

US ENVIRONMENTAL PROTECTION AGENCY
OFFICE OF PESTICIDES PROGRAMS
REGISTRATION DIVISION (15-767)
WASHINGTON, DC 20460

EPA REGISTRATION NO.

961-362

DATE OF ISSUANCE

Oct 7, 1992

TERM OF ISSUANCE

CONDI' , EXPIRES: January 1, 1995

NAME OF PESTICIDE PRODUCT

Lebanon Fertilizer with Barricade[®]
(0.436) Preemergence Weed Control

NOTICE OF PESTICIDE: REGISTRATION
 REREGISTRATION
(Under the Federal Insecticide, Fungicide,
and Rodenticide Act, as amended)

NAME AND ADDRESS OF REGISTRANT (Include ZIP code)

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

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 a 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 nitrosamine data to fulfill the regulations requiring a discussion of the formation of impurities (Code of Federal Regulations, 40: section 167(b)) within one year of the date of this Notice.
2. Add the phrase "EPA registration No. 961-362" to the label before you release the product for shipment.
3. Submit five (5) copies of the final printed labeling before you release the product for shipment.

and provided that Sandoz Agro, Inc., the manufacturer of the active ingredient of this product, submits the required data to continue the registration of procliamine as listed in the EPA Fact Sheet NO. 231.

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.

enclosure

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

ATTACHMENT IS APPLICABLE

SIGNATURE OF APPROVING OFFICIAL

DATE

Joanne I. Miller Oct 7, 1992

LB. NET WEIGHT
(Kg)

LEBANON FERTILIZER WITH BARRICADE *

PREEMERGENCE WEED CONTROL

FERTILIZER ANALYSIS

| | |
|--|-------|
| Nitrogen (N) | 32% |
| Ammoniacal Nitrogen | 4.0% |
| Urea Nitrogen | 28.0% |
| Available Phosphoric Acid (P ₂ O ₅) | 4% |
| Soluble Potash (K ₂ O) | 6% |

Nutrient Sources: Urea, Nitroform, Monoammonium Phosphate, Muriate of Potash.

Active Ingredient:

*Prodiamine [N³, N³, -Di-n-propyl-2, 4-dinitro-6-(trifluoromethyl)-
-m-phenylenediamine].....

0.43%

Inert Ingredients.....

99.57%

Total.....

with 0.00109%
in EPA Letter Dated

(L) (D)

EPA Reg No. 961-

EPA Est. 961-PA-01:961-IL-01

Superscript Used is First Letter
of Lot Number.

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

*Barricade is the registered trademark for Sandoz Ltd.

For selective preemergence control of grass and broadleaf weeds in established turf
grasses and landscape ornamentals.

Keep Out of Reach of Children CAUTION

See the following section, Precautionary Statements, Hazards To Humans and
Domestic Animals, for additional information.

Lebanon Chemical Corporation
Lebanon, PA

101

**PRECAUTIONARY STATEMENTS
HAZARDS TO HUMANS AND DOMESTIC ANIMALS**

CAUTION

Causes moderate eye injury (irritation). Harmful if inhaled or absorbed through the skin. Avoid contact with skin, eyes, or clothing. Avoid breathing dust. Wash thoroughly with soap and water after handling. Prolonged or frequently repeated skin contact while handling the material may cause allergic reactions in some individuals.

Statements Of Practical Treatment

If in eyes: Flush thoroughly with water for several minutes. Get medical attention if irritation persists.

If on skin: Wash with soap and water. Rinse thoroughly. Get medical attention if irritation persists.

If inhaled: Remove victim to fresh air.

Environmental Hazards

This product has low solubility in water. At the limits of solubility, this product is not toxic to fish. However, at concentrations above the level of water solubility, it may be toxic to fish. Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. Drift and runoff from treated area may be hazardous to aquatic organisms in adjacent sites. Do not contaminate water when disposing of equipment washwaters.

STORAGE AND DISPOSAL

Do not contaminate water, food, or feed by storage or disposal.

STORAGE

Store in original container away from other fertilizer, feed, or food stuffs and separated from other pesticides.

PESTICIDE DISPOSAL

Waste resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

CONTAINER DISPOSAL

Plastic Containers: - Triple rinse (or equivalent). Then offer for recycling or reconditioning, or; puncture and dispose of in a sanitary landfill or at an incineration facility, or; if allowed by state and local authorities, by burning locally. If burned, stay out of smoke.

