq. ft. or 0.2 to 0.4 qt. (0.1 to 0.2 gal.)/1000 sq. ft. (3 to 7 gallons of water/seedling ft.). Applications should be made to control weeds in a lawn or garden before the plants can be made immediately following an application. With this method, control is to be expected. When possible, applications should be made early in the spring. Late summer applications may provide benefits for control of summer annual weeds if made following cultivation. Weeds controlled within 6 months or more may be expected following proper application.

Dacthal Flowable Herbicide is specifically recommended for weed control with the following:

Aster	Camellia	Geranium
Azalea	Chrysanthemum	Hollyhock
Bayonet	Clematis	Hydrangea
Begonia	Cornus	Impatiens
Bleeding heart	Cornus	Lily
Burpee's	Cornus	Lily of the valley
Chrysanthemum	Cornus	Magnolia
Claytonia	Cornus	Marigold
Conium maculatum	Cornus	Mockingbird
Crocus	Cornus	Orange
Cyclamen	Cornus	Pansy
Dianthus	Cornus	Peony
Delphinium	Cornus	Phlox
Double day lily	Cornus	Primrose
Double red day lily	Cornus	Rose
Double white day lily	Cornus	Sage
Double yellow day lily	Cornus	Salvia
Double yellow day lily	Cornus	Scilla
Double yellow day lily	Cornus	Shrimp
Double yellow day lily	Cornus	St. Ignace
Double yellow day lily	Cornus	St. Ignace



Gum	Moroccan	Russian olive
Heath	Morning glory	Sage scarlet
Heath Pink	Moss rose	Snapdragon
Holly	Mother of Thyme	Spiderwort, VA
Hydrangea	Mountain Laurel	Sprea
Honeysuckle	Mourning Bride	Spruce
Iris	Nasturtium	Stonecrop
Ivy Baller	Oak	Strawflower
Ivy Boston	Orpno	Sundrops
Ivy English	Pachistima	Sunflower
Ivy Wilson	Pennyandra	Sweet pea
Juniper	Pewee	Sycamore
Lantana	Petunia	Tree peony
Larkspur candle	Pine	Tulip tree
Launderton	Podocarpus	Viburnum
Lotus	Podocarpus	Violet African
Lupine	Poplar	Walnut
Maple	Prickly pear	Weigela
Maple Japanese	Prickly pear	Wisteria
Maple Norway	Prickly pear	Wormwood
Maple Norway	Prickly pear	Yarrow fernleaf
Maple Norway	Prickly pear	Yew
Maple Norway	Prickly pear	Zinnia

Do not use on the following plants

Alfalfa	Asparagus	Birch
Buckwheat	Blackberry	Sweet William
Chickpea	Blackberry	Tamarisk

Amount of DACTHAL FLOWABLE HERBICIDE to Use in Treating Small Areas

Area to be Treated*	Recommended rate of DACTHAL FLOWABLE HERBICIDE/A	Amount of DACTHAL FLOWABLE HERBICIDE to Apply
100 sq ft	1/2 oz	1/2 oz
200 sq ft	1 oz	1 oz
300 sq ft	1 1/2 oz	1 1/2 oz
400 sq ft	2 oz	2 oz
500 sq ft	2 1/2 oz	2 1/2 oz
600 sq ft	3 oz	3 oz
700 sq ft	3 1/2 oz	3 1/2 oz
800 sq ft	4 oz	4 oz
900 sq ft	4 1/2 oz	4 1/2 oz
1000 sq ft	5 oz	5 oz

Note: For treating small areas, it is important to use care in measuring and to apply the herbicide to the area to be treated. Do not mix with water and keep the container tightly closed. Do not use in areas where the herbicide is not needed. Do not use in areas where the herbicide is not needed. Do not use in areas where the herbicide is not needed. Do not use in areas where the herbicide is not needed.

WEEDS	GROSS AMOUNTS		WHEN TO APPLY
	AMITROL Y	WATER	
ROCKY PLANTS AND VINES			

WEEDS	GROSS AMOUNTS		WHEN TO TREAT
	AMITROL Y	WATER	
AQUATIC WEEDS IN MARSHES* DRAINAGE DITCHES*			

WEEDS	SPOT TREATMENTS		ACRE TREATMENTS		WHERE TO APPLY
	AMITROL Y	WATER	AMITROL Y	WATER	
WEEDS IN NON CROP AREAS					
SUCH AS RAILROADS ROADSIDES DRAINAGE DITCH BANKS FENCE ROWS AND HARDWOOD NURSERIES					

NEEPOCK SPRAYERS

POWER SPRAYERS

BEST DOCUMENT AVAILABLE