PM23	8378-39	
US ENVIRONMENTAL PROTECTION AGENCY	EPA REGISTRATION NO. 8376-39	MAK U 6 1990
OFFICE OF PESTICIDES PROGRAMS REGISTRATION DIVISION (75-767) WASHINGTON, DC 20460	TERM OF ISSUANCE Unconciltional	
	NAME OF PESTICIDE PRODUC	T
NOTICE OF PESTICIDE: REGISTRATION (Under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended)	ondstation (1996) – Exam Zedostanion e Celebrotti unakrete Athlitikusto	
AME AND ADDRESS OF REGISTRANT (Include ZIP code)		
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anox Pertinizer CL. 1.0. Box 240 Rhox, Indiana (4000)		
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IOTE: Changes in labeling formula differing in substance for submitted to and accepted by the Registration Division prior product always refer to the above U.S. EPA registration number of the basis of information furnished by the registrant, the	r to use of the label in commerce nber.	e. In any correspondence on this
the Federal Insecticide, Fungicide, and Rodenticide Act.	above named pesticide is heree	y registered/recegistered ander
A copy of the labeling accepted in connection with this Re	gistration/Reregistration is retu	urned herewith.
Registration is in no way to be construed as an indorsement nealth and the environment, the Administrator, on his motio cide in accordance with the Act. The acceptance of any na Act is not to be construed as giving the registrant a right to by others.	n, may at any time suspend or c one in connection with the regis	ancel the registration of a pest- tration of a product under this
this product is registerially 3(c)(b) provided that you:	- Georganic, vitre (1872)	JUCTION
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If these conditions are pot condi- subject to cancellation in accordance for shiplent of the product constitute is stamped copy of the fater is enclose	ieu with, the registra with Plink pection w(e m acceptance of these). Your releaster
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SHAW'S TURF FOOD/CRABGRASS CONTROL BARRICADE 28

ACTIVE INGREDIENT: .3 . .3

Prodiamine: [N°,N°-Di- <u>n</u> -propyl-2,4-dinitro-6-(trifluor phenylenediamine	
INERT INGREDIENTS:	<u>99.72%</u>
TOTAL:	
Guaranteed Fertilizer Analysis:	ACCEPTED

Nitrogen	32 %	(N)
Phosphorus	4%	(P_2O_5)
Potassium	6%	(K ₂ O)

with COMMENTS In EPA Letter Dated 2.16

MAR N 6 1996 Under the Federal Insecticide. a Rodensteine Ant ded, for the pesticide ler EPA Rez. No.

Nitrogen from: Urea formaldehyde, Urea, Ammonia

For selective preemergence control of grass and broadleaf weeds in:

- established turf grasses (excluding golf course putting greens) and lawns
- landscape ornamentals (including established perennials & wild/lower 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:

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EPA Reg. No. 8378-39 EPA Est. No.

> Knox Fertilizer Co. P.O. Box 248 Knox, IN 46634

BARRICADE® is a Registered Trademark or Sandoz, Ltd.

PRECAUTIONARY STATEMENTS

30416

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

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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

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Sore 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>Paper 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.

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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

- established turf grasses (excluding golf course putting greens) and lawns
- Iandscape ornamentais
- established perennials & wildflower plantings

This product controls susceptible weeds by inhibiting weed seeds germination and root development. Most effective weed control will be obtained when this product is activated by at least 0.5 inch of rainfall or irrigation prior to weed seed germination and within 14 days following 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 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.

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Do not apply to golf course putting greens.

Application Directions

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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 grasses and lawns. The maximum amount of this product that may be applied per year is given for each turf grass species in the Maximum Annual Rates section of this label.

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 prior to weed seed germination and within 14 days following application. See the map below for spproximate crabgrass seed germination dates.

CRABGRASS SEED GERMINATION DATES

Approximate Date

Use Precautions

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

Application of this product may thin emerged annual bluegrass and newly overseeded grasses.

Do not apply to overseeded turf within 60 days after seeding or until after the second mowing, whichever 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 cut treated sod before 120 days after application. 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.

Rates of Application

This product may be applied as a single application or in sequential applications to control weeds germinating throughout the year. All applications must be made prior to germination of the target weeds. This product will not control established weeds.

Maximum use rate selection should be based on turf species. The length of time of residual weed control provided by this product is related to the rate applied.

