

US ENVIRONMENTAL PROTECTION AGENCY
OFFICE OF PESTICIDES PROGRAMS
REGISTRATION DIVISION (75-767)
WASHINGTON, DC 20460

EPA REGISTRATION NO.

524-455

DATE OF ISSUANCE

3 SEP 1992

TERM OF ISSUANCE

Conditional, Expires July 31, 1994

NAME OF PESTICIDE PRODUCT

DIMENSION[®] 2 F.G. turf herbicide

NOTICE OF PESTICIDE: REGISTRATION
 REREGISTRATION

(Under the Federal Insecticide, Fungicide,
and Rodenticide Act, as amended)

NAME AND ADDRESS OF REGISTRANT (Include ZIP code)

Monsanto Company
700 14th Street, N.W., #1100
Washington, D.C. 20005

NOTE: Changes in labeling formula 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 U.S. 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.

A copy of the labeling accepted in connection with this Registration/Reregistration is returned herewith.

Registration is in no way to be construed as an indorsement or approval of this product by this 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.

This product is conditionally registered in accordance with FIFRA section 3(c)(7)(C) provided that you:

1. Submit generic data required to change this registration to an unconditional FIFRA section 3(c)(3) registration. The required data with deadlines for submitting the required data were listed on the second page of the notice of pesticide registration of non-biobu herbicide, EPA Reg. No. 524-455.
2. Submit an acceptable dermal sensitization study for this product on or before December 1, 1992, in accordance with your letter of September 1, 1992.
3. Add the phrase "EPA registration No. 524-455" to the label before you release the product for shipment.
4. Submit five (5) copies of the final printed labeling before you release the product for shipment.

If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA section 6(e). Your release for shipment of the product constitutes acceptance of these conditions. A stamped copy of the label is enclosed for your records.

BEST AVAILABLE COPY

Joanne I. Miller
Product Manager (23)
Fungicide-Herbicide Branch
Registration Division (75-767C)

enclosure

ATTACHMENT IS APPLICABLE

SIGNATURE OF APPROVING OFFICIAL

DATE

9/3/92

PH23 524-455 J. J. J.

DIMENSION® 2 F.G.

Turf Herbicide by Monsanto

Dimension 2 F.G. is a selective herbicide that provides preemergence control of listed annual grasses and broadleaf weeds in established cool and warm-season turfgrass in lawns and ornamental turf.

Read the entire label before using this product. Use only according to label instructions. Read "LIMIT OF WARRANTY AND LIABILITY" before buying or using. If terms are not acceptable, return at once unopened.

For more information on the use of this product call 1-800-323-1421.

PRECAUTIONARY STATEMENTS

Storage and Disposal

Hazards to Humans and Domestic Animals

Do not contaminate water, foodstuffs, feed or seed by storage or disposal.

Keep out of reach of Children.

STORAGE:
Store this product in original container only. In case of spill, sweep up material and dispose of material according to label directions.

CAUTION!

CAUSES EYE IRRITATION. HARMFUL IF INHALED.
Avoid contact with eyes or clothing. Avoid breathing dust. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash before reuse. Prolonged or frequently repeated skin contact while handling this material may cause allergic reaction in some individuals.

DISPOSAL:
Wastes resulting from the use of this product that cannot be used or chemically reprocessed should be disposed of in a landfill approved for pesticide disposal or in accordance with applicable Federal, state or local procedures.

FIRST AID: IF IN EYES, immediately flush with plenty of water. Get medical attention if irritation persists.

Do not reuse emptied container.

SEP 1992

524-455

Completely empty bag into application equipment. Dispose of emptied bag(s) in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

IF INHALED, remove individual to fresh air. Seek medical attention if breathing difficulty develops.

(See pamphlet for Complete Directions for Use)

In case of an emergency involving this product, Call Collect, day or night, (314) 694-4000.

