## 12/16/2005



U.S. ENVIRONMENTAL PROTECTION AGENCY Office of Pesticide Programs Registration Division (7505C) 401 "M" St., S.W. Washington, D.C. 20460

\_ Registration

x Reregistration

(under FIFRA, as amended)

NOTICE OF PESTICIDE:

EPA Reg. Number:

Date of Issuance:

5481-489

DEC 16 2005

Term of Issuance:

UnConditional

Name of Pesticide Product:

Dacthal G-5 Herbicide

Name and Address of Registrant (include ZIP Code):

AMVAC Chemical Corporation 4695 MacArthur Court, Suite 1250 Newport Beach, CA 92660

**Note:** Changes in labeling differing in substance from that accepted in connection with this registration must be submitted to and accepted by the Registration Division prior to use of the label in commerce. In any correspondence on this product always refer to the above EPA registration number.

On the basis of information furnished by the registrant, the above named pesticide is hereby registered/reregistered under the Federal Insecticide, Fungicide and Rodenticide Act.

Registration is in no way to be construed as an endorsement or recommendation of this product by the Agency. In order to protect health and the environment, the Administrator, on his motion, may at any time suspend or cancel the registration of a pesticide in accordance with the Act. The acceptance of any name in connection with the registration of a product under this Act is not to be construed as giving the registrant a right to exclusive use of the name or to its use if it has been covered by others.

Based on your response to the DCPA Reregistration Eligibility Decision (RED) document, EPA has reregistered the product listed above provided you:

Submit three (3) copies of your final printed labeling before you release the product for shipment.

Enclosed is a copy of your label stamped "Accepted". This action is taken under the authority of section 4(g)(2)(c) of the Federal Insecticide, Fungicide, and Rodenticide Act, as amended. Reregistration under this section does not eliminate the need for continual reassessment of pesticides. EPA may require submission of data at any time to maintain the registration of your product.

Joanne I. Miller Product Manager (23) Herbicide Branch Registration Division(7505C)

Signature of Approving Official: Joanne J. Millon

DEC 16 2005

EPA Form 6570-6

Date:

# Dacthal® G-5 Herbicide

(5% Dacthal Granules)

A selective pre-emergence herbicide for control of annual grasses and certain broadleaved weeds in home vegetable gardens, ornamental planting nursery stock and certain commercial vegetable crops.

Active Ingredient:	By Wt.
DCPA (dimethyl tetrachloroterephthalate)	5.0%
Inert Ingredients:	
Total	100.0%

## ACCEPTED

DEC 16 2006 Under the Federal Insecticide, Fungicide, and Rodenticide Act as amended, for the pesticide registered under EPA Reg. No.

5481-489

# Keep Out of Reach of Children CAUTION

See back panel for additional precautionary statements.

FIRST AID	
If inhaled	<ul> <li>Move person to fresh air.</li> <li>If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible.</li> <li>Call a poison control center or doctor for further treatment advice.</li> </ul>
If on skin or clothing	<ul> <li>Take off contaminated clothing.</li> <li>Rinse skin immediately with plenty of water for 15-20 minutes.</li> <li>Call a poison control center or doctor for treatment advice.</li> </ul>
If in eyes	<ul> <li>Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li> <li>Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li> <li>Call a poison control center or doctor for treatment advice.</li> </ul>
If swallowed	<ul> <li>Call a poison control center or doctor immediately for treatment advice.</li> <li>Have person sip a glass of water if able to swallow.</li> <li>Do not induce vomiting unless told to do so by the poison control center or doctor.</li> <li>Do not give anything by mouth to an unconscious person.</li> </ul>
Emergency Telep	
	container or label with you when calling a poison control center or doctor, or going for ons? Call 1-888-462-6822. In case of spills, contact Chemtrec at 1-800-424-9300

NET CONTENTS: As Marked on Container

EPA Reg. No. 5481-489 EPA Est. No. 50534-TX-1



## **Precautionary Statements**

## Hazards to Humans and Domestic Animals

#### CAUTION

Harmful if absorbed through skin. Avoid contact with skin, eyes, or clothing. Wear long-sleeved shirt and long pants, shoes and socks, and chemical resistant gloves (made of any water proof material, selection category A). Wash thoroughly with soap and water after handling. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

## Personal Protective Equipment (PPE)

Applicators and other handlers must wear:

- · Long-sleeved shirt and long pants
- · Chemical-resistant gloves made of any waterproof material,
- · Shoes and socks

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

## **Engineering Controls**

When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240 (d) (4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

## **User Safety Recommendations**

Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
- Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. Wash the outside of gloves before removing.
- Remove PPE immediately after handling this product. As soon as possible, wash thoroughly and change into clean clothing.

