

PAR EX SLOW RELEASE FERTILIZER WITH
0.434% BARRICADE® HERBICIDE

ACTIVE INGREDIENT:

Prodiamine: [N³,N³ -Di-n-propyl-2,4-dinitro-6-(trifluoromethyl)-m-phenylenediamine 0.434%

INERT INGREDIENTS:..... 99.566%

TOTAL:..... 100.00%

Guaranteed Fertilizer Analysis:

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

Nitrogen from: Urea formaldehyde, Urea, Ammonia

ACCEPTED
with COMMENTS
In EPA Letter Dated
DEC - 5 1995

Under the Federal Insecticide,
Fungicide, and Rodenticide Act
as amended, for the pesticide
registered under EPA Reg. No.
557-2025

For selective preemergence control of grass and broadleaf weeds in:

- * established turf grasses (excluding golf course putting greens) and lawns
- * landscape ornamentals (including established 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: 50 LBS. (22.6 kg)

EPA Reg. No. 557-
EPA Est. No. 557-CO-1

Vigoro
P.O. Box 1986
Collinsville, IL 62234

BARRICADE® is a Registered Trademark of Sandoz, Ltd.

6 of 15

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 limit 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

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 or 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 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 or local authorities. If the drum cannot be reused, dispose of in a sanitary landfill or by incineration if allowed by state and local authorities.

1 of 15

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 pre-emergence herbicide that provides residual control of many grass and broadleaf weeds in established turf grasses (excluding golf course putting greens), lawns and for landscape ornamentals (established perennials and wildflower plantings).

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

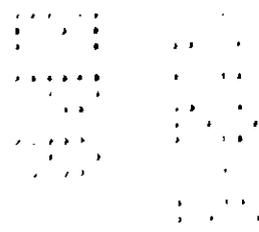
Not for use on plants being grown (1) for sale or other commercial use, (2) for commercial seed production, or (3) for research purposes. For use on plants intended for aesthetic purposes or climatic modification and being grown in ornamental gardens or parks, or on golf courses or lawns and grounds.

Do not graze or feed forage cut from area 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.



