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# LEBANON FERTILIZER WITH BARRICADE PREEMERGENCE WEED CONTROL

#### ACTIVE INGREDIENT:

Guaranteed Fertilizer Analys :

Nitrogen 32 % (N) Phosphorus 4 %  $(P_2O_5)$ Potassium 6 %  $(K_2O)$ 

Nitrogen from: Urea formaldcayde, Urea, Ammonia

ACCEPTED

27 SEP 1993
Under the Federal Insecticide,
Fungicide, and Endonstriae Act.

261-364

For selective preemergence control of grass and broadleaf weeds in established turf grasses (excluding golf course putting greens), lawns and landscape ornamentals.

KEEP OUT OF REACH OF CHILDREN

#### CAUTION

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

Net Weight:

EPA Reg. No. 961-364 EPA Est. No. 961-PA-01 EPA Est. No. 961-IL-01

Lebanon Chemical Corp.
P.O. Box 4139
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

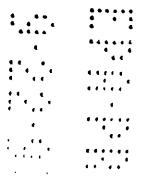
If in eyes: Flush thoroughly with water for several minutes. Get medical attention if irritation persists.

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 cf water solubility, it may be toxic to fish. For terrestrial use, 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.



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#### 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

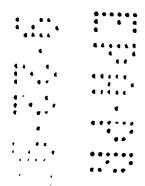
Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

#### 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.

<u>Paper and plastic containers:</u> 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.



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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.

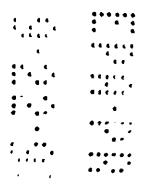
This product is a selective preemergence herbicide that provides residual control of many grass and broadleaf weeds in turf grasses and landscapes. This product controls susceptible weeds by inhibiting weed seeds germination and root development. For most effective weed control this product must be incorporated 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.

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 aesthetic purposes or climatic modification and being grown in ornamental gardens or parks, or on golf courses or lawns.

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.

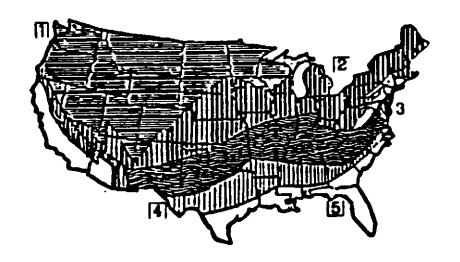
#### ESTABLISHED TURF

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.

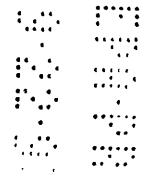
Most effective weed control in turf grasses will be obtained when this product is activated by at least 1/2 inch of rainfall or irrigation within 14 days after application and prior to weed germination. See the map below for approximate crabgrass germination dates.

CRABGRASS SEED GERMINATION DATES

Approximate Date



I After May 30
IIIE 2 After May 10
III 3 After April 20
III 4 After March 20
III 5 Jan 1 to Mar 20



#### Use Precautions

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.

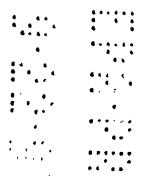
Do not apply to OVERSEEDED TURF for 60 days after seeding or until after the second mowing, which ever is longer. Injury to desirable seedlings is likely if this product is applied before seedling secondary roots are in the second inch of soil, not thatch plus soil.

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 (Poa annua) are desirable species.



#### Maximum Annual Rates

This product should not be applied above a maximum annual rate of 682 lbs./A or 15.3 lbs. 1000 ft<sup>2</sup>.

## 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.

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

Turf Species and Rates Table:

Turf Species:	Maximum Rate of this product Per Calendar Year Lbs./A (Lbs./1000 ft²)  682 (15.3)		
Bermudagrass* Centipedegrass Seashore Paspalum Tall Fescue (including turf-type) Zoysia			
Kentucky Bluegrass Perennial Ryegrass	454 (10.2)		
Creeping Red Fescue St. Augustinegrass	336 (8)		
Creeping Bentgrass	300 (6.8) { ,'',		

<sup>\*</sup> May be used on newly sprigged or plugged Bermudagrass at rates not to exceed 236 lbs. product per acre or 5.1 lbs. product per 1000 ft<sup>2</sup>. On newly sprigged or plugged Bermudagrass temporary slowing of stolon rooting may cccur. Suppression only of Foxtail, Goosegrass and Rescuegrass due to reduced product rates used in sprigging situations.

- Do not apply more than 341 lbs. of this product per application.
- Do not apply more than 682 lbs. of this product per calendar year.
- If making more than one application, do not apply more than 341 lbs. of this product within any 60 day period.
- 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:

Crabgrass (large, smooth)
Annual Bluegrass (Poa annua)
Goosegrass1

Annual Foxtails
Barnyardgrass
Broadleaf Signalgrass
Johnsongrass (from seed)
Rescuegrass3

Carpetweed
Common Chickweed
Common Lambsquarter
Common Purslane
Henbit
Knotweed
Pigweed
Prostrate Spurge
Shepardspurse2
Yellow woodsorrel(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.

