# BEST AVAILABLE COFT

1

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

Dear Mr. Ronland:

Subject: Lebanon Fertilizer with Barricade Presnergence weed Control (0.43%) EPA Registration No. 961-362 Lebanon Fertilizer with Barricade Preemergence weed Control (0.65%) PPA Registration No. 361-363 Lebanon Pertilizer with Zarricade Preemergence weed Control (0.22%) EPA Registration No. 961-364 Lebanon Pertilizer with Barricaue Preenergence weed Control (0.344) SPA Registration No. 961-365 / Lepanon Fertilizer with Barricade Preenergence weed Control (0.29%) EPA Registration Ro. 961-367 Application Dated Schober 27, 1994, Request To Update Label to Match the Barricade & Dabel for EPA Registration Ro. 55947-144 and Your Letter Dated December 1994, Request for Extension of Conditional Registration for Each of These Products

This is in response to your request to amend the labels of the subject pesticide product registrations under the Pederal Insecticide, Fungicide and Rodenticide Act (PIFNA) as amended to reflect the Barricade\* Flabel has been review and is acceptable provided that your

- 1. Revise the expression of dosage in foot note ! under the listing of the section entitled: "Needs Controlled", to give the dosages in a consistent order from low to high.
- 2. Subsit one (1) printed copy of the final printed label before releasing the product for shipment under the enclosed stamped latel.

It these con trong are not complied with, the registration will be subject to cancellation in accordance with FIFRA,

Mr. Kenry E. Rohland Lebenon Chemical Corporation P.C. Mox 180, 1660 t. Cumberland Street Lebenon, Pennsylvania 17042

Dear Mr. Roblands

Subject: Labanon Fartilizer with Berricade Proesergence weed Control (0.43%) EPA Registration No. 961-362 Lebanon Pertilizer with Barricade Preemeroence Weed Control (0.65%) EPA Registration so. 961-363 Lebanon Fertilizer with Satricade Preemergence weed Central (0.224) EPA Registration so. 961-364 Lebanon Pertilizer with Barricade Preesergence weed Control (0.3%%) EPA Registration No. 461-365 Lubanon Fertilizer with sarricade Preemergence weed Control (0.25%) EPA Registration No. 961-367 Application Dated October 27, 1994, Request To Opdate Label to Match the Barricade ? Label for EPA Registration No. 55947-144 and Your Letter Dated December 1994, Request for Extension of Conditional Registration for Each of These Products

Your request to amend the labels of the subject posticide registrations under the Federal Insecticide, Fungicide and Rodent-icide Act (FIFRA), as asended, to reflect the Barricade P Label has been reviewed and is acceptable under the Act provided that your

- 1. Revise the expression of dosage in foot note 1 under the listing of the section entitled: "weeds Controlled", to give the dosages in a consistent order from low to high.
- 2. Submit one (1) printed copy of the final printed label before releasing the product for enipsent under the enclosed stamped label.

If those conditions are not complied with, the registration will be subject to cancellation in accordance with FIPHA,

BEST AVAILABLE COPY

12h Word 1-ans

## LEBANON FERTILIZER WITH BARRICADE® 0.38% PREEMERGENCE WEED CONTROL

**ACTIVE INGREDIENT:** 

Prodiamine: [N3,N3-Di-n-propyl-2,4-dinitro-6-(trifluoromethyl)-m-

0.38% 

**Guaranteed Fertilizer Analysis:** 

ACCEPTED with COMMENTS In EPA Letter Dated

Nitrogen

32 % (N)

**Phosphorus** 

4 %  $(P_2O_5)$ 

Potassium

}

)

 $(K_2O)$ 

Nitrogen from: Urea formaldehyde, Urea, Ammonia

Under the Federal Insecticide. Fundicide, and Rodenticide Act as amended for the pesticide registered under EPA Rcg. No. 961-365

JAN 1 0 1995

For selective preemergence control of grass and broadleaf weeds in:

- established turf grasses (excluding golf course putting greens) and lawns
- landscape ornamentals (including perennial & wildflower plantings)

#### **KEEP OUT OF REACH OF CHILDREN**

### CAUTION

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

Net Weight:

EPA Reg. No. 961-365

EPA Est. No.