Environmental Hazards

This pesticide is toxic to fish. Drift or runoff may adversely affect aquatic organisms. 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 when disposing of equipment washwaters.

ACTIVE INGREDIENTS:
* Dithiopyr, 3,5-pyridinedicarbothioic acid, 2-(difluoromethyl)-4-(2-methylpropyl)-6-(trifluoromethyl)-S,S-dimethyl ester 2.1%
INERT INGREDIENTS: 97.9%
100.0%

BIRD CAUTION:

While avian toxicology studies have shown low acute toxicity to birds, the potential for avian reproduction effects is still being evaluated. To reduce potential exposure to birds, do not apply this product in split applications; make only one application per season; do not apply more than 25 pounds of this product per acre (0.5 lb ai/A). Avoid known bird nesting sites and areas where birds are actively feeding when applying this product.

* This product contains 1 pound of the active ingredient, dithiopyr, per 50 pound bag.

Product protected by U.S. Patent No. 4,692,584; Other patents pending.

©MONSANTO COMPANY 1992
©Dimension is a registered trademark of Monsanto Company

DIRECTIONS FOR USE

EPA Reg. No. 524-XXX EPA Est. 524-OH-1

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

NET 50 LBS

853.12-000.xx D

BEST AVAILABLE COPY

7-10

**DIMENSION® 2 F.G. Turf Herbicide
by Monsanto**

FOR PROFESSIONAL TURF APPLICATOR USE ONLY

Dimension® 2 F.G. is a selective herbicide that provides preemergence control of listed annual grasses and broadleaf weeds in established cool and warm-season turfgrasses in lawns and ornamental turf.

EPA Reg. No. 524-

***Dimension is a registered trademark of Monsanto Company.**

1992-1

A-853.12-000.XX/00

Read the entire label before using this product.

Use only according to label instructions.

Read "LIMIT OF WARRANTY AND LIABILITY" before buying or using. If terms are not acceptable, return at once unopened.

PRECAUTIONARY STATEMENTS

Hazards to Humans and Domestic Animals

Keep out of reach of children.

CAUTION!

CAUSES EYE IRRITATION.

HARMFUL IF INHALED.

Avoid contact with eyes or clothing.

Avoid breathing dust.

Wash thoroughly with soap and water after handling.

Remove contaminated clothing and wash before reuse.

Prolonged or frequently repeated skin contact while handling this material may cause allergic reaction in some individuals.

ACCEPTED
with COMMENTS
to EPA Letter Dated:

3 SEP 1992

Under the Federal Insecticide,
Fungicide, and Rodenticide
Act, this pesticide is
registered under EPA Reg. No.

324-455

1/2/92

(MON-25140NEW)

BEST AVAILABLE COPY

FIRST AID: IF IN EYES, immediately flush with plenty of water. Get medical attention if irritation persists.

IF INHALED, remove individual to fresh air. Seek medical attention if breathing difficulty develops.

In case of an emergency involving this product, Call Collect, day or night, (314) 694-4000.

Environmental Hazards

This pesticide is toxic to fish. Drift or runoff may adversely affect aquatic organisms. 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 when disposing of equipment washwaters.

BIRD CAUTION:

While avian toxicology studies have shown low acute toxicity to birds, the potential for avian reproduction effects is being evaluated. To reduce potential exposure to birds, do not apply this product in split applications; make only one application per season; do not apply more than 25 pounds of this product per acre (0.5 lb ai/A). Avoid known bird nesting sites and areas where birds are actively feeding when applying this product.

ACTIVE INGREDIENTS:

*Dithiopyr, 3,5-pyridinedicarbothioic acid, 2-(difluoromethyl)-4-(2-methylpropyl)-6-(trifluoromethyl)-S,S-dimethyl ester.....2.1%

INERT INGREDIENTS:.....97.9%
100.0%

*This product contains 1 pound of the active ingredient, dithiopyr, per 50 pound bag.