Paper and Plastic Containers: - Completely empty container into application equipment. Then dispose of empty container in a sanitary landfill or at an incineration facility, or; if allowed by state or local authorities, by burning locally. If burned, stay out of smoke.

Fiber Drums: - Completely empty liner by shaking or tapping sides and bottom to loosen clinging particles. Empty residues into application equipment. Dispose of empty liner in a sanitary landfill or at an incineration facility, if allowed by state and local authorities. If the drum can not be reused, dispose in a sanitary landfill or by incineration if allowed by state and local authorities.

DIRECTION FOR USE

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

This product is a selective preemergence herbicide that provides residual control of many grass and broadleaf weeds in turf grasses and landscapes. This product controls susceptible weeds by inhibiting weed seeds germination and root development. For most effective weed control this product must be incorporated by 1/2 inch of rainfall, irrigation or shallow mechanical incorporation. Incorporation should take place as soon as possible after application and should not be delayed past 14 days from the date of application.

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

Do not apply aerially.

Application Directions

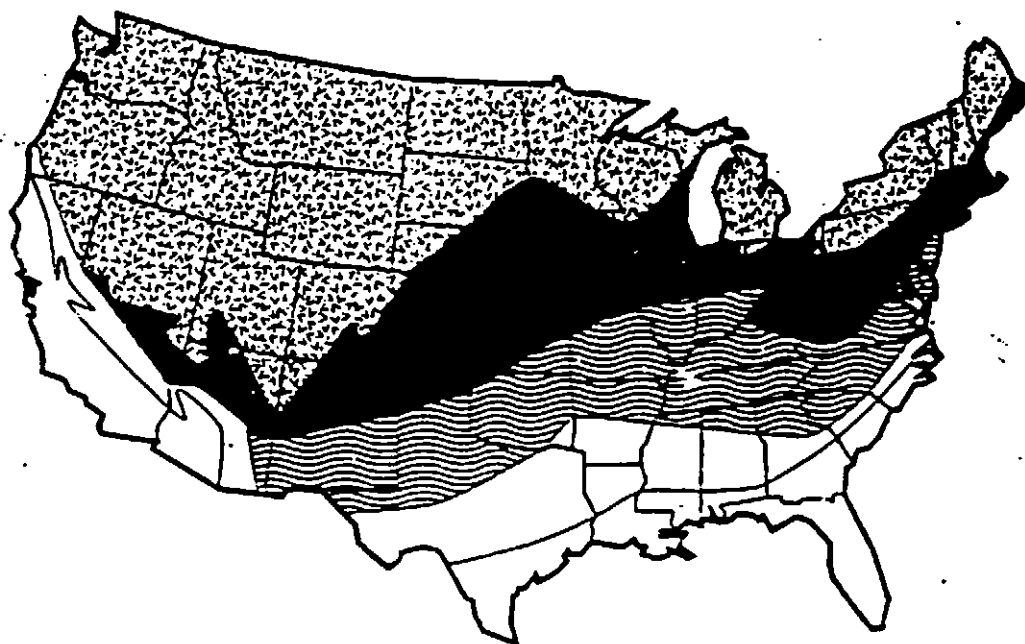
Apply uniformly through suitable, calibrated commercial application equipment.

ESTABLISHED TURF

This product is a selective preemergence herbicide that, when properly applied, will control certain grass and broadleaf weeds in established grass turf. The species of turf grass determines the maximum amount of material that may be applied during a year.

Most effective weed control in turf grasses will be obtained when this product is activated by at least 1/2 inch of rainfall or irrigation within 14 days after application and prior to weed germination. See the map below for approximate crabgrass germination dates.

CRABGRASS SEED GERMINATION DATES



Approximate Date

After May 30

After May 10

After April 20

After March 20

January 1 to March 20

Foxtails (yellow, green) tend to germinate before crabgrass; therefore, if targeting foxtails apply this product three (3) weeks before the corresponding crabgrass germination date.

Use Precautions

The following use precautions apply to the use of this product in turf grasses:

Application of this product may thin emerged annual bluegrass and newly over-seeded grasses.

Do not apply to FALL SEEDED TURF until the following spring, and only after the second mowing.

Do not apply to SPRING SEEDED TURF or to newly set sod until the following year.

Application of this product to turf stressed by drought, low fertility, or pest damage may result in turf injury.