#### **Environmental Hazards**

Collect and incorporate granules spilled on the soil surface. Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when cleaning equipment or disposing of equipment washwaters.

Groundwater Advisory: Tetrachloroterephthalic acid, a breakdown product of Dacthal, is known to leach through soil as a result of agricultural and turf uses and has been found in groundwater which may be used for drinking water. Users are advised not to apply Dacthal to sand and loamy sand soils where the water table (groundwater) is close to the surface and where these soils are very permeable; i.e., well drained. Consult with the state pesticide lead agency for information regarding soil permeability and aquifer vulnerability in your area.

Surface Water Advisory: DCPA can contaminate surface water through spray drift. Under some conditions, DCPA may also have a high potential to contaminate surface water through runoff (via both dissolution in runoff water and adsorption to eroding soil) for several weeks post-application. Users are advised not to apply DACTHAL G-5 to poorly draining or wet soils with readily visible sloping towards adjacent surface waters, frequently flooded areas, areas over-laying extremely shallow groundwater, areas with in-field canals or ditches that drain to surface water, areas not separated from adjacent surface waters with vegetated filter strips, and highly erodible soils.

## DACTHAL® G-5 Herbicide

Read entire label carefully and use only as directed.

## General Information



Dacthal G-5 is a 5% granular formulation for use as a preemergence application for control of annual grasses and certain broadleaved weeds on mineral soils; Nursery Stock; Strawberries; Seeded Crops: broccoli, brussels sprouts, cabbage, cauliflower, collards, horseradish, kale, melons (cantaloupe, honeydew, watermelon), mustard greens, onions, turnip greens and turnips; Transplant Crops: broccoli, brussels sprouts, cabbage, cauliflower, eggplant, peppers, onions, sweet potatoes, and tomatoes

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.

Dacthal G-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.

Do not apply this product through any type of irrigation equipment.

#### Conversion Table - Acre and Smaller Areas

If Rate per Acre is	Amount of Dacthal G-5 to Apply	
	250 Sq. Ft.	1,000 Sq. Ft.
160 pounds per acre	0 lb. 15 oz.	3 lbs. 12 oz.
180 pounds per acre	1 lbs. ½ oz.	4 lbs. 2 oz.
210 pounds per acre	1 lbs. 3 oz.	4 lbs. 12 oz.
300 pounds per acre	1 lbs. 12 oz.	7 lbs. 0 oz.

If there is no rain within three or four days after Dacthal G-5 application, sprinkler irrigation (½ 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.

#### Weed Control Spectrum

Dacthal is a preemergence herbicide which provides effective control of annual grasses and certain broadleaved weeds. The following weeds are grouped according to their susceptibility to Dacthal.

#### Susceptible Weeds

Controlled at Lowest Recommended Rates for Each Soil Type

Carpetweed
Chickweed, Common
Crabgrass, Large
Crabgrass, Smooth
Foxtail, Green
Foxtail, Yellow

Lovegrass Nettle, Burning Pansy, Field Purslane Pusley, Florida Witchgrass

#### Moderately Susceptible Weeds

Lambsquarters, Common

Highest Recommended Rates for Each Soil Type Required for Effective Control

Barnyardgrass Johnsongrass (from seed)
Bluegrass, Annual Knotweed, Prostrate
Copperleaf, Rhombic Nightshade, Black
Copperleaf, Virginia Panicum, Brown Top
(three-seeded mercury) Pigweed, Redroot

Dodder Sandbur

Deadnettle, Purple Spurge, Nodding Deadnettle, Spotted Spurge, Prostrate Goosegrass Spurge, Spotted

Groundcherry

#### Difficult to Control Weeds

Commercially acceptable control of the following weeds may not always be obtained but weed population will be suppressed when applied at the maximum rate, thus resulting in less competition with the emerging and growing crop.

Buckwheat, Wild Canarygrass, Littleseed Dock, Curly (from seed)

Foxtail, Giant Goosefoot, Nettleleaf

Knotweed, Silversheath

Ladysthumb

Henbit

Panicum, Fall Panicum, Texas Polypogon, Rabbitfoot

Rocket, London Shepherdspurse Sowthistle, Annual

Vaseygrass Witchweed

#### Weeds Not Controlled with Dacthal

Galinsoga

Jimsonweed Johnsongrass (from rhizomes)

Mustards

Nutsedge

Ragweed, Common

Smartweed Velvetleaf

#### Directions for Use

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

DO NOT APPLY IN SUFFOLK AND NASSAU COUNTIES IN LONG ISLAND, NEW YORK.

## AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE) and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

DO NOT enter or allow worker entry into treated areas during the restricted entry interval (REI) of 12 hours. Exception: If the product is soil-incorporated, the Worker Protection Standard, under certain circumstances, allows workers to enter the treated area if there will be no contact with anything that has been treated.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water, is:

- Chemical-resistant gloves made of any waterproof material, and
- Shoes plus socks

## NON-AGRICULTURAL USE REQUIREMENTS

The requirements in this box apply to uses of this product that are NOT within the scope of the Worker Protection Standard for agricultural pesticides (40 CFR Part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries, or greenhouses. Do not enter or allow others to enter treated area until dusts have settled. If soil incorporation is required following the application, do not enter or allow others to enter the treated area (except those persons involved in the incorporations) until the incorporations is complete. If the incorporation is accomplished by watering-in, do not enter or allow others to enter the treated area until the surface is dry following the watering-in.



Nursery Stock or Ornamental Plantings: Apply at lining out, late fall, or early spring at the rate of 180 lbs. Dacthal G-5 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 G-5 is specifically recommended for weed control on the following nursery and ornamental plantings:

Abelia Fir Ageratum Forget-Me-Not Oak Alyssum Forsythia Andromeda, Jap. Four-O'clock Arborvitae Foxglove Ash Gaillardia Geranium Aster Azalea Gladiolus Pine Babysbreath Golddust Barberry Goldentuft Bellflower Gum Birch Hawthorn Bleedingheart Privet Heath, Pink Bloodleaf Holly **Boxwood** Hydrangea **Bugloss** Honeysuckle Rhododendron Camellia Iris Rose

Candytufts Ivy, Baltic Chrysanthemum Ivy, Boston Cinquefoil Ivy, English Coleus Ivy, Wilson Columbine Juniper Coneflower, Purple Lantana Coreopsis Larkspur, Candle Coralbells Lavendercotton Cosmos Lilac Cotoneaster Lily

Cottonwood Locust Cuphea Lupine Cypress Magnolia Dahlia Maple Delphinium Marguerite, Golden Deutzia Marigold Dogwood Mockorange Elaeagnus Morningglory Moss, Rose Elm Euonymus Mother-of-Thyme Evening Primrose Mountain Laurel Feverfew Mourning Bride

Nasturtium Orpine **Pachistima** Pachysandra Peony Petunia Pittosporium Podocarpus Poker Plant Poplar

Privet, variegated Redbud

Russian Olive

Sage, Scarlet

Snapdragon Spiderwort, Va. Spirea Spruce Stonecrop Strawflower Sundrops Sunflower Sweet Pea Sycamore Tree Peony Tulip Tree Viburnum Violet, African

Yarrow, Fernleaf Yew Zinnia

Weigelia

Wormwood

Willow

## Do not use on the following plants:

Bugleweed **Button Pink**  Germander Mesembryanthemum

Sweet William Telanthera

Carnation Pansy Geum Phlox

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

Any application of Dacthal should be made prior to weed seed germination.

## **Crops**

Broccoli, Brussels Sprouts, Cauliflower, Cabbage and all other Brassica (Cole) Leafy Vegetables in this crop group<sup>1</sup>\*

When to Apply: At seeding or transplanting.

Rate/Acre: 160 to 210 lbs. Dacthal G-5 (See Rates of Application)

Remarks: Apply uniformly to the soil. Dacthal G-5 can be applied directly over transplants without injury. If weeds have emerged, soil should be clean cultivated or weeded prior to application. Can be preplant incorporated.

<sup>1</sup>\*Brassica leafy vegetables crop group includes broccoli, Chinese (gai lon, white flowering) broccoli, broccoli raab (rapini), Brussels sprouts, cabbage, Chinese cabbage (bok choy, napa, tight-heading varieties), Chinese mustard cabbage (gai choy), cauliflower, cavalo broccolo, collards, kale, kohlrabi, mizuna, mustard greens, mustard spinach and rape greens.

Chayote (fruit), Chinese waxgourd (Chinese preserving melon), gherkin, gourd, edible (includes hyotan, cucuzza, hechima, Chinese okra), Momordica spp (includes balsam apple, balsam pear, bittermelon,), muskmelon (includes hybrids and/or varieties of Cucumis melo (including true cantaloupe, casaba, Santa Claus melon, crenshaw melon, honeydew melon, honey balls, Persian melon, golden pershaw melon, mango melon, pineapple melon, snake melon), watermelon including hybrids and/or varieties of Citrullus spp.: Apply uniformly to the soil at 160 to 210 lbs. Dacthal G-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 application if weeds have emerged.

Turnips (Greens and Roots: broccoli, raab (raab, raab salad), hanover salad, turnip tops (turnip greens): Apply uniformly to the soil at 160 to 210 lbs. Dacthal G-5 per acre at time of seeding.