Product protected by U. S. Patent No. 4,692,184. Other patents pending.

DIRECTIONS FOR USE

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

For information on use of this product call 1-800-323-1421.

Storage and Disposal

Do not contaminate water, foodstuffs, feed or seed by storage or disposal.

STORAGE:

Store this product in original container only. In case of spill, sweep up material and dispose of material according to label directions.

DISPOSAL:

Wastes resulting from the use of this product that cannot be used or chemically reprocessed should be disposed of in a landfill approved for pesticide disposal or in accordance with applicable Federal, state or local procedures.

Do not reuse emptied container.

Completely empty bag into application equipment. Dispose of emptied bag(s) in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

GENERAL INFORMATION

This product is a selective herbicide that provides preemergence control of crabgrass and other susceptible annual grasses and broadleaf weeds in established lawns and ornamental turf. This product will not harm nearby established ornamentals when used according to label directions.

615 17

PRECAUTIONS

For best results, cultural practices that disturb the soil, such as core aeration or verticutting, should be done before application of this product. Turfgrass should be allowed to recover from these cultural practices prior to application of this product. Irrigation or rainfall within 7 days after application may improve the performance of this product.

Reseeding or Sprigging: Reseeding, overseeding, or sprigging of treated areas within 4 months after application of this product may inhibit the establishment of desirable turfgrass. When reseeding or overseeding, proper cultural practices such as soil cultivation, irrigation and fertilization should be followed. For best results, use mechanical or power seeding equipment (slit seeders) designed to give good seed to soil contact.

This product may be used on seeded, sodded, or sprigged turfgrass that are well-established. Allow the turf to develop a good root system and uniform stand before application.

Use of this product on turfgrass not well-established, weakened by weather, or mechanical related stress may increase the potential for injury.

DO NOT apply over-the-top of desirable flowers, vegetables, shrubs or trees.

DO NOT use clippings from treated turf for mulching around vegetables or fruit trees.

DO NOT allow domestic animals to feed or forage on the treated turf.

TURFGRASSES

When applied as directed under the conditions described, the following established turfgrasses are tolerant to this product:

Cool-Season Grasses

Bentgrass, creeping
Agrostis stolonifera

Bluegrass, Kentucky
Poa pratensis

Fescue, fine
Festuca rubra

Fescue, tall
Festuca arundinacea

Ryegrass, perennial

Lolium perenne

Warm-Season Grasses

Bahiagrass
Paspalum notatum

Bermudagrass
Cynodon dactylon

Buffalograss
Buchloe dactyloides

Carpetgrass
Axonopus affinis

Centipedegrass
Eremochloa ophiuroides

Kikuyugrass
Pennisetum clandestinum

St. Augustinegrass
Stenotaphrum secundatum

Zoysiagrass
Zoysia japonica

The following fine fescue varieties have been found to be sensitive to this product: 'Atlanta', 'Banner', 'Beauty', 'Bilgart', 'CF-2', 'Enjoy', 'HF-93', 'Highlight', 'Ivalo', 'Koket', 'Majenta', 'Mary', 'Pennlawn', 'Tamara', 'Tatjana', 'Walforf', and 'Waldina'.

APPLICATION DIRECTIONS

This product provides preemergence control of listed annual grasses and broadleaf weeds when applied prior to their germination in established turfgrass.

Control of Annual Grasses and/or Annual Broadleaf Weeds

This product should be applied prior to the germination of annual grasses and/or broadleaf weeds. Use the higher recommended use rates where weed infestations are dense and/or applications are made early and longer residual control is desirable.

For preemergence control of annual bluegrass and listed winter annual broadleaf weeds, apply this product in the fall prior to their germination and emergence. Use the higher recommended use rates where weed infestations are dense.

Refer to the following table for recommended use rates of this product for the preemergence control of annual grasses and/or broadleaf weeds.

