

US ENVIRONMENTAL PROTECTION AGENCY
OFFICE OF PESTICIDES PROGRAMS
REGISTRATION DIVISION (75-767)
WASHINGTON, DC 20460

EPA REGISTRATION NO.
961-367

DATE OF ISSUANCE
NOV 5 1993

TERM OF ISSUANCE
conditional, expires: January 1, 1995

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

NAME OF PESTICIDE PRODUCT
Lebanon Fertilizer with barricade™
(0.29%) Preemergence weed Control

NAME AND ADDRESS OF REGISTRANT (Include ZIP code)

Lebanon Chemical Corporation
P.O. BOX 180
Lebanon, PA 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 any 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. Add the phrase "EPA Registration No. 961-367" to the label before you release the product for shipment.
2. 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 proflaminate 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)

BEST AVAILABLE COPY

ATTACHMENT IS APPLICABLE

SIGNATURE OF APPROVING OFFICIAL

Joanne I. Miller

DATE

NOV 5 1993

0 4 17

ACCEPTED
In EPA Letter Dated

NOV 5 1993
Under the Federal Insecticide,
Fungicide, and Rodenticide Act
as amended, for the pesticide
registered under EPA Reg. No.
761-367

**LEBANON FERTILIZER WITH BARRICADE®
PREEMERGENCE WEED CONTROL**

ACTIVE INGREDIENT:

Prodiamine: [N³,N³-Di-n-propyl-2,4-dinitro-6-(trifluoromethyl)-m-phenylenediamine 0.29%

INERT INGREDIENTS: 99.71%

TOTAL: 100.0%

Guaranteed Fertilizer Analysis:

Nitrogen 32 % (N)
Phosphorus 4 % (P₂O₅)
Potassium 6 % (K₂O)

Nitrogen from: Urea formaldehyde, Urea, Ammonia

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

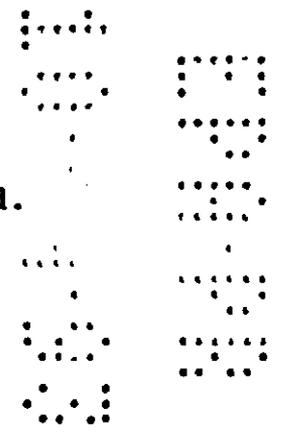
See the following section, Precautionary Statements, Hazards To Humans and Domestic Animals, for additional information.

Net Weight:

EPA Reg. No. 961-XXX
EPA Est. No. 961-PA-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

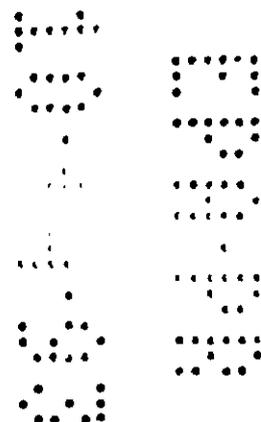
If in eyes: Flush thoroughly with water for several minutes. Get medical attention if irritation persists.

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 of 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.



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

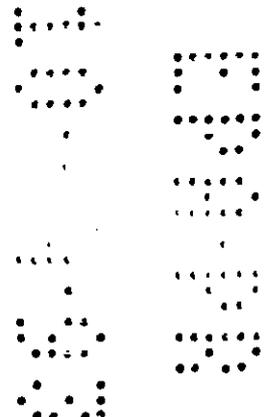
Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

CONTAINER DISPOSAL

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 and local authorities, by burning locally. If burned, stay out of smoke.

Fiber Drums: 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 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.

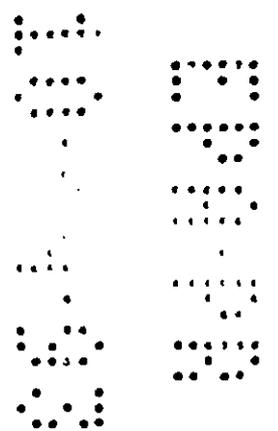
Not for use on plants being grown (1) for sale or other commercial use, (2) for commercial seed production, or (3) for research purposes. For use on plants intended for aesthetic purposes or climatic modification and being grown in ornamental gardens or parks, or on golf courses or lawns.

