

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

WASHINGTON, D.C. 20460

OFFICE OF PREVENTION, PESTICIDES AND TOXIC SUBSTANCES

Ms. Janine M. Polizzi ChemReg International, LLC Authorized Agent for Knox Fertilizer Company Knox Fertilizer Company P.O. Box 248 Knox, IN 46534

AUG 1 5 2002

Dear Ms. Polizzi:

Subject: Dimension® 100 Turf Herbicide with Plant Food EPA Reg. No. 8378-49

Application and Letter Dated July 24, 2002, Requesting Amendments To This Registration: To Comply with EPA PR-Notice 2001-1 and 2001-6, by Updating First Aid Statements and Storage and Disposal Statements, Respectively; To Modify the Ingredients Statements To Delete the Chemical Name per PR Notice 97-5; To Add Restrictions for the Product as Required by State Law in the State of New York; To Add Minor Changes for Clarification; and Your Letter Dated August 14, 2002, Resubmission of Proposed Labeling with Letter from New York State Department of Environmental Conservation, (from Jeanine Broughel to Telisport W. Putsavage, Re: NY Dithiopyr Labeling

The propose labeling submitted with your letter dated August 14, 2002 has been reviewed and found acceptable as an amendment to the registration of the subject pesticide product under the Federal Insecticide, Fungicide and Rodenticide Act, as amended provided that you:

1. Revise the second paragraph under the "General Information" section to read:

"This product should only be applied to lawns and ornamental turfs that are composed of one or more of the following turfgrass species that have been determined to be tolerant. When applied as directed by this label the following established turfgrasses are tolerant to this product:"

2. Revise the last statement in the paragraph under "Control of Crabgrass, Preemergence and Early Postemergence Control" that reads: "So the practicalto make

applications and still control crabgrass."; to read: "So the practicalto make an application and still control crabgrass."

- 3. Under the "Spring Applications" section revise the statement that reads: "Where split fertilizer.....may be split across two applications.."; to read: "Where split Fertilizermay be split between two applications".
- 4. Submit one (1) copy of the final printed label prior to your shipment of this pesticide product under the enclosed revised stamped label.

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 under this labeling constitutes acceptance of these conditions. A stamped copy of the label is enclosed for your records.

Sincerely yours,

Joanne I. Miller

Product Manager (23) Herbicide Branch

Registration Division (7505C)

Enclosure

Dimension® 100

Turf Herbicide with Plant Food

This product is a selective herbicide that provides control of listed annual grasses and broadleaf weeds in established lawns and ornamental turfs, including golf course fairways, roughs, and tee boxes.

Not for use on turf being grown for sale or other commercial use as sod, or for commercial seed production, or for research purposes.

In New York State: For Use Only by Professional Turf Applicators Use is Prohibited in Nassau and Suffolk Counties

ACTIVE INGREDIENT:	
Dithiopyr*	0.10%
INERT INGREDIENTS:	99.90%
Total	100.00%

*CAS # 97886-45-8

Fertilizer Guarantee Analysis
Nitrogen XX%
PhosphateXX%
Potash XX%
Derived from Urea, Ammoniated Phosphate, and Muriate of Potash.

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

EPA REG. NO. 8378-49

EPA EST, NO. 8378-IN-1

Read the entire label before using this product. Use only according to label instructions.

NOTICE: Before using this product, read the entire Precautionary Statements, Terms and Conditions of Use, Directions for Use, Use Precautions, and Storage and Disposal Instructions. If the Terms and Conditions of Use are not acceptable, return the product unopened within thirty days of purchase to the place of purchase.

KEEP OUT OF REACH OF CHILDREN CAUTION

SEE BACK PANEL FOR ADDITIONAL PRECAUTIONARY STATEMENTS

Net Weight XX Pounds (XX kg.)

End	Front	Panel

ACCEPTED with COMMENTS In EPA Letter Dated

AUG | 5 2002

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

FIRST AID			
IF IN EYES	 Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice. 		
IF INHALED	 Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control center or doctor for further treatment advice. 		
	HOT LINE NUMBER		

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact 1-800-858-7378 from 6:30 a.m. to 4:30 p.m. Pacific Time, everyday, for emergency medical treatment information.

PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS and DOMESTIC ANIMALS

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

ENVIRONMENTAL HAZARDS

This product is toxic to fish and highly toxic to other aquatic organisms including oysters and shrimp. Use with care when applying to turf areas adjacent to any body of water. Drift and runoff from treated turf may adversely affect aquatic organisms in adjacent aquatic sites. 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 apply when weather conditions favor drift from treated areas. Do not contaminate water when disposing of equipment washwaters or rinsate

DIRECTIONS FOR USE

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

GENERAL INFORMATION

This product is a selective herbicide that provides control of crabgrass and other annual grasses and broadleaf weeds in established lawns and ornamental turfs, including golf course fairways, roughs, and tee boxes. This product will not harm nearby established ornamentals when used according to label directions.

This product should only be applied to lawns and ornamental turfs that are composed of the following turfgrass species that have been determined to be tolerant to applications of this product. When applied as directed under the conditions described, the following established turfgrasses are tolerant to this product:

Cool-Season Grasses

Common Name	Scientific Name
Bentgrass, Creeping*	Agrostis palustris
Bluegrass, Kentucky	Poa pratensis
Fescue, fine**	Festuca rubra
Fescue, tall	Festuca arundinacea
Ryegrass, perennial	Lolium perenne

Warm-Season Grasses

Common Name	Scientific Name
Bahiagrass	Paspalum notatum
Bermudagrass	Cynodon dactylon
Buffalograss***	Buchice dactyloides
Carpetgrass	Axonopus affinis
Centipedegrass	Eremochioa ophiuroides
Kikuyugrass	Pennisetum clandestinum
St. Augustinegrass	Stenotaphrum secundatum
Zoysiagrass	Zoysia japonica

DO NOT apply this product to Colonial bentgrass (Agrostis tenuis) varieties. *Use of this product on certain varieties of creeping bentgrass such as 'Cohansey', 'Carmen', 'Seaside', and 'Washington' may result in undesirable turfgrass injury. Not all varieties of creeping bentgrass have been tested. ** Use of this product on certain varieties of fine fescue may result in undesirable turf injury. 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', 'Jamestown', 'Koket', 'Majenta', 'Mary', 'Pennlawn', 'Tamara', 'Tatjana', 'Waldorf', and 'Waldina'. Not all varieties of fine fescue have been tested.

*** DO NOT use this product on seedling buffalograss in the spring of the first year of establishment until the turfgrass is fully green and has established new roots.

NOTE: It is not possible to evaluate all turfgrass varieties for tolerance to this product. It is suggested that the user evaluate the phytotoxicity of this product to other turfgrass varieties on a limited area, at recommended use rates, prior to initiating large-scale use.

Reseeding, Overseeding, or Sprigging

Reseeding, overseeding, or sprigging of treated areas within 12 weeks after application of this product may inhibit the establishment of desirable turfgrasses. When reseeding or overseeding, proper cultural practices such as soil cultivation, irrigation and fertilization must be followed. For best results, use mechanical or power seeding equipment (slit seeders) designed to give good seed to soil contact.

Use Precoutions

Turfgrass Safety: This product may be used on seeded, sodded, or sprigged lawns and ornamental turfs that are well-established. The grass must have developed a good root system and a uniform stand, and have received at least two mowings following its seeding, sodding, or sprigging before it can receive its first application of this product. Use of this product on lawns and ornamental turfs that are not well-established, or on those that have been weakened by weather-, pest-, disease-, chemical-, or mechanical-related stress, may increase the chances for turf injury.

- DO NOT use this product on golf course putting greens.
- The early postemergence crabgrass control described below is limited. Postemergence applications are only effective on crabgrass if applied before crabgrass has displayed its fifth leaf or first tiller.
- For best results, cultural practices that disturb the soil, such as core-, spike-, or hydro-aerification, and verticutting, should be done before application of this product. DO NOT apply this product until the grass has recovered from these cultural practices.
- Apply this product directly to established lawns or ornamental turfs only. DO NOT apply to flowers, vegetables, shrubs, or trees.
- DO NOT use clippings from treated turf for mulching around vegetables or fruit trees.
- DO NOT graze treated areas.
- Keep people and pets off treated areas until dust has settled.

Control of Crabgrass, Preemergence and Early Postemergence Control

This product provides "preemergence" control of crabgrass (including the large, smooth, and southern species) when applied prior to the emergence of crabgrass from the ground in established lawns and ornamental turfs.

It can also provide "early postemergence" control of crabgrass during the early stages of crabgrass growth after the crabgrass has emerged from the ground. Postemergence crabgrass control will be obtained only when this product is applied prior to the tillering of crabgrass, which generally corresponds to the time when you can first easily see the crabgrass plants in the lawn or turf. So the practical benefit of this product's additional, early postemergence activity is that (compared to strictly preemergence crabgrass products) it can give the user a 2-4 week longer period of time to make applications and still control crabgrass.