Onions [dry bulb onions (shallots); green onions (leeks, spring onions or scallions, Japanese bunching onions, Welsh onion, green shallots, or green eschalots)]: Apply uniformly to soil at seeding, or transplanting and/or layby at 160 to 210 lbs. Dacthal G-5 per acre. Application can be made directly over transplants without injury. A layby application can be made on onions up to 14 weeks after seeding or transplanting; on garlic, layby application can be made when the crop plant has 3 to 5 true leaves. Should weeds emerge prior to layby, the crop should be cultivated or weeded before application. Use ¼ inch of overhead irrigation to incorporate Dacthal into the soil. Where onion emergence is expected to be slow due to cold and wet soil conditions, delay application until seed begins to germinate to reduce the risk of crop injury. Preplant incorporation is not recommended for onions.

Horseradish: Apply uniformly to the soil at time of planting at 160 to 210 lbs of Dacthal G-5 per acre. Preplant incorporation is not recommended.

Sweet Potatoes; arrowroot; cassava, bitter and sweet; chayote (root); dasheen (taro); turmeric: Apply uniformly to the soil at 160 to 210 lbs. Dacthal G-5 per acre at time of transplanting or layby. Application can be made 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 application.

Tomatoes; tomatillos; eggplant; pepino; groundcherry: Apply uniformly to the soil at 160 to 210 lbs. Dacthal G-5 per acre. Application 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. Application can be made directly over the plants without injury. If weeds have emerged, the crop should be cultivated or weeded prior to application.

Strawberries - New Plantings: Apply uniformly to soil at 180 lbs. per acre at time of transplanting. Established Plantings: Apply in early fall and early spring at rate of 160 to 180 lbs. 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, Dacthal G-5 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 G-5, 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.



## Storage and Disposal

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

Pesticide Storage: Store in a dry place.

**Pesticide Disposal:** Wastes resulting from the use of this product may be disposed of at an approved waste disposal facility. Do not contaminate water when disposing of equipment washwaters.

Container Disposal: Completely empty bag into application equipment and dispose of empty bag in a sanitary landfill, or incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

#### LIMITED WARRANTY AND DISCLAIMER

The manufacturer warrants (a) that this product conform to the chemical description on the label; (b) that this product is reasonably fit for the purposes set forth in the directions for use, subject to the inherent risks referred to herein, when it is used in accordance with such directions; and (c) that the directions, warnings, and other statements on this label are based upon responsible experts' evaluations of reasonable tests of effectiveness, of toxicity to laboratory animals and to plants and residues on food crops, and upon reports of field experience. Tests have not been made on all varieties of food crops and plants, or in all states or under all conditions.

THERE ARE NO EXPRESS WARRANTIES OTHER THAN THOSE SET FORTH HEREIN. THE MANUFACTURER NEITHER MAKES NOR INTENDS, NOR DOES IT AUTHORIZE ANY AGENT OR REPRESENTATIVE, TO MAKE ANY OTHER WARRANTIES, EXPRESS OR IMPLIED, AND IT EXPRESSLY EXCLUDES AND DISCLAIMS ALL IMPLIED WARRANTIES OF MERCHANTABILITY OF FITNESS FOR A PARTICULAR PURPOSE, OR ANY WARRANTY OF QUALITY OR PERFORMANCE. THIS WARRANTY DOES NOT EXTEND TO, AND THE BUYER SHALL BE SOLELY RESPONSIBLE FOR, ANY AND ALL LOSS OR DAMAGE WHICH RESULTS FROM THE USE OF THIS PRODUCT IN ANY MANNER WHICH IS INCONSISTENT WITH THE LABEL DIRECTIONS, WARNINGS OR CAUTIONS.

BUYER'S EXCLUSIVE REMEDY AND MANUFACTURER'S OR SELLER'S EXCLUSIVE LIABILITY FOR ANY AND ALL CLAIMS, LOSSES, DAMAGES, OR INJURIES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, WHETHER OR NOT BASED IN CONTRACT, NEGLIGENCE, STRICT LIABILITY IN TORT OR OTHERWISE, SHALL BE LIMITED, AT THE MANUFACTURER'S OPTION, TO REPLACEMENT OF, OR THE REPAYMENT OF THE PURCHASE PRICE FOR, THE QUANTITY OF PRODUCT WITH RESPECT TO WHICH DAMAGES ARE CLAIMED. IN NO EVENT, SHALL MANUFACTURER OR SELLER BE LIABLE FOR SPECIAL, INDIRECT OR CONSEQUENTIAL DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT.

AMVAC offers this product, and Buyer accepts it, subject to the foregoing Limited Warranty which may be varied only by agreement in writing signed by an authorized representative of AMVAC.

AMVAC Chemical Corporation 4100 E. Washington Boulevard Los Angeles, CA 90023 U.S.A.