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

Do not apply aerially.

Do not apply to golf course putting greens.

BEST AVAILABLE COPY



Application Directions

Apply uniformly through suitable, calibrated commercial application equipment.

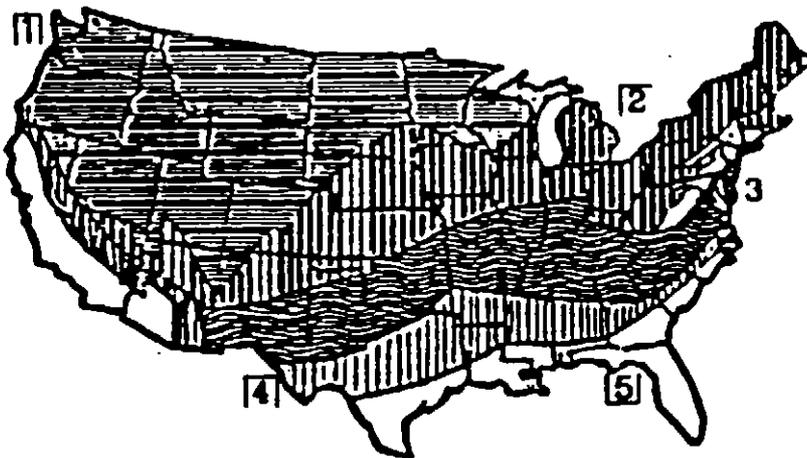
ESTABLISHED TURF

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.

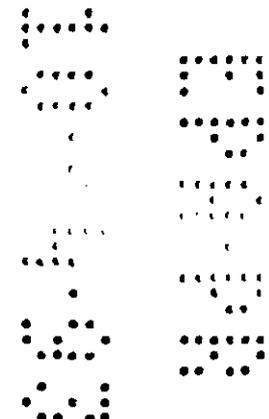
Most effective weed control in turf grasses will be obtained when this product is activated by at least 1/2 inch of rainfall or irrigation within 14 days after application and prior to weed germination. See the map below for approximate crabgrass germination dates.

CRABGRASS SEED GERMINATION DATES

Approximate Date



- ▬ 1 After May 30
- ▮ 2 After May 10
- ▧ 3 After April 20
- ▨ 4 After March 20
- 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.

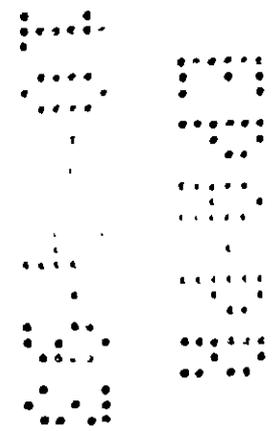
Do not apply to OVERSEEDED TURF for 60 days after seeding or until after the second mowing, which ever is longer. Injury to desirable seedlings is likely if this product is applied before seedling secondary roots are in the second inch of soil, not thatch plus soil.

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 517 lbs./A or 11.6 lbs./1000 ft².

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.

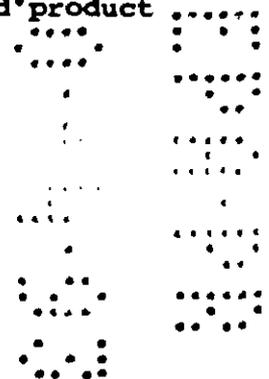
The rates listed in the table below are for weed control of approximately 2-6 months.

Turf Species and Rates Table:

Turf Species:	Maximum Rate of this product Per Calendar Year Lbs./A (Lbs./1000 ft ²)
Bermudagrass* Centipedegrass Seashore Paspalum Tall Fescue (including turf-type) Zoysia	517 (11.6)
Kentucky Bluegrass Perennial Ryegrass	345 (7.8)
Creeping Red Fescue St. Augustinegrass	255 (6)
Creeping Bentgrass	228 (5.2)

* May be used on newly sprigged or plugged Bermudagrass at rates not to exceed 179 lbs. product per acre or 3.9 lbr. product per 1000 ft². On newly sprigged or plugged Bermudagrass temporary slowing of stolon rooting may occur. Suppression only of Foxtail, Goosegrass and Rescuegrass due to reduced product rates used in sprigging situations.