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

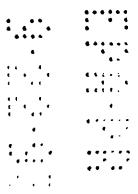
<sup>1.</sup> In many areas a single application of 300 to 336 lbs/Acre of this product will control goosegrass. However, under heavy goosegrass pressure and/or an extended growing season, apply an initial treatment of 336 lbs/Acre followed after 60 days with a second treatment of 109 to 336 lbs/Acre for season long goosegrass control.

## 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	
236	6	3	4		
454	8	12	6	8	
682	12	18	9	12	



#### LANDSCAPE ORNAMENTALS

This product is recommended for use on landscape ornamentals. Do not apply more than 336 lbs./A in any 60 day interval, and do not exceed the maximum rate per calendar year of 682 lbs./A.

This product will not harm most established ornamental trees, shrubs and flowers. The following species have shown tolerance to this product:

#### Scientific 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

Cornus florida

C. stolonifera

Cortaderia selloana

Cotoneaster apiculatus

C. buxifolius

C. dammeri

C. microphyllus

Cupressus sempervirens

Delasperma alba

Dodonea viscosa

Elaeagnus pungens

Euonymus fortunei

#### Common name

Japanese Maple
Norway Maple
Kiwi\*
Lily-of-the-Nile
Vine Hill Manzanita
Cape Weed
Japanese Aucuba

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Wintergreen Barberry Mentor Barberry Japanese Barberry Warty Barberry Japanese Boxwood Weeping Bottlebrush Scotch Heather Hottentot Fig (Ice Plant) Feathery Cassia Wild Lilac False Cypress Cleyera Flowering Dogwood American Dogwood Pampas Grass Cranberry Cctoneaster

Bearberry Cotoneaster
Rockspray Cotoneaster
Italian Cypress
White Trailing Ice Plant
Hop Bush
Silverberry
Wintercreeper

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

E. japonicaE. kiautschovica Fatsia japonica Forsythia intermedia F. viridissima Gardenia jasminoides Hedera helix Hibiscus rosa-sinensis Ilex cornuta I. crenata I. opaca I. pernyi 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

Evergreen Euonymus
Spreading Euonymus
Japanese Aralia
Border Forsythia
Greenstem Forsythia
Gardenia, Cape-Jasmine
English Ivy
Chinese Hibiscus
Chinese Holly
Japanese Holly
American Holly

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

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

## Scientific name

## Common name

Pinus brutia
P. canariensis
P. halepensis
P. nigra
P. radiata
P. thunbergiana
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
Rhododendron
(including Azalea)

Rosa banksiae
Rosmarinus officinalis
Santolina virens
Sedum album
Syzygium paniculatum
Taxus cuspidata
T. media
Thuja occidentalis
Trachelospermum asiatum
Tsuga canadensis
Viburnum japonicum
V. odoratissimum

Calabrian Pine Canary Island Pine Aleppo Pine Austrian Black Pine Monterey Pine Japanese Black Pine Eastern White Pine Scotch Pine Pistachio\* Queensland Pittosporum Mock Orange Japanese Yew English Laurel Almond, Apricot, Nectarine, Peach, Plum and Prune\* Firethorn Firethorn Firethorn Bradford Pear sp. Red Oak Indian Hawthorne 'Coral Bells' 'Formosa' 'Hino-crimson' 'PJM' 'Roseum Elegans' Lady Bank's Rose Rosemary

Stonecrcp
Japanese Boxcherry
Japanese Yew
Yew
American Arborvitae
Star Jasmine
Canada Hemlock
Japanese Viburnum
Sweet Viburnum

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

# Scientific name

V. plicatum

V. rigidum

V. tinus
V. trilobium
V. wrightii

Vinca minor

Vitis sp.

Weigela florida

Yucca aloifolia

Y. filamentosa

## Common name

Japanese Snowball Canary Island Viburnum Laurustinus Cranberry Bush

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Dwarf Periwinkle Grape\* Old Fashioned Weigela Spanish Bayonet Yucca, Adam's Needle

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

#### LIMITED WARRANTY AND LIABILITY

NOTICE: Read this Limited Warranty and Liability before buying or using this product. If the terms are not acceptable, return it at once unopened.

It is critical that this product be used and mixed only as specified The laws of a State may make some or all of the on the label. paragraph inapplicable or may give you rights in addition to your rights hereunder. Except to the extent prohibited by law the exclusive remedy of the user or buyer and the limit of liability of this Company or any other Seller for any and all losses, personal injuries or damages resulting from the use of this product, shall be the purchase price paid by the user or buyer for the quantity of the product involved. Except to the extent prohibited by State Law, there is not warranty, and this Company and other Sellers disclaim all liability for losses, personal injury or damages: (i) arising from any use of this product in a manner or for a purpose not recommended in its label directions, or form mixing this product before use with any substance except as recommended by the product's label; (ii) arising from handling or storage in violation of label instructions; (iii) for all indirect, special or consequential damages, and; (iv) when not reported to this Company within one year of discovery.

THERE ARE NO IMPLIED WARRANTIES AND NO WARRANTIES OF MERCHANTABILITY OR FITNESS.