Do not apply this product to tees or greens, or to areas where dichondra, colonial bentgrass, velvet bentgrass, or annual bluegrass (Poa annua) are desirable species.

Maximum Annual Rates

This product should not be applied above a maximum annual rate of 350 lbs./acre or 1.5 lbs. active ingredient per acre.

Turf Species and Rates

For season long control this product may be applied as a single application, or if needed followed by a second application for increased length of control. The length of time of residual weed control provided by this product is related to the rate applied. Use the higher rate within the listed range for longer control. Longer control is desirable in areas where crabgrass germinates between January 1 and April 20 (See Crabgrass Seed Germination Data Map).

Select maximum use rate based on turf grass species. All applications must be made prior to germination of the target weed seeds.

The rates listed in the table below are for weed control of approximately 2-6 months.

Turf Species and Rates Table:

Minimum And Maximum Rate Of This Product Per Calendar Year

| Turf Species: | Lbs./Acre | Lbs./1000 Sq. Ft. |
|--|-----------|-------------------|
| Bermudagrass | 75 - 350 | 1.7 - 8.0 |
| Centipedegrass | | |
| Seashore Paspalum | | |
| Tall Fescue | | |
| Zoysia | | |
| Perennial Bluegrass | 75 - 232 | 1.7 - 5.3 |
| Perennial Ryegrass | | |
| Creeping Red Fescue | 75 - 172 | 1.7 - 4.0 |
| St. Augustinegrass | | |
| Creeping Bentgrass min. 1/2 inch height | 75 - 154 | 1.7 - 3.5 |
| Bermudagrass newly sprigged or plugged ¹ | 75 - 121 | 1.7 - 2.8 |

¹ Suppression only of Foxtail, Goosegrass and Rescuegrass due to reduced product rates.

- Do not apply more than 175 lbs. of this product per application.
- Do not make more than 2 applications per calendar year.
- Do not apply more than 350 lbs. of this product per calendar year.
- If making two applications, wait at least 60 days after the 1st application before making a second application.
- Use higher rates of this product to achieve higher levels of fertility and weed control for each turf type.

Weeds Controlled

When used at the recommended rates (see Turf Species and Rates Table) this product will control:

| | |
|-------------------------------|----------------------------|
| Annual Bluegrass | Knotweed |
| Common Chickweed ¹ | Oxalis |
| Crabgrass (Large, Smooth) | Prostrate Spurge |
| Foxtails (Yellow, Green) | Rescuegrass ³ |
| Goosegrass ² | Shepardspurge ¹ |
| Henbit | |

¹ Fall Application.

² For the best control of goosegrass apply 175 lbs. / A. Sixty (60) days later make a second application with 58 to 175 lbs./A of product (see information in Turf Species and Rates section above).

³ Suppression only.

Overseeding / Reseeding

This product will inhibit the germination of turf species if overseeded/reseeded too soon after application. The interval between application and overseeding/reseeding is dependent on the application rate, soil temperature, and soil moisture. A shorter interval is possible if growing conditions are warm and wet, while a longer interval is needed if conditions are cool and dry.

Use the Overseeding/Reseeding Intervals Table below as a guide when choosing the appropriate overseeding/reseeding interval for each situation.

Overseeding/Reseeding Intervals Table:

| Product Rate | Overseeding/Reseeding Interval (months) Based Upon Seeding Method and Predominate Soil Conditions for the Season | | | |
|--------------|--|------------|---------------|------------|
| | Broadcast Seeding | | Drill Seeding | |
| | Wet & Warm | Cool & Dry | Wet & Warm | Cool & Dry |
| 75 - 116 | 4 | 6 | 3 | 4 |
| 121 - 233 | 8 | 12 | 6 | 8 |
| 237 - 350 | 12 | 18 | 9 | 12 |

LANDSCAPE ORNAMENTALS

This product herbicide will not harm most established ornamental trees, shrubs and flowers when applied to surrounding areas in accordance to the directions given in the Turf Species and Rates section. The following species have shown tolerance to Barricade.