BEST AVAILABLE COPY



- Do not apply more than 259 lbs. of this product per application.
- Do not apply more than 517 lbs. of this product per calendar year.
- If making more than one application, do not apply more than 259 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.

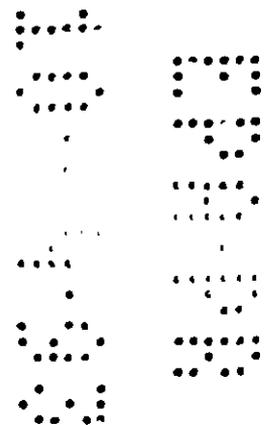
Weeds Controlled

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

Crabgrass (large, smooth)	Carpetweed
Annual Bluegrass (Poa annua)	Common Chickweed
Goosegrass ¹	Common Lambsquarter
	Common Purslane
Annual Foxtails	Henbit
Barnyardgrass	Knotweed
Broadleaf Signalgrass	Pigweed
Johnsongrass (from seed)	Prostrate Spurge
Rescuegrass ³	Shepardspurse ²
	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.

1. In many areas a single application of 228 to 255 lbs/Acre of this product will control goosegrass. However, under heavy goosegrass pressure and/or an extended growing season, apply an initial treatment of 255 lbs/Acre followed after 60 days with a second treatment of 83 to 255 lbs/Acre for season long goosegrass control.
2. Winter weeds are best controlled by applications made prior to germination: late summer, fall or winter timings.
3. Suppression only.



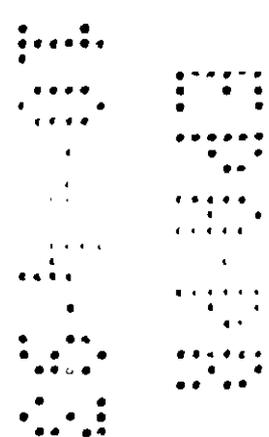
Overseeding/Reseeding

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:

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
179	4	6	3	4
345	8	12	6	8
517	12	18	9	12



LANDSCAPE ORNAMENTALS

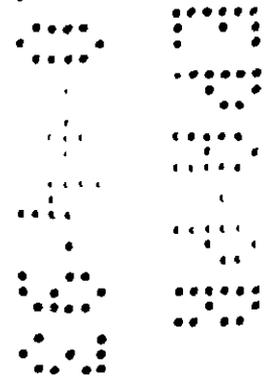
This product is recommended for use on landscape ornamentals. Do not apply more than 255 lbs./A in any 60 day interval, and do not exceed the maximum rate per calendar year of 517 lbs./A.

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

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

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

BEST AVAILABLE COPY



Scientific name

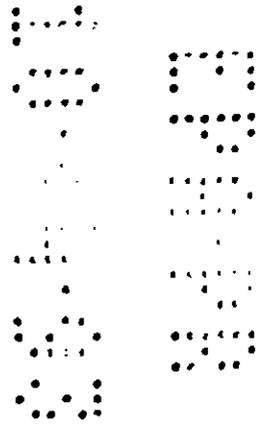
Common name

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
 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.

