

Mr. Henry E. Rohland
Lebanon Chemical Corporation
P.O. Box 180, 1600 E. Cumberland Street
Lebanon, Pennsylvania 17042

Dear Mr. Rohland:

**Subject: Lebanon Fertilizer with Dimension® (.19%) Crabgrass Control
EPA Registration No. 961-361
Application Dated February 7, 1994, Label Amendments
and Response to EPA Worker Protection Standard;
Resubmissions Dated March 17, 1994 and April
26, 1994**

The subject amendments reflected in the proposed labeling submitted April 26, 1994 has been reviewed and are acceptable under the Federal Insecticide, Fungicide and Rodenticide Act as amended provided that you:

1. Revise Table 1 on page 6 of 8 to remove the floating asterisk on the word "Rates".
2. Submit five (5) printed copies of the final printed labeling before releasing 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.

Sincerely yours,

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

Enclosure

EWilson:Diskette#ABC11:05-04-94

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2 of 9

LEBANON FERTILIZER WITH DIMENSION® CRABGRASS CONTROL

Dimension® 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 THE SALE OR OTHER COMMERCIAL USE AS SOD, OR FOR COMMERCIAL SEED PRODUCTION, OR FOR RESEARCH PURPOSES.

ACTIVE INGREDIENTS:

*Dithiopyr, 3,5-pyridinedicarbothioic acid, 2-(difluoromethyl)-4-(2-methylpropyl)-6-(trifluoromethyl)-S,S-dimethyl ester	0.19%
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INERT INGREDIENTS:	99.81%
TOTAL	100.00%

*This product contains .095 lb. of the active ingredient, dithiopyr, per 50 lb. bag.

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

* Dimension is a registered trademark of Monsanto Company.

EPA Reg. No. 961-361	(L) (D)	EPA Est. 961-PA-01:961-IL-01
		Superscript used is first letter of lot number.

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.

KEEP OUT OF REACH OF CHILDREN

CAUTION

HARMFUL IF INHALED

See Back Panel for Additional Precautionary Statements

ACCEPTED
with COMMENTS
in EPA Letter Dated

MAY 5 1994

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

961-361

MANUFACTURED BY

Lebanon Chemical Corporation
P.O. Box 180
Lebanon, PA 17042

Page 1 of 3 Pages
961-361

Lebanon Fertilizer with Dimension® Crabgrass Control
04/26/94

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3 of 9

**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.

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 day or night (800) 424-9300.

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.

STORAGE AND DISPOSAL

STORAGE: 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.

PRODUCT 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.

EMPTY CONTAINER DISPOSAL: Do not reuse bag. 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.

SPILL: In case of spill, sweep up material and dispose of material according to "product disposal" directions listed above.

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DIRECTIONS FOR USE

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

For information on use of this product, call 1-800-233-0628.

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.

USE PRECAUTIONS

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.

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

- Bentgrass, creeping* (*Agrostis palustris*)
- 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*)

* 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 turfgrass 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," "Tamaraz," "Tatiana," "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.

Page 3 of 3 Pages

961-361

Lebanon Fertilizer with Dimension Crabgrass Control

04/26/94

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DO NOT apply this product to colonial bentgrass (*Agrostis tenuis*) varieties.

RESEEDING, OVERSEEDING, OR SPRIGGING

Reseeding, overseeding, or sprigging of treated areas within 4 months 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 should be followed. For best results, use mechanical or power seeding equipment (slit seeders) designed to give good seed to soil contact.

GOLF COURSE PUTTING GREENS

DO NOT use this product on golf course putting greens.

OTHER USE PRECAUTIONS

- ✓ 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** apply this product to pastures.
- ✓ Keep people and pets off treated areas until dust has settled.

APPLICATION DIRECTIONS

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. However, it is often difficult to see the very small, early stages of crabgrass in well-established lawns and ornamental turfs. 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.

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6 of 9

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.

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 three 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 the 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.

- ▶ Use Program 1 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.
- ▶ Use Program 2 for preemergence control at sites where (a) turfgrass is cut low (e.g., golf fairways), and (b) turfgrass maintenance or weed control has 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 sites where turfgrass is cut high (e.g., homeowner lawns).
- ▶ Use Program 3 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 sites 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

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789

**Table 1: Recommended Single Application Use Rates*
(Lbs. of this Product per 1,000 Sq. Ft.)**

PROGRAM	1	2	3
USE (turfgrass cut)	PREEMERGENCE (high)	PREEMERGENCE (low) OR POSTEMERGENCE (high)	PREEMERGENCE (low, CR POSTEMERGENCE (low)
REGION			
North	N R ***	2.3	3.0
Transition	2.3	3.0	4.5
South	3.0	4.5	6.0
Coastal South	4.5	6.0	6.0**

- North: All other areas.
- Transition: DE, KS, KY, MD, MO, NJ, VA, southeastern PA, southern areas of IL, IN, OH and coastal areas of CT, NY and RI
- South: AL, AR, AZ, CA, GA, LA, MS, NC, NM, NV, OK, SC, TN and TX
- Coastal South: HI, FL, and southern coastal areas of AL, GA, LA, MS, NC, SC and TX

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

***N.R. - This formulation is not recommended.

Fall Applications

This product can also be applied in the late summer or early fall (late August through November) at the "Program 3" use rates listed in Table 1 to provide control of crabgrass through the early part of the next spring.

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

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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) applications 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, this product will also control (at the "Program 3" rates) or suppress (at the "Program 2" rates) the following weeds when applied prior to their emergence:

- | | |
|-------------------------------|--|
| Barnyardgrass | I. espedeza (common) |
| Bluegrass (annual) | Oxalis (buttercup, creeping & yellow woodsorrel) |
| Crowfootgrass | Purslane (common) |
| Foxtail (yellow & green) * | Speedwell (corn) |
| Goosegrass | Scourge (prostrate & spotted) |
| Kikuyugrass | |
| Ryegrass (annual & perennial) | |
| Smutgrass | |

* Also controlled at the "Program 2" rates.

Fall Applications: Used as directed for late summer or early fall use, for crabgrass control through the early part of the next spring, this product will also control (at the "Program 3" rates) or suppress (at the "Program 2" rates) the following weeds when applied prior to their emergence:

- | | |
|--------------------|---------------------|
| Bluegrass (annual) | Geranium (Carolina) |
| Bittercress | Parsley-piert |
| Chickweed | Pineappleweed |
| Henbit | Shepherdspurse |

APPLICATION EQUIPMENT 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 uniform distribution of granules.



949

LIMIT OF WARRANTY AND LIABILITY

The Manufacturer 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 EXPRESSED 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 (800) 233-0628.

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, application in any manner not explicitly set forth 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.

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