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

BARRICADE® is a Registered Trademark of Sandoz, Ltd.

#### 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 areas 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**

)

1

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

### PESTICIDE DISPOSAL

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

### **CONTAINER DISPOSAL**

<u>Plastic Containers</u>: 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 and local authorities, by burning locally. If burned, stay out of smoke.

<u>Fiber Drums:</u> Completely empty liner by shaking and 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 cannot be reused, dispose of in a sanitary landfill or by incineration if allowed by state and local authorities.

### **DIRECTIONS 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 0.5 inch of rainfall or irrigation. Incorporation should take place as soon as possible after application and should not be delayed past 14 days from the date of application.

Not for use on plants being grown (1) for sale or other commercial use, (2) for commercial seed production, or (3) for research purposes. For use on plants intended for eesthetic purposes or climatic modification and being grown in ornamental gardens or parks, or on golf courses or lawns and grounds.

Do not graze or feed livestock forage cut from areas treated with this product.

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

Do not apply aerially.

)

Do not apply to golf course putting greens.

### **Application Directions**

Apply uniformly through suitable, calibrated commercial application equipment.

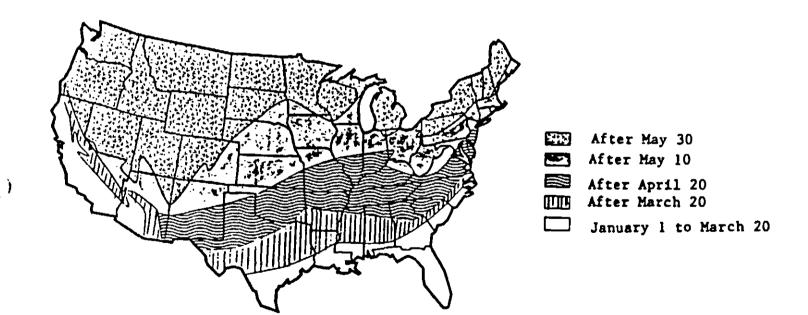
### **ESTABLISHED TURF**

This product is a selective preemergence herbicide that, when properly applied, will control certain grass and broadleaf weeds in established turf grass and lawns. 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 0.5 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



#### **Use Precautions**

)

١

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

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

Do not apply to OVERSEEDED TURF for 60 days after seeding or until after the second mowing, which ever is longer. Injury to desirable seedlings is likely if this product is applied before seedling secondary roots are in the second inch of soil, not thatch plus soil.

Do not apply 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.

Disturbing the herbicide barrier with cultural practices such as disking may result in reduced weed control.

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

#### **Maximum Annual Rates**

This product should not be applied above a maximum annual rate of 395 lb/A

#### **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. This product will not control established weeds.

### Turf Species and Rates Table:

)

)

MAXIMUM RATE/CALENDAR YEAR of LEBANON FERTILIZER WITH BARRICADE 0,38% PREEMERGENCE WEED CONTROL by Turf Grass Species <sup>1</sup>				
Turf Species:	Ib LEBANON FERTILIZER WITH BARRICADE 0.38%/A			
Bermudagrass <sup>2</sup> Bahiagrass Centipedegrass Seashore Paspalum Tall Fescue (including turf-type) Zoysia	395	1.5		
Buffalograss Kentucky Bluegrass Perennial Ryegrass	263	1.0		
Creeping Red Fescue St. Augustinegrass	195	0.75		
Creeping Bentgrass	174	0.65		

<sup>1</sup> These are the maximum rate per calendar year by species limitations.

May be used on newly sprigged or plugged Bermudagrass at rates not to exceed 337 lb/A. Newly sprigged or plugged Bermudagrass stolon rooting may be temporarily retarded. Suppression only of Foxtail, Goosegrass and Rescuegrass due to reduced product rates used in sprigging situations.

