



Reg # 407-416

PM-23

File
198
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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

JAN 31 1994

Gene R. Currie
IMPERIAL INC.
P. O. Box 98
Shenandoah, IA 51601

OFFICE OF
PREVENTION, PESTICIDES AND
TOXIC SUBSTANCES

Subject: Label Amendment Submission of 08/19/93 in Response to PR Notice 93-7
EPA Reg. No. 407-416
IMPERIAL 5% DACTHAL

Dear Registrant:

The labeling cited above and submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), as amended, is accepted subject to the comments reflected on the enclosed sheet. A copy of your proposed labeling stamped "ACCEPTED WITH COMMENTS" is enclosed.

WHAT THIS ACCEPTANCE MEANS:

Based on your certification, the Agency has accepted the labeling changes that are necessary to comply with the Worker Protection Standard (WPS) labeling requirements of 40 CFR part 156, subpart K, described in PR Notices 93-7 and 93-11. Any other labeling changes submitted in connection with this amendment application but not directly related to compliance with the WPS have not been reviewed or accepted by the Agency. If you wish to make such changes, you must submit a separate amendment application proposing them. If your product is currently suspended, the acceptance of this labeling amendment does not affect the suspension in any way.

WHAT YOU NEED TO DO NEXT:

By the next label printing make all the specified changes to your labeling. Send to EPA one (1) copy of the final printed labeling:

- BEFORE selling or distributing any product bearing the final printed labeling
- AND
- WITHIN one year from date of this acceptance.



Recycled/Recyclable
Printed with Soy/Canola Ink on paper that
contains at least 50% recycled fiber

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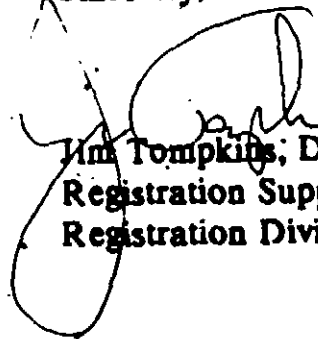
Submit the final printed labeling via the U.S. Postal Service to:

Document Processing Desk (FIN-LABEL)
Office of Pesticide Programs (7505C)
U.S. Environmental Protection Agency
401 M Street, SW
Washington, D.C. 20460-0001

Hand or courier deliveries of final printed labeling may be made to:

Document Processing Desk (FIN-LABEL)
Office of Pesticide Programs
Room 266A, Crystal Mall 2
1921 Jefferson Davis Highway
Arlington, VA 22202

Sincerely,



Jim Tompkins, Deputy Chief
Registration Support Branch
Registration Division (7505W)

Attachment

IMPERIAL
5% DACTHAL R

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Active Ingredient:	
DCPA (dimethyl tetrachloroterephthalate).....	5.0%
Inert Ingredients:	95.0%
TOTAL	100.0%

R Registered Trademark ISK Biotec Corporation

KEEP OUT OF REACH OF CHILDREN
CAUTION

STATEMENT OF PRACTICAL TREATMENT

IF IN EYES: Flush with plenty of water. Call a physician if irritation persists.

SEE ADDITIONAL PRECAUTIONARY STATEMENTS BELOW

Manufactured by
IMPERIAL INC.
Shenandoah, IA 51601

ACCEPTED
with COMMENTS
in EPA Letter Dated

JAN 31 1994

EPA Reg. No. 407-416
EPA Est. No. 407-IA-1

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

I-92

NET CONTENTS _____

407-416

PRECAUTIONARY STATEMENTS
HAZARDS TO HUMANS AND DOMESTIC ANIMALS
CAUTION

Causes moderate eye irritation. Avoid contact with eyes or clothing.

Personal Protective Equipment:

- Applicators and other handlers must wear:
- Long-sleeved shirt and long pants.
 - Waterproof gloves.
 - Shoes plus socks.