Scientific Name

Common Name

| | |
|----------------------------------|---------------------------|
| <i>Acer Palmatum</i> | Japanese Maple |
| <i>A. platanoides</i> | Norway Maple |
| <i>Actinidia chinensis</i> | Kiwi* |
| <i>Agapanthus africanus</i> | Lily-of-the-Nile |
| <i>Arctostaphylos densiflora</i> | Vine Hill Manzanita |
| <i>Arctotheca calendula</i> | Cape Weed |
| <i>Aucuba japonica</i> | Japanese Aucuba |
| <i>Barberis gladwynensis</i> | |
| <i>B. julianae</i> | Wintergreen Barberry |
| <i>B. mentorensis</i> | Mentor Barberry |
| <i>B. thunbergii</i> | Japanese Barberry |
| <i>B. verruculosa</i> | Warty Barberry |
| <i>Buxus microphylla</i> | Japanese Boxwood |
| <i>Callistemon viminalis</i> | Weeping Bottlebrush |
| <i>Calluna vulgaris</i> | Scotch Heather |
| <i>Carpobrotus edulis</i> | Hottentot Fig (Ice Plant) |
| <i>Cassia artemisoides</i> | Feathery Cassia |
| <i>Ceanothus rigidus</i> | Wild Lilac |
| <i>Chamaecyparis pisifera</i> | False Cypress |
| <i>Cleyeta japonica</i> | Cleyera |
| <i>Cornus florida</i> | Flowering Dogwood |
| <i>C. stolonifera</i> | American Dogwood |
| <i>Cortaderia selloana</i> | Pampas Grass |
| <i>Cotoneaster apiculatus</i> | Cranberry Cotoneaster |
| <i>C. buxifolius</i> | |
| <i>C. dammeri</i> | Bearberry Cotoneaster |
| <i>C. microphyllus</i> | Rockspray Cotoneaster |
| <i>Cupressus sempervirens</i> | Italian Cypress * |
| <i>Delasperma alba</i> | White Trailing Ice Plant |
| <i>Dodonea viscosa</i> | Hop Bush |
| <i>Elaeagnus pungens</i> | Silverberry |
| <i>Euonymus fortunei</i> | Wintercreeper |

*Ornamental species only. Do not use on food producing trees or vines.

| <u>Scientific Name</u> | <u>Common Name</u> |
|--------------------------------|--------------------------|
| <i>E. japonica</i> | Evergreen Euonymus |
| <i>E. kiautschovica</i> | Spreading Euonymus |
| <i>Fatsia japonica</i> | Japanese Aralia |
| <i>Forsythia intermedia</i> | Border Forsythia |
| <i>F. viridissima</i> | Greenstem Forsythia |
| <i>Gardenia jasminoides</i> | Gardenia, Cape-Jasmine |
| <i>Hedera helix</i> | English Ivy |
| <i>Hibiscus rosa-sinensis</i> | Chinese Hibiscus |
| <i>Ilex cornuta</i> | Chinese Holly |
| <i>I. crenata</i> | Japanese Holly |
| <i>I. opaca</i> | American Holly |
| <i>I. pernyi</i> | |
| <i>Jasminium nudiflorum</i> | Winter Jasmine |
| <i>Juniperus chinensis</i> | Chinese Juniper |
| <i>J. conferta</i> | Shore Juniper |
| <i>J. horizontalis</i> | Creeping Juniper |
| <i>Juglans sp.</i> | Walnut * |
| <i>Justicia brandegeana</i> | Shrimp Plant |
| <i>Lagerstromia indica</i> | Crepe Myrtle |
| <i>Ligustrum amurense</i> | Amur Privet |
| <i>L. japonicum</i> | Japanese Privet |
| <i>L. lucidum</i> | Glossy Privet |
| <i>Liriope muscari</i> | Big Blue Lily Turf |
| <i>Lonicera japonica</i> | Japanese Honeysuckle |
| <i>L. tatarica</i> | Tatarian Honeysuckle |
| <i>Maleophora luteola</i> | Ice Plant |
| <i>Malus sp.</i> | Crabapple* |
| <i>Nandina domestica</i> | Heavenly Bamboo |
| <i>Olea europa</i> | Olive* |
| <i>Ophiopogon japonicus</i> | Mondo Grass |
| <i>Osteospermum fruticosum</i> | Trailing African Daisy |
| <i>Oxydendrum arboreum</i> | Sourwood |
| <i>Persea americana</i> | Avocado* |
| <i>Photinia fraseri</i> | Fraser's Photinia * |
| <i>Picea abies</i> | Norway Spruce |
| <i>Pieris japonica</i> | Lily-of-the-Valley Shrub |

*Ornamental species only. Do not use on food producing trees or vines.