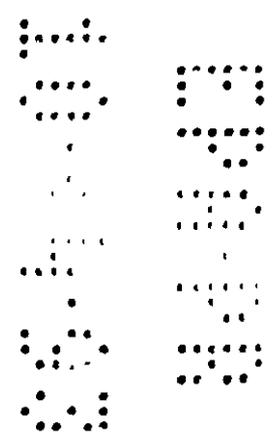


Scientific name

Common name

Scientific name	Common name
Pinus brutia	Calabrian Pine
P. canariensis	Canary Island Pine
P. halepensis	Aleppo Pine
P. nigra	Austrian Black Pine
P. radiata	Monterey Pine
P. thunbergiana	Japanese Black Pine
P. strobus	Eastern White Pine
P. sylvestris	Scotch Pine
Pistachio sp.	Pistacnio*
Pittosporum rhombifolium	Queensland Pittosporum
P. tobira	Mock Orange
Podocarpus macrophyllus	Japanese Yew
Prunus laurocerasus	English Laurel
Prunus sp.	Almond, Apricot, Nectarine, Peach, Plum and Prune*
Pyracantha coccinea	Firethorn
P. fortuneana	Firethorn
P. koidzumii	Firethorn
Pyrus sp.	Bradford Pear sp.
Quercus rubra	Red Oak
Raphiolepis indica	Indian Hawthorne
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 asiaticum	Star Jasmine
Tsuga canadensis	Canada Hemlock
Viburnum japonicum	Japanese Viburnum
V. odoratissimum	Sweet Viburnum

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



Scientific name

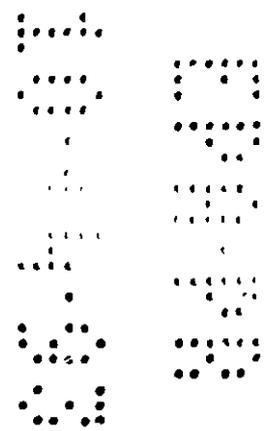
Common name

 V. plicatum
 V. rigidum
 V. tinus
 V. trilobium
 V. wrightii
 Vinca minor
 Vitis sp.
 Weigela florida
 Yucca aloifolia
 Y. filamentosa

 Japanese Snowball
 Canary Island Viburnum
 Laurustinus
 Cranberry Bush

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

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

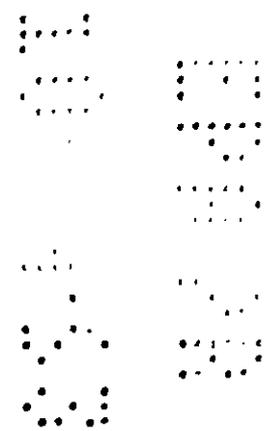


LIMITED WARRANTY AND LIABILITY

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 on the label. The laws of a State may make some or all of the 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 from 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.

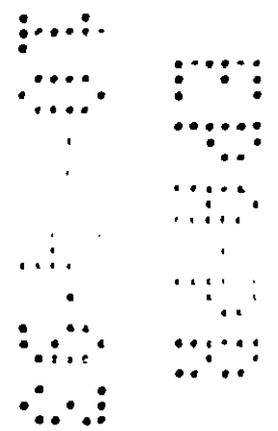


Lebanon

10 3 11

% Al	0.430 %	0.650	0.220 %	0.380 %
Rcg. No.	961-362	961-363	961-364	961-365
Factor	4.65	3.08	9.09	5.26

35 lb/A	348.8	230.8	681.8	394.7
27 oz/M	125.6	83.1	245.5	142.1
lb/M	7.8	5.2	15.3	8.9
50 lb/A	232.6	153.8	454.5	263.2
18 oz/M	83.7	55.4	163.6	94.7
lb/M	5.2	3.5	10.2	5.9
37 lb/A	172.1	113.8	336.4	194.7
14 oz/M	65.1	43.1	127.3	73.7
lb/M	4.1	2.7	8.0	4.6
33 lb/A	153.5	101.5	300.0	173.7
12 oz/M	55.8	36.9	109.1	63.2
lb/M	3.5	2.3	6.8	3.9
26 lb/A	120.9	80.0	236.4	136.8
9 oz/M	41.9	27.7	81.8	47.4
lb/M	2.6	1.7	5.1	3.0
37.5 lb/A	174.4	115.4	340.9	197.4
12 lb/A	55.8	36.9	109.1	63.2



% Al 0.290 %

Req. No. 961-XXX

Factor 6.90

75 lb/A	517.2
27 oz/M	186.2
lb/M	11.6
50 lb/A	344.8
18 oz/M	124.1
lb/M	7.8
37 lb/A	255.2
14 oz/M	96.6
lb/M	6.0
33 lb/A	227.6
12 oz/M	82.8
lb/M	5.2
26 lb/A	179.3
9 oz/M	62.1
lb/M	3.9
37.5 lb/A	258.6
12 lb/A	82.8