APPLICATION FREQUENCY AND TIMING

This product may be applied as a single application, as a split application, or as a sequential application for crabgrass control in the spring, summer, or fall.

DO NOT apply more than 11.5 lbs, of this product per 1,000 sq. ft. per application, and no more than 17.2 lbs, of this product per 1,000 sq. ft. per year.

In the State of New York do not exceed 0.5 lbs. active ingredient acre per year (11.5 lbs. /1.000 sq. ft.). Use is prohibited in Nassau and Suffolk Counties.

Spring Applications

For single applications made in the spring or early summer, this product should be applied at the appropriate rate corresponding to one of the two control programs listed in Table 1 below, depending on the user's location, the turfgrass mowing height, and whether the use is considered to be preemergence or early postemergence at the time of application. The duration of residual weed control provided by this product is directly related to the total rate applied, but will vary somewhat depending on weather, weed pressure, turfgrass competitiveness, and the user's location within a region.

<u>Use Program #1</u> for preemergence control at sites where the turfgrass is cut high (e.g., homeowner lawns). This program provides 3-5 months of preemergence crabgrass control. This program should not be used for early postemergence crabgrass control.

<u>Use Program #2</u> for preemergence control at sites where (a) turfgrass is cut low (e.g., golf fairways) and (b) turf maintenance or weed control has not been conducted during the previous year. This program provides 4-6 months of preemergence crabgrass control. This program may also be used for early postemergence control at site where turfgrass is cut low (e.g., golf fairways).

Subsequent, sequential pre- and/or postemergence applications should be made where longer periods of control are desired.

Where split fertilizer applications are recommended the rates in Table 1 may be split across two applications made 6-10 weeks apart and prior to crabgrass emergence.

<u>Table 1</u>: Recommended Single Application Use Rates*
(Pounds of this product/1,000 sq. ft.)

PROGRAM	#1	#2	
USE	Preemergence	Preemergence	
(turfgrass	(high-cut turf)	(low-cut turf)	
cut)		Postemergence	
REGION		(low-cut turf)	
North	2.86 lbs./1,000 sq. ft.	5.73 lbs./1,000 sq. ft.	
Transition	4.15 lbs./1,000 sq. ft.	8.51 lbs./1,000 sq. ft.	
South	5.73 lbs./1,000 sq. ft.	11.4 lbs./1,000 sq. ft.	
Coastal	8.51 lbs./1,000 sq. ft.	11.4 lbs./1,000 sq. ft.**	
South			

*DO NOT apply more than 11.5 lbs. of this product/1,000 sq. ft. per application, and no more than 17.2 pounds of this product/1,000 sq. ft. per year.

In the State of New York do not exceed 0.5 lbs. active ingredient acre per year (11.5 lbs. /1,000 sq. ft.). Use is prohibited in Nassau and Suffolk Counties.

** May require split or sequential applications for full control.

Postemergence control is limited; see "Control of Crabgrass" and "Use Precautions" sections above. Regions include areas listed below.

<u>See Map of United States.</u>

North:

all other areas.

Transition:

DE, KS, KY, MD, MO, NJ, VA, WV, southeastern PA,

southern areas of IL, IN, OH,

& Coastal areas of CT, NY, & RI.

South:

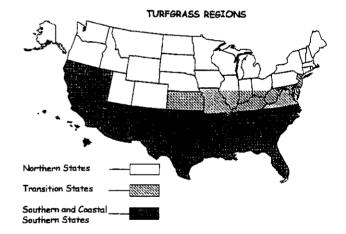
AL, AR, AZ, CA, GA, LA, MS, NC, NM, NV,

OK, SC, TN, & TX

Coastal South:

 ${\sf HI}, {\sf FL}, {\sf \&}$ southern coastal areas of ${\sf AL}, {\sf GA},$

LA, MS, NC, SC, & TX.



Fall Applications

This product can also be applied in the late summer or early fall (late August through November) at the "Program 2" use rates listed in Table 1 to provide control of crabgrass through the early part of the next spring.

The fall application may be followed by an appropriate spring application to provide season-long control.

Tips for Improved Control:

For best results, apply this product within a few days after mowing and delay mowing again for a few days after the application.

When treated lawn or ornamental turf areas are watered or receive significant rainfall within a few days after application of this product, improved weed control may result.

Use of split (half-rate) application spaced 6--8 weeks apart may provide improved weed control.