Weeds Controlled and Use Rate Recommendations

Weeds	Suggested Use Rate (Lb ai/A)	
	North	South
Crabgrass, Large Smooth Foxtail, Green Yellow	0.125 to 0.25*	0.25 to 0.38*
Barnyardgrass Crowfootgrass Kikuyugrass Lespedeza, common Oxalis, Buttercup Oxalis Creeping Woodsorrel Yellow Woodsorrel Purslane, common Speedwell, corn Smutgrass	0.25	0.38
Bluegrass, annual Bittercress Chickweed Geranium, Carolina Goosegrass Henbit Parsley-piert Pineappleweed Ryegrass, Annual Perennial Shepherdspurse Spurge, Prostrate Spotted	0.25 to 0.38*	0.38 to 0.50*

Higher use rates are recommended where weed infestations are heavy and/or dense.

APPLICATION EQUIPMENT AND INSTRUCTIONS

Apply this product with drop or rotary-type spreaders designed to apply granular herbicides. Calibrate application equipment prior to usage, and apply this product uniformly over the turfgrass area. A more uniform application can be made by spreading half of the required amount over the area and then applying the remaining half at a right angle to the previous. Avoid the use of spreaders that would apply this product in narrow rows or concentrated bands. Avoid streaking, skips, or overlaps during application. Check equipment frequently to ensure equipment is functioning properly and applying uniform distribution of granules.

LIMIT OF WARRANTY AND LIABILITY

This Company warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes set forth in the Complete Directions for Use label pamphlet ("Directions") when used in accordance with those Directions under the conditions described herein. NO OTHER EXPRESS WARRANTY OR IMPLIED WARRANTY OF FITNESS FOR PARTICULAR PURPOSE OR MERCHANTABILITY IS MADE. This warranty is also subject to the conditions and limitations stated herein.

Buyer and all users shall promptly notify this Company of any claims whether based in contract, negligence, strict liability, other tort or otherwise. Notice of these claims may be made by calling 1-800-323-1421.

Buyer and all users are responsible for all loss or damage from use or handling which results from conditions beyond the control of this Company, including, but not limited to, incompatibility with products other than those set forth in the Directions, application to or contact with desirable vegetation, unusual weather, weather conditions which are outside the range considered normal at the application site and for the time period when the product is applied, as well as weather conditions which are outside the application ranges set forth in the Directions, application in any manner not explicitly set forth in the Directions, moisture conditions outside the moisture range specified in the Directions, or the presence of products other than those set forth in the Directions in or on the soil, crop or treated vegetation.

THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE LIMIT OF THE LIABILITY OF THIS COMPANY OR ANY OTHER SELLER FOR ANY AND ALL LOSSES, INJURIES OR DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT (INCLUDING CLAIMS BASED IN CONTRACT, NEGLIGENCE,

STRICT LIABILITY, OTHER TORT OR OTHERWISE) SHALL BE THE PURCHASE PRICE PAID BY THE USER OR BUYER FOR THE QUANTITY OF THIS PRODUCT INVOLVED, OR, AT THE ELECTION OF THIS COMPANY OR ANY OTHER SELLER, THE REPLACEMENT OF SUCH QUANTITY, OR, IF NOT ACQUIRED BY PURCHASE, REPLACEMENT OF SUCH QUANTITY. IN NO EVENT SHALL THIS COMPANY OR ANY OTHER SELLER BE LIABLE FOR ANY INCIDENTAL, CONSEQUENTIAL OR SPECIAL DAMAGES.

Buyer and all users are deemed to have accepted the terms of this LIMIT OF WARRANTY AND LIABILITY which may not be varied by any verbal or written agreement.

©MONSANTO COMPANY 1991

853.12-000.XX/00

In case of an emergency involving this product, Call Collect, day or night, (314)694-4000.

MONSANTO COMPANY
AGRICULTURAL PRODUCTS
ST. LOUIS, MISSOURI 63167 U. S. A.