Follow manufacturers instructions for cleaning or maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

USER SAFETY RECOMMENDATIONS

Users should:

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

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ENVIRONMENTAL HAZARDS

Collect and incorporate granules spilled on the soil surface. For terrestrial uses, do not apply directly to water, or to areas where surface water is present, or to intertidal areas below the mean high water mark. Do not contaminate water by cleaning of equipment or disposal of wastes.

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. Your local agricultural agencies can provide further information on the type of soil in your area and the locations of groundwater used for drinking water.

DIRECTIONS FOR USE

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

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 apply only to uses of this product that are covered by the Worker Protection Standard.

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.

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 12 hours.

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:

- Coveralls.
- Waterproof gloves.
- Shoes plus socks.

STORAGE AND DISPOSAL

STORAGE: Store in a secure area, in original container only, away from fertilizers, food, or feed.

PESTICIDE DISPOSAL: Securely wrap original bag in several layers of newspaper and discard in trash.

CONTAINER DISPOSAL: Do not reuse bag. Discard bag in trash.

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

This product 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, seeded beans (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), 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 this product's granules over this area.

CONVERSION TABLE - ACRE TO SMALLER AREAS

Amount of 5% DACTHALR to Apply

<u>If Rate per Acre is</u>	<u>100 sq ft</u>	<u>250 sq ft</u>	<u>1,000 sq ft</u>
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.

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REPLANTING: Replanting crops other than those included on this label in soil treated with this product 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 crop treated by this product.

ANY APPLICATION OF THIS PRODUCT 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.

THIS PRODUCT IS NOT RECOMMENDED FOR USE ON PUTTING-GREENS OR ON BENTGRASS 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, Ageratum, Alyssum, Andromeda-Jap., Arborvitae, Ash, Aster, Azalea, Babysbreath, Barberry, Bellflower, Birch, Bleedingheart, Bloodleaf, Boxwood, Bugloss, Camellia, Candytufts, Chestnut, Chrysanthemum, Cinquefoil, Coleus, Columbine, Coneflower- purple, Coreopsis, Coralbells, Cosmos, Cotoneaster, Cottonwood, Crabapple, Cuphea, Cypress, Dahlia, Delphinium, Deutzia, Dogwood, Elaeagnus, Elm, Euonymus, Evening Primrose, Feverfew, Fir, Forget-me-not, 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, Juniper, Lantana, Larkspur-candle, Lavendercotton, Lilac, Lily, Locust, Lupine, Magnolia, Marguerite-golden, Marigold, Mock-orange, 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, Redbud, Rhododendron, Rose, Russian Olive, Sage-scarlet, Snapdragon, Spiderwort-Va., Spirea, Spruce, Stonecrop, Strawflower, Sundrops, Sunflower, Sweet Pea, Sycamore, Tree peony, Tulip tree, Viburnum, Violet-African, Walnut, Weigelia, Willow, Wormwood, Yarrow-fernleaf, Yew, and, Zinnia.

DO NOT USE ON THE FOLLOWING PLANTS:

Bugleweed	Carnation	Germander	Pansy	Sweet William
Button pink	Geum	Mesembranthemum	Phlox	Telanthaera

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. of this product per acre. This product's 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 snap), SOUTHERN PEAS (blackeyed): Apply uniformly to the soil at time of seeding at rate of 160 to 210 lb. of this product per acre.

SEEDED CUCUMBERS, SQUASH (winter and summer), MELONS (cantaloupe, watermelon, honeydew): Apply uniformly to the soil at the rate of 160 to 210 lb. of this product 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.

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

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POTATOES (whole or cut pieces): Apply uniformly to the soil at rate of 160 to 210 lb. of this product 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. This product 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. of this product per acre at time of transplanting or layby. This product 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 application.

TOMATOES, EGGPLANT, PEPPERS: Application uniformly to the soil at rate of 160 to 210 lb. of this product 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. This product can be applied directly over the plants without injury. If weeds have emerged, the crop should be cultivated or weeded prior to making application of this product.

STRAWBERRIES: New Planting - Apply uniformly to soil at rate of 160 to 210 lb. of this product 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: 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.