6-15

APPLICATION DIRECTIONS

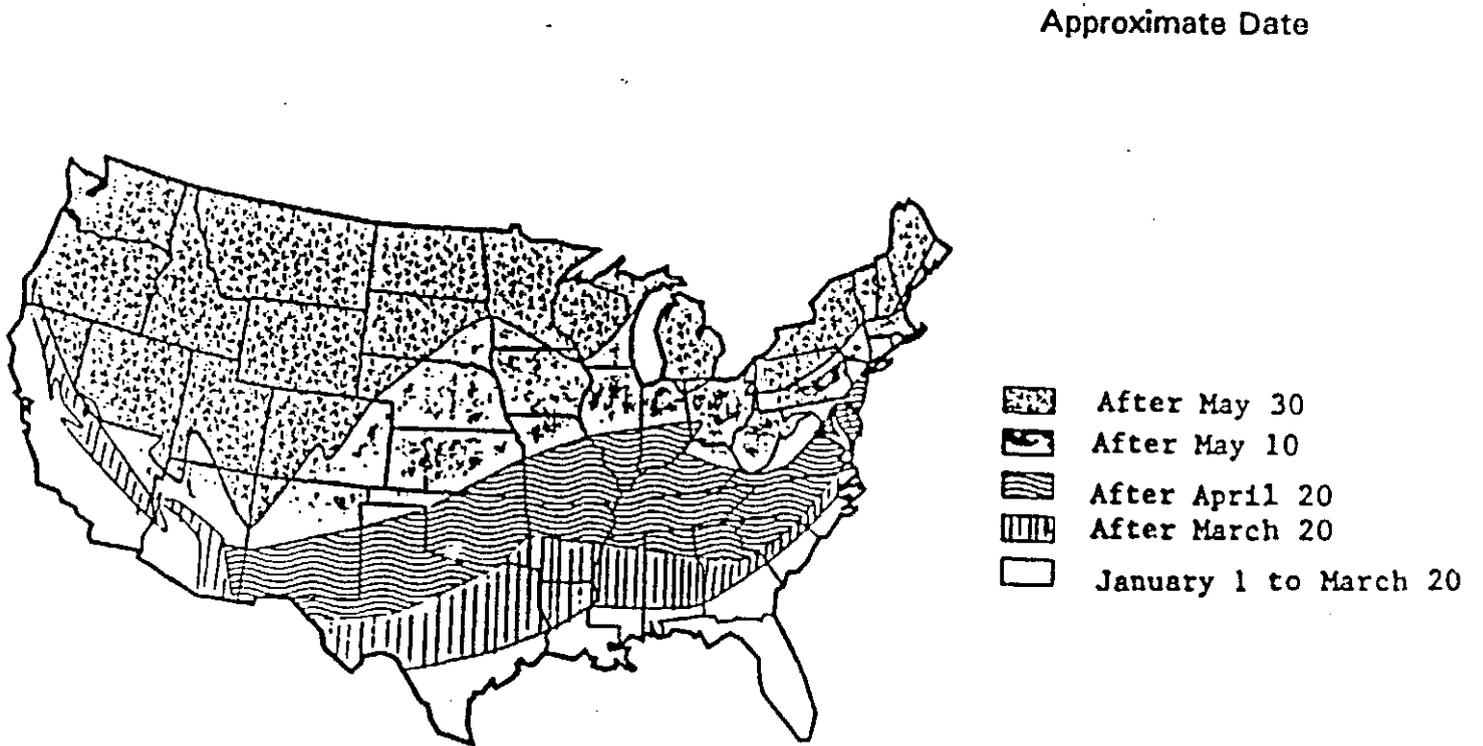
Apply uniformly through suitable calibrated commercial application equipment.

ESTABLISHED TURF

This product is a selective preemergence herbicide that, when properly applied, will control certain grass and broadleaf weeds in established turfgrass and lawns. The maximum amount of this product that may be applied per year is given for each turfgrass species in the Maximum Annual Rates table following.

Most effective weed control in turfgrasses will be obtained when this product is activated by at least 0.5 inch of rainfall or irrigation prior to weed germination and within 14 days after application. See the map below for approximate crabgrass seed germination dates.

CRABGRASS SEED GERMINATION DATES



USE PRECAUTIONS

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

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

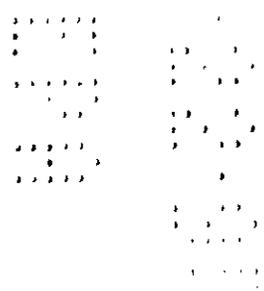
Do not apply to OVERSEEDED TURF within 60 days after seeding or until after the second mowing, which ever is longer. Injury to desirable seedlings is likely if this product is applied before seedling secondary roots are in the second inch of soil, not thatch plus soil.

Do not 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 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 turfgrass species listed in the following table. Do not exceed the maximum yearly rate as given in the following table:

Maximum Annual Rates Table:

MAXIMUM RATE/CALENDAR YEAR OF PAR EX SLOW RELEASE FERTILIZER WITH 0.434% BARRICADE HERBICIDE BY TURF GRASS SPECIES		
TURF SPECIES:	lb Par ex Slow Release (0.434)A	lb. ai / A
Bermudagrass ² Bahigrass Centipedegrass Seashore Paspalum St. Augustinegrass ³ Tall Fescue(including turf type) Zoysia	346	1.5
Buttfolagrass Kentucky Bluegrass Perennial Ryegrass	231	1.0
Creeping Red Fescue St. Augustinegrass	171	0.75
Creeping Bentgrass	152	0.65

1. These are the maximum rate per calendar year by species limitations
2. May be used on newly plugged or sprigged Bermudagrass at rates not to exceed 120 lbs./A/yr. 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 171 to 231 lb./A per application followed by sequential applications at doses that would not exceed the maximum annual application rate of 346 lb./A/yr.
 - Do not apply more than 346 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 in accordance with the label this product will provide control of the following weeds:

- Barnyardgrass
- Bluegrass, Annual (poa annua)
- Crabgrass (large, smooth)
- Crowfootgrass
- Cupgrass, Woolly
- Foxtails, Annual
- Goosegrass (1)
- Itchgrass
- Johnsongrass (from seed)
- Junglerice
- Lovergrass
- Panicum (Texas, Fall, Browntop)
- Rescuegrass (3)
- Signalgrass, Broadleaf
- Sprangletop
- Witchgrass
- Carpetweed
- Chickweed, Common
- Chickweed, Mouseear (from seed)
- Henbit
- Knotweed
- Kachia
- Lambsquarter, Common
- Pigweed
- Purslane, Common
- Pusley, Florida
- Shepard's purse (2)
- Spruce, Prostrate
- Woodsorrel, Yellow (from seed)

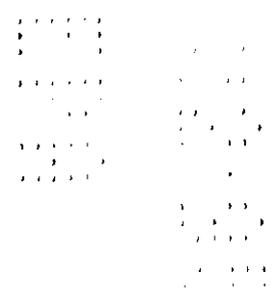
Do not exceed the maximum annual rates recommended for the turf species. All applications must be made prior to germination of the target weed. This product will not control established weeds.

(1) In many areas a single application of 152 to 346 lb/A of this product will control goosegrass. However, under heavy goosegrass pressure and/or an extended growing season, the most effective weed control may be obtained by making an initial application of 152-231 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.

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

(3) Suppression only.

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.



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 seedings is likely if this product is applied before seeding secondary roots are in the second inch of soil, not thatch plus soil.

WHEN TO OVERSEED AFTER APPLICATION

This product 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.

Product Rate (lb/A)		Interval Before Overseeding		
Product	ai	North	Transition	South
116	.50	4 mo	4 mo	4 mo
152	.65	5 mo	4 mo	4 mo
171	.75	6 mo	5 mo	5 mo
184	.80	---	6 mo	6 mo
231	1.00	---	7 mo	7 mo
265	1.15	---	---	9 mo
300	1.30	---	---	10 mo

113

LANDSCAPE ORNAMENTALS (Including Established Perennial and Wildflower Plantings)

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

Use Rates: Apply this product at 152 to 346 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 346 lb/A.

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 activate the 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 in of rainfall or irrigation, or with shallow (1 to 2 in) 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 and mulch. 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 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.

<u>Scientific Name</u>	<u>Common Name</u>
Acer palmatum	Japanese Maple
A. platanoides	Norway Maple
Actinidia chinensis	Kiwi*
Agapanthus africanus	Lily-of-the-Nile (African Lily)
Arctostaphylos densiflora	Vine Hill Manzanita
Arctotheca calendula	Cape Weed
Aucuba japonica	Japanese Aucuba
Barberis gladwynensis	Barberry
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
Citrus spp.	Citrus species*
Cornus florida	Flowering Dogwood
C. stolonifera	American Dogwood
Cortaderia selloana	Pampas Grass
Cotoneaster apiculatus	Cranberry Cotoneaster
C. buxifolius	Cotoneaster
C. dammeri	Bearberry Cotoneaster
C. microphyllus	Rockspray Cotoneaster
Cretaeus spp.	Hawthorne
Cupressus sempervirens	Italian Cypress
Delasperma alba	White Trailing Ice Plant
Dodonea viscosa	Hop Bush
Elacagnus pungens	Silverberry
Euonymus fortunei	Wintercreeper Euonymus
E. japonica	Japanese Spindle Tree (Evergreen Euonymus)
E. kiautschovica	Spreading Euonymus
Fatsia japonica	Japanese Aralia
Forsythia intermedia	Border Forsythia
F. viridissima	Greenstem Forsythia
Gardenia jasminoides	Gardenia, Cape-Jasmine
Gladiolus spp.	Gladiolus species **
Hedera helix	English Ivy
Hibiscus	Rose of Sharon**
Hibiscus rosa-sinensis	Chinese Hibiscus
Ilex cornuta	Chinese Holly
I. crenata	Japanese Holly
I. opaca	American Holly
I. pernyi	Holly
I. vomitoria	Yaupon
Iris spp.	Iris species **