Maximum Annual Rates

This product is recommended for use on the turf grass species listed in the following table. Do not exceed the maximum yearly rate as given in the following table:

MAXIMUM APPLICATION RATE/CALENDAR YEAR of SHAW'S TURF FOOD/CRABGRASS CONTROL BARRICADE 28 by Turf Grass Species ¹				
Turf Species:	Ib SHAW'S TURF FOOD 28/A	lb ai/A		
Bermudagrass ² Bahiagrass Centipedegrass Seashore Paspalum St. Augustinegrass ³ Tall Fescue (including turf-type) Zoysia	535	1.5		
Buffalograss Kentucky Bluegrass Perennial Ryegrass	357	1.0		
Creeping Red Fescue	267	0.75		
Creeping Bentgrass	233	0.65		

These are the maximum rates per calendar year by species limitations.

- ² May be used on newly sprigged or plugged Bermudagrass at rates not to exceed 186 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.
- ³ Use at an initial rate of 267 to 357 lb/A per application followed by sequential applications at doses that would not exceed the maximum annual application rate of 535 lb/A/yr.
- Do not apply more than 535 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.

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Weeds Controlled

When used in accordance with this label this product will provide control of the following weeds:

Barnyardgrass Bluegrass, Annual (Poa annua) Crabgrass (Large, Smooth) Crowfootgrass Cupgrass, Woolly Foxtails, Annual Goosegrass¹ Itchgrass Johnsongrass (from seed) Junglerice Lovegrass Panicum (Texas, Fall, Browntop) Rescuegrass³ Signalgrass, Broadleaf Sprangletop Witchgrass

Carpetweed Chickweed, Common Chickweed, Mouseear (from seed) Henbit Knotweed Kochia Lambsquarter, Common Pigweed Purslane, Common Pusley, Florida Shepherd's Purse² Speedwell, Persian Spurge, Prostrate Woodsorrel, Yellow (from seed)

In many areas a single application of 233 to 535 lb/A of this product will control goosegrass. However, under heavy goosegrass pressure and/or an extended growing season, most effective weed control may be obtained by making an initial application of 233 to 357 lb/A followed after 60 to 90 days by a second application at doses that would not exceed those given in the Maximum Annual Rate Table. Do not exceed the maximum rate for turf grass species listed in the Maximum Annual Rate Table above.

² Applications for this weed should be made in late summer, fall or winter prior to germination.

³ Suppression only.

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Sequential applications may be made so long as the total amount of product applied does not exceed the maximum annual application rates recommended for each turf species. All applications must be made prior to germination of the weed seeds.

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WHEN TO APPLY AFTER OVERSEEDING TURF

Do not apply to overseeded turf within 60 days after seeding or until after the second mowing, whichever is longer. Injury to desirable seedlings is likely if BARRICADE is applied before seedling secondary roots are in the second inch of soil, not thatch plus soil.

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WHEN TO OVERSEED AFTER APPLICATION

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BARRICADE will inhibit the germination of turf species if overseeded too soon after application. Follow rates and intervals in the table below for best overseeding/reseeding results.

SHAW'S TURF FOOD 28 Rate (lb/A)		Interval Before Overseeding		
Product	ai	North	Transition	South
180	.50	4 mo	4 mo	4 mo
233	.66	5 mo	4 mo	4 mo
267	.74	. 6 mo	5 mo	5 mo
285	.80		6 mo	6 mo
357	1.00		7 mo	7 mo
407	1.14			9 mo
465	1.30			10 mo

LANDSCAPE ORNAMENTALS (including Established Perennials and Wildflower Plantings)

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

Use Rates

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Apply this product at 233 to 535 lb/A in fall and/or spring. Use higher rates 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 535 lb/A/yr.

Application Timing and Information

This product may be applied to newly transplanted and established ornamentals as a broadcast, over the top or directed application. Irrigation or rainfall soon after application will wash residues off plant foliage and accivate this product in the soil.

This product may be applied at any time to established plants. 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. Apply before budding/grafting or after buds/grafts have taken to avoid any inhibition of the tissue union.

This product is a preemergence herbicide and will not control emerged weeds. Most effective weed control in ornamentals will be obtained when this product is activated by at least 0.5 inch of rainfall or irrigation, or with shallow (1 to 2 inch) mechanical incorporation, prior to weed seed germination and within 14 days following application.

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

Tolerant Ornamental Species

This product will not harm most 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

Abies spp.

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 alba

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Common name

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Fir species** (Balsam, Fraser, Noble, etc.) Japanese Maple Norway Maple Kiwi* Lily-of-the-Nile (African Lily) Vine Hill Manzanita Cape Weed Japanese Aucuba Barberry Wintergreen Barberry Mentor Barberry Japanese Barberry Warty Barberry Japanese Boxwood Weeping Bottlebrush Scotch Heather Hottentot Fig (Ice Plant) Feathery Cassia Wild Lilac False Cypress Clevera Citrus species* Flowering Dogwood American Dogwood Pampas Grass Cranberry Cotoneaster Cotoneaster **Bearberry Cotoneaster** Rockspray Cotoneaster Hawthorne Italian Cypress White Trailing Ice Plant

*Ornamental species only. Do not use on food producing trees or vines. **For use on landscape ornamental sites.