Control of Other Grass and Broadleaf Weeds Spring Applications

Used as directed for crabgrass control in the spring (Table 1), this product will also control (at the "Program 2" rates) the following weeds when applied prior to their emergence:

Barnyardgrass

Lespedeza (common)

Bluegrass (annual)

Oxalis (buttercup, creeping &

yellow woodsorre!)

Crowfootgrass

Foxtail (yellow & green)

Pursiane (common) Speedwell (corn)

Goosegrass Kikuyugrass

Spurge (prostrat & spotted)

Ryegrass (annual & perennial)

Smutgrass

Fall Applications

Used as directed for late summer or early fall use, for crabgrass control through the early part of the next spring (Table 1), this product will also control (at the "Program 2" rates) the following weeds when applied prior to their emergence:

Bluegrass (annual)

Geranium (Carolina)

Bittercress

Parsley-piert Pineappleweed

Chickweed Henbit

Shepherdspurse

APPLICATION EQUIPMENT AND INSTRUCTIONS

Apply this product with drop or rotary-type spreaders designed to apply granular herbicides. Avoid the use of spreaders that would apply this product in narrow rows or concentrated bands. Before each application, calibrate the spreader according to the equipment manufacturer's directions for adjusting the spreader settings such that the spreader delivers the appropriate application rate recommended above. Apply this product uniformly over the lawn or ornamental turf 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 direction. Avoid streaking, skips, or overlaps during application. Check equipment frequently to ensure equipment is functioning properly and applying a uniform distribution of granules.

Spreader Settings					
Lbs. of product to apply /1,000 sq. ft.					
Spreader	2.86	4.15	5.73	8.51	11.4 lbs.
	lbs.	lbs.	lbs	lbs.	
Cyclone	XXX	XXX	XXX	XXX	XXX
Scotts	XXX	XXX	XXX	XXX	XXX

STORAGE AND DISPOSAL

<u>STORAGE</u>: Store this product only in its original container in a dry, cool, secured storage area. Do not contaminate water, foodstuffs, feed, or seed by storage or disposal.

<u>PRODUCT DISPOSAL</u>: 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.

IF EMPTY: Do not reuse this bag. Place in trash.

IF PARTLY FILLED: Call your local solid waste agency or

1-800-CLEANUP for disposal instructions. Never place unused product down any indoor or outdoor drain.

<u>SPTLL</u>: In case of spill, sweep up and dispose of material according to Product Disposal directions listed above.

TERMS AND CONDITIONS OF USE

If terms of the following Warranty Disclaimer, Inherent Risks of Use, and Limitation of Remedies are not acceptable, return unopened package at once to the seller for a full refund of purchase process paid. Otherwise, use by the buyer or any other user constitutes acceptance of the terms under Warranty Disclaimer, Inherent Risks of Use and Limitations of Remedies.

WARRANTY DISCLAIMER

Seller warrants that this product conforms to the chemical description on the labels and is reasonably fit for the purposes stated on the labels when used in strict accordance with the directions, subject to the inherent risks set forth below. SELLER MAKES NO OTHER EXPRESS OR IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR ANY OTHER EXPRESS OR IMPLIED WARRANTY.

INHERENT RISKS

It is impossible to eliminate all risks associated with use of this product. Plant injury, lack of performance, or other unintended consequences may result because of such factors as use of the product contrary to label instructions (including conditions noted on the label, such as unfavorable temperature, soil conditions, etc.), abnormal conditions (such as excessive rainfall, drought, tornadoes, hurricanes), presence of other materials, manner of application or other factors, all of which are beyond the control of the Seller. All such risks shall be assumed by buyer.

LIMITATION OF REMEDIES

The exclusive remedy for losses or damages resulting from this product (including claims based on contract, negligence, strict liability, or other legal theories), shall be limited to, at Seller's election, one of the following:

- 1. Refund of purchase price paid by buyer or user for product bought, or
- 2. Replacement of amount or product used.

Seller shall not be liable for losses or damages resulting from handling or use of this product unless Seller promptly notifies of such loss or damage in writing. In no case shall Seller be liable for consequential or incidental damages or losses.

The terms of this Warranty Disclaimer and Inherent Risks of Use above and this Limitation of Remedies cannot be varied by any written or verbal statements or agreements. No employee or sales agent of Seller or the Seller is authorized to vary or excess the terms of the Warranty Disclaimer or this Limitation of Remedies in any manner.

Distributed by: Knox Fertilizer Company, Inc. P.O. Box 248 Knox, Indiana 46534

Net Weight XX Pounds (XX kg.)