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

** For use on landscape ornamental sites.

Scientific NameCommon Name

Jasminium nudiflorum	Winter Jasmine
Juniperus chinensis	Chinese Juniper
J. conferta	Shore Juniper
J. horizontalis	Creeping Juniper
Juglans sp.	Walnut*
Justicia brandegeana	Shrimp Plant
Lagerstromia indica	Crepe Myrtle
Ligustrum amurense	Amur Privet
L. japonicum	Japanese Privet
L. lucidum	Glossy Privet (Waxleaf)
Liriope muscari	Big Blue Lily Turf
Lonicera japonica	Japanese Honeysuckle
L. tatarica	Tatarian Honeysuckle
Magnolia spp.	Magnolia species**
Maleophora luteola	Ice Plant
Malus sp.	Crabapple*
Nandina domestica	Heavenly Bamboo
Narcissus spp.	Narcissus species**
Nerium spp.	Oleander
Olea europa	Olive*
Ophiopogon japonicus	Mondo Grass
Osteospermum fruticosum	Trailing African Daisy
Oxydendrum arboreum	Sourwood
Persea americana	Avocado*
Photinia fraseri	Frasier's Photinia (Redtip)
Picea spp.	Spruce species ** (Colorado Blue, Norway, etc.)
Pieris japonica	Lily-of-the-Valley Shrub
Pinus brutia	Calabrian Pine
P. ellioti	Slash Pine
P. canariensis	Canary Island Pine
P. halepensis	Aleppo Pine
P. nigra	Austrian Black Pine
P. palustris	Longleaf Pine
P. radiata	Monterey Pine
P. thunbergiana	Japanese Black Pine
P. strobus	Eastern White Pine
P. sylvestris	Scotch Pine
P. taeda	Loblolly Pine
P. virginiana	Virginia Pine
Pistachio sp.	Pistachio*
Pittosporum rhombifolium	Queensland Pittosporum
P. tobira	Japanese Pittosporum
Podocarpus macrophyllus	Japanese Yew
Prunus laurocerasus	English Laurel
Prunus sp.	Almond, Apricot, Nectarine, Peach, Plum, & Prune*
Pseudotsuga menziesii	Douglas Fir**
Pyracantha coccinea	Firethorn (Scarlet)
P. fortuneana	Firethorn
P. koidzumii	Firethorn
Pyrus sp.	Bradford Pear sp.
Quercus spp.	Oak species
Raphiolepis indica	Indiana Hawthorne
Rhododendron	'Coral Bells'
(including Azalea)	'Formosa'
	'Hino-crimson'
	'PJM'
	'Roseum Elegans'
Rosa banksiae	Lady Bank's Rose
Rosmarinus officinalis	Rosemary
Santolina virens	

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

**For use on landscape ornamental sites.

14 of 15

Scientific Name

Common Name

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
Tulip spp.	Tulip species**
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	Leatherleaf Viburnum
Vinca major	Vinca
Vinca minor	Dwarf Periwinkle
Vitis sp.	Grape*
Weigela florida	Old Fashioned Weigela
Yucca aloifolia	Spanish Bayonet
Yucca filamentosa	Yuca, Adam's Needle

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

** For use on landscape ornamental sites.

15.9.15

**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 manufacturer or seller. All such risks shall be assumed by buyer or user.

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. **Manufacturer makes no other express or implied warranty of fitness or of merchantability or any other express or implied warranty.** In no event shall manufacturer or seller be liable for any incidental, consequential or special damages resulting from the use or handling of this product.

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.