Scientific name

Dodonea viscosa Elaeagnus pungens Euonymus fortunei E. japonica E. kiautschovica Fatsia japonica Forsythia intermedia F. viridissima Gardenia jasminoides Gladiolus spp. Hedera helix Hibiscus Hibiscus rosa-sinensis llex cornuta I. crenata I. opaca I. pernyi I. vomitoria Iris spp. 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 Magnolia spp. Maleophora luteola Malus sp. Nandina domestica Narcissus spp. Nerium spp.

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Common name Hop Bush Silverberry Wintercreeper Japanese Spindle Tree (Evergreen Euor, mus) Spreading Euonymus Japanese Aralia **Border Forsythia** Greenstem Forsythia Gardenia, Cape-Jasmine Gladiolus species * * English Ivy Rose of Sharon** Chinese Hibiscus Chinese Holly Japanese Holly American Holly Holly Yaupon Iris species** Winter Jasmine Chinese Juniper Shore Juniper Creeping Juniper Walnut* Shrimp Plant Crepe Myrtle **Amur Privet** Japanese Privet Glossy Privet (Waxleaf) Big Blue Lity Turf Japanese Honeysuckie Tatarian Honeysuckle Magnolia species * * Ice Plant Crabapple * Heavenly Bamboo Narcissus species *** Oleander -

*Ornamental species only. Do not use on food producing trees or vines. **For use on landscape ornamental sites.

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Scientific name Olea europa **Ophiopogon** japonicus Osteospermum fruticosum Oxydendrum arboreum Persea americana Photinia fraseri Picea spp. Pieris japonica Pinus brutia P. canariensis P. elliottii P. halepensis P. nigra P. palustrus P. radiata P. strobus P. sylvestris P. taeda P. thunbergiana P. virginiana Pistachio sp. Pittosporum rhombifolium P. tobira Podocarpus macrophyllus Prunus laurocerasus Prunus sp. Pseudotsuga menziesii

Pyracantha coccinea P. fortuneana P. koidzumii Pyrus sp. Quercus spp. Raphiolepis indica

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Common name Olive* Mondo Grass Trailing African Daisy Sourwood Avocado* Frasier's Photinia (Redtip) Spruce species * * (Colorado Blue, Norway, etc.) Lily-of-the-Valley Shrub **Calabrian** Pine **Canary Island Pine** Slash Pine Aleppo Pine Austrian Black Pine Longleaf Pine **Monterey** Pine Eastern White Pine Scotch Pine **Loblolly Pine Japanese Black Pine** Virginia Pine Pistachio* Queensland Pittosporum Japanese Pittosporum Japanese Yew English Laurel Almond, Apricot, Nectarine, Peach, Plum and Prune* Douglas Fir * * Firethorn (Scarlet) Firethorn Firethorn Bradford Pear sp. Oak species

*Ornamental species only. Do not use on food producing trees or vines. **For use on landscape ornamental sites.

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Indian Hawthorne

Scientific name

Rhododendron (including Azalea)

Rosa banksiae Rosmarinus officinalis Santolina virens Sedum album Syzygium paniculatum Taxus cuspidata T. media Thuja occidentalis Trachelospermum asiatum Tsuga canadensis Tulip spp. Viburnum japonicum V. odoratissimum V. plicatum V. rigidum V. tinus V. trilobium V. wrightii Vinca major Vinca minor Vitis sp. Weigela florida Yucca aloifolia Y. filamentosa

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Common name _____ 'Coral Bells' 'Formosa' 'Hino-crimson' 'PJM' 'Roseum Elegans' Lady Bank's Rose Rosemary Stonecrop Japanese Boxcherry Japanese Yew Yew American Arborvitae Star Jasmine Canada Hemlock Tulip species Japanese Viburnum Sweet Viburnum Japanese Snowball Canary Island Viburnum Laurustinus Cranberry Bush Leatherleaf Viburnum Vinca¹ **Dwarf Periwinkle** Grape* Old Fashioned Weigela Spanish Bayonet Yucca, Adam's Needle

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

WARRANTY STATEMENT

NOTICE: Buyer and user assume all risk and liability of use, storage and/or handling of this product not in accordance with the terms of this label.

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