Scientific Name

Common Name

| | |
|----------------------------------|---|
| <i>Pinus brutia</i> | Calabrian Pine |
| <i>P. canariensis</i> | Canary Island Pine |
| <i>P. halepensis</i> | Aleppo Pine |
| <i>P. nigra</i> | Austrian Black Pine |
| <i>P. radiata</i> | Monterey Pine |
| <i>P. thunbergiana</i> | Japanese Black Pine |
| <i>P. strobus</i> | Eastern White Pine |
| <i>P. sylvestris</i> | Scotch Pine |
| <i>Pistachio sp.</i> | Pistachio* |
| <i>Pittosporum rhombifolium</i> | Queensland Pittosporum |
| <i>P. tobira</i> | Mock Orange |
| <i>Podocarpus macrophyllus</i> | Japanese Yew |
| <i>Prunus laurocerasus</i> | English Laurel |
| <i>Prunus sp.</i> | Almond, Apricot, Nectarine, Peach, Plum and Prune* |
| <i>Pyracantha coccinea</i> | Firethorn |
| <i>P. fortuneana</i> | Firethorn |
| <i>P. koidzumii</i> | Firethorn |
| <i>Pyrus sp.</i> | Bradford Pear sp. |
| <i>Quercus rubra</i> | Red Oak |
| <i>Raphiolepis indica</i> | Indian Hawthorn |
| <i>Rhododendron</i> | 'Coral Bells' |
| <i>(including Azalea)</i> | 'Formosa' |
| | 'Hino-crimson' |
| | 'PJM' |
| | 'Roseum Elegans' |
| <i>Rosa banksiae</i> | Lady Bank's Rose |
| <i>Rosemarinus officinalis</i> | Rosemary |
| <i>Santolina virens</i> | |
| <i>Sedum album</i> | Stonecrop |
| <i>Syzygium paniculatum</i> | Japanese Boxcherry |
| <i>Taxus Cuspidata</i> | Japanese Yew |
| <i>T. media</i> | Yew |
| <i>Thuja occidentalis</i> | American Arborvitae |
| <i>Trachelospermum asiaticum</i> | Star Jasmine |
| <i>Tsuga canadensis</i> | Canada Hemlock |
| <i>Viburnum japonicum</i> | Japanense Viburnum |
| <i>V. odoratissimum</i> | Sweet Viburnum |

*Ornamental species only. Do not use on food producing trees or vines.

Scientific Name

Common Name

V. plicatum

Japanese Snowball

V. rigidum

Canary Island Viburnum

V. tinus

Laurustinus

V. trilobium

Cranberry Bush

V. wrightii

Dwarf Perwinkle

Vinca minor

Grape*

Vitis sp.

Old Fashioned Weigela

Weigela florida

Spanish Bayonet

Yucca aloifolia

Yucca,

Y. filamentosa

Adam's Needle

* Ornamental tree species only - not for use on food producing trees or vines.

11/15

**LIMITED WARRANTY
AND LIMITATION OF LIABILITY**

NOTICE. Read this Limitation of Warranty and Limitation of Liability before buying or using this product. If the terms are not acceptable, return the product at once, unopened, and the purchase price will be refunded.

It is impossible to eliminate all risks inherently associated with the use of this product. Crop injury, ineffectiveness, or other unintended consequences may result because of such factors as weather conditions, presence of other materials, or the manner of use or application, all of which are beyond the control of Lebanon Chemical Corporation or seller. All such risks shall be assumed by buyer or user.

Lebanon Chemical Corporation warrants that this product conforms to the chemical description on the label and is reasonably fit for the purpose stated in the Directions of Use, under normal conditions, subject to the risks described above. **LEBANON CHEMICAL CORPORATION MAKES NO OTHER EXPRESS OR IMPLIED WARRANTY OF FITNESS OR OF MERCHANTABILITY OR ANY OTHER EXPRESS OR IMPLIED WARRANTY.** In no event shall Lebanon Chemical Corporation or seller be liable for any incidental, consequential or special damages resulting from the use or handling of this product.

Lebanon Chemical Corporation offer this product, and buyer and user accept it, subject to the foregoing limitations of warranty and limitation of liability, which may not be modified by any oral or written agreement.

**LEBANON TURF PRODUCTS
P.O. BOX 180
LEBANON, PA 17042**

Lebanon Turf Products is a division of Lebanon Chemical Corporation.