- Do not apply more than 395 lb of this product per calendar year.
- 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:

Barnyardgrass
Bluegrass, Annual (Poa annua)
Crabgrass (large, smooth)
Foxtails, Annual
Goosegrass<sup>1</sup>
Johnsongrass (from seed)
Rescuegrass<sup>3</sup>
Signalgrass, Broadleaf

Carpetweed
Chickweed, Common
Henbit
Knotweed
Lambsquarter, Common
Pigweed
Purslane, Common
Shepard's-purse<sup>2</sup>
Spurge, Prostrate
Woodsorrel, Yellow (from seed)

Do not exceed the maximum annual application rates recommended for the turf species. All applications must be made prior to germination of weed seeds. This product will not control established weeds.

In many areas a single application of 174 to 395 lb/A of this product will control goosegrass. However, under heavy goosegrass pressure and/or an extended growing season, make an initial application of 174 to 263 lb/A followed after 60 to 90 days by a second application of 221 to 137 lb/A, respectively, for season long goosegrass control. Do not exceed the maximum rate for turf grass species listed in the Maximum Annual rate Table above.

Winter weeds are best controlled by applications made prior to germination: late summer, fall or winter timings.

<sup>&</sup>lt;sup>3</sup> 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:

This Product Rate (lbs./A)	Overseeding/Reseeding Interval (months) Based Upon Seeding Method and Predominant Soil Conditions for the Season				
	Broadcast Seeding		Drill Seeding		
	Wet and Warm	Cool and Dry	Wet and Warm	Cool and Dry	
137	4	6	3	4,	
263	8	12	6_	8	
395	12	18	9	12	

### **LANDSCAPE ORNAMENTALS** (including Perennial and Wildflower Plantings)

This product may be applied for residual preemergence weed control in ornamentals.

#### **Use Rates**

)

)

Apply this product at 174 to 395 lb/A in fall and/or spring. Use the higher rate of application for longer control periods. Sequential or single applications are allowed so long as the total amount of product applied does not exceed the maximum annual application rate of 395 lb/A.

### **Application Timing and Information**

Apply this product prior to weed seed germination to the soil surface surrounding established tolerant ornamentals listed below. Delay application to allow soil to settle around new transplants and water thoroughly before applying this product. Apply this product after cuttings form roots and become established.

This product is a preemergence harbicide and will not control emerged weeds. Most effective weed control in ornameritals will be obtained when this product is activated by at least 0.5 in of rainfall or irrigation, or with shallow (1 to 2 in) mechanical incorporation, before weed seeds germinate. Acceptable control will be obtained when this product is activated within 14 days after application.

Best weed control is obtained when this product is applied to soil free of clods, weeds, and debris such as leaves and mulch. Prior to application of this product, control existing vegetation by hand weeding, cultivation or the use of an appropriate postemergence herbicide.

1

### **Tolerant Ornamental Species**

This product will not harm most established ornamental trees, shrubs and flowers. The species listed below are tolerant to this product. Best results will be obtained when this product is uniformly applied to the soil surface; avoid applying to ornamental shoots which may defeat the effort to get uniform distribution on the soil surface. This product may be applied over the top of these species without injury.

### Scientific name

#### Common name

Acer palmatum

A. platanoides
Actinidia chinensis
Agapanthus africanus
Arctostaphylos densiflora
Arctotheca calendula
Aucuba japonica
Barberis gladwynensis

B. julianae
B. mentorensis
B. thunbergii
B. verruculosa
Buxus microphylla
Callistemon viminalis
Calluna vulgaris
Carpobrotus edulis
Cassia artemisoides
Ceanothus rigidus
Chamaecyparis pisifera

..)

)

Cleyera japonica
Citrus spp.
Cornus florida
C. stolonifera
Cortaderia selloana
Cotoneaster apiculatus

C. buxifolius
C. dammeri
C. microphyllus
Cretaegus spp.

Cupressus sempervirens

Delasperma a!ba Dodonea viscosa Elaeagnus pungens Euonymus fortunei

E. japonica

E. kiautschovica Fatsia japonica Forsythia intermedia

F. viridissima

Gardenia jasminoides

Hedera helix

Hibiscus rosa-sinensis

Ilex cornuta I. crenata I. opaca I. pernyi Japanese Maple Norway Maple

Kiwi\*

Lily-of-the-Nile Vine Hill Manzanita

Cape Weed

Japanese Aucuba

Barberry

Wintergreen Barberry
Mentor Barberry
Japanese Barberry
Warty Barberry
Japanese Boxwood
Weeping Bottlebrush
Scotch Heather

j : .:

Hottentot Fig (Ice Plant)

Feathery Cassia Wild Lilac False Cypress

Cleyera

Citrus species\*
Flowering Dogwood
American Dogwood

Pampas Grass

Cranberry Cotoneaster

Cotoneaster

Bearberry Cotoneaster Rockspray Cotoneaster

Hawthorne\*
Italian Cypress

White Trailing Ice Plant

Hop Bush Silverberry Wintercreeper

Evergreen Euonymus
Spreading Euonymus
Japanese Arelia
Border Forsythia
Greenstem Forsythia

Greenstem Forsythia Gardenia, Cape-Jasmine

English Ivy Chinese Hibiscus Chinese Holly Japanese Holly American Holly

Holly

### Scientific name

#### Common name

Jasminium nudiflorum Juniperus chinensis

J. conferta
J. horizontalis
Juglans sp.

Justicia brandegeana Lagerstromia indica Ligustrum amurense

L. japonicum L. lucidum Liriope muscari Lonicera japonica

L. tatarica

Maleophora luteola

Malus sp.

)

)

Nandina domestica

Olea europa

Ophiopogon japonicus
Osteospermum fruticosum
Oxydendrum arboreum

Persea americana
Photinia fraseri
Picea abies
Pieris japonica
Pinus brutia
P. canariensis

P. nigra P. radiata

P. thunbergiana

P. halapensis

P. strobus P. sylvestris Pistachio sp.

Pittosporum rhombifolium

P. tobira

Podocarpus macrophyllus Prunus laurocerasus

Prunus sp.

Pyracantha coccinea

P. fortuneana
P. koidzumii
Pyrus sp.
Quercus rubra
Raphiolepis indica

Winter Jasmine Chinese Juniper Shore Juniper Creeping Juniper

Walnut\*
Shrimp Plant
Crepe Myrtle
Amur Privet
Japanese Privet
Glossy Privet
Big Blue Lily Turf

Japanese Honeysuckle Tatarian Honeysuckle

Ice Plant Crabapple\*

Heavenly Bamboo

Olive\*

Mondo Grass

Trailing African Daisy

Sourwood Avocado\*

Frasier's Photinia Norway Spruce

Lily-of-the-Valley Shrub

Calabrian Pine
Canary Island Pine
Alappa Pina

Aleppo Pine

Austrian Black Pine Monterey Pine

Japanese Black Pine Eastern White Pine

Scotch Pine Pistachio\*

Queensland Pittosporum Japanese Pittosporum

Japanese Yew English Laurel

Almond, Apricot, Nectarine, Peach,

Plum and Prune\*

Firethorn Firethorn

Bradford Pear sp.

Red Oak

Indian Hawthorne

Scientific name	Common name
Rhododendron	'Coral Bells'
(including Azalea)	'Formosa'
·	'Hino-crimson'
	'PJM'
	'Roseum Elegans'
Rosa banksiae	Lady Bank's Rose
Rosmarinus officinalis	Rosemary
Santolina virens	
Sedum album	Stonecrop
Syzygium paniculatum	Japanese Boxcherry
Taxus cuspidata	Japanese Yew
T. media	Yew
Thuja occidentalis	American Arborvitae
Trachelospermum asiatum	Star Jasmine
Tsuga canadensis	Canada Hemlock
Viburnum japonicum	Japanese Viburnum
V. odoratissimum	Sweet Viburnum
V. plicatum	Japanese Snowball
V. rigidum	Canary Island Viburnum
V. tinus	Laurustinus
V. trilobium	Cranberry Bush
V. wrightii	
Vinca minor	Dwarf Periwinkle
Vitis sp.	Grape *
Weigela florida	Old Fashioned Weigela
Yucca aloifolia	Spanish Bayonet
Y. filamentosa	Yucca, Adam's Needle

)

)

<sup>\*</sup>Ornamental species only. Do not use on food producing trees or vines.

### LIMITATION OF 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 the manufacturer or seller. All such risks shall be assumed by buyer or user.

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

)

)

The manufacturer and seller 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.

