

**Barricade**

HERBICIDE II

For selective pre-emergence control of grass and broadleaf weeds in established turfgrasses (excluding golf course putting greens) and lawns and landscape ornamentals (including perennial & wildflower plantings).

Active Ingredient:

Prodiamine: (N²,N²-Di-n-propyl-2,4-dinitro-6-(trifluoromethyl)-m-phenylenediamine)

0.28%

Inert Ingredients:

99.72%

Total 100.00%

BARRICADE® - a registered trademark of Novartis

Professional Turf™ - a trademark of The Andersons, Inc.

GUARANTEED ANALYSIS

Total Nitrogen (N) 32%

Available Phosphate (P₂O₅) 4%

Soluble Potash (K₂O) 6%

Plant nutrients derived from ammonium phosphate, urea, muriate of potash, sulfur coated urea.

ACCEPTED

NOV 5 1997

Under the Federal Insecticide,
Fungicide, and Rodenticide Act,
as amended for the pesticide

9/98-124

KEEP OUT OF REACH OF CHILDREN PRECAUTIONARY STATEMENTS

CAUTION

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

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 particulates. 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.

Turf Species and Rates Table:

MAXIMUM RATE/CALENDAR YEAR of THE ANDERSONS BARRICADE HERBICIDE II by Turf Grass Species ¹		
Turf Species:	Lbs. ANDERSONS BARRICADE II/A	Lbs. a/A
Bermudagrass ²	536	1.5
Centipedegrass		
Seashore Paspalum		
Tall Fescue (including turf-types)		
Zoysia		
Kentucky Bluegrass	357	1.0
Perennial Ryegrass		
Creeping Red Fescue	264	0.75
St. Augustinegrass		
Creeping Bentgrass	236	0.65

¹These are the maximum rate per calendar year by species limitations.

²May be used on newly sprigged or plugged Bermudagrass at rates not to exceed 186 lb/A product per 1000 sq. ft. Newly sprigged or plugged Bermudagrass stolen 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 536 lbs. 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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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 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.

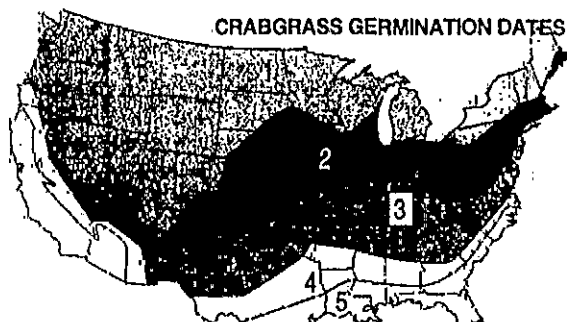
APPLICATION DIRECTIONS

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 turfgrasses 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.



Approx. Date
1 - After May 30
2 - After May 10
3 - After April 20
4 - After March 20
5 - Jan. 1 to March 20

WEEDS CONTROLLED

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

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

¹In many areas a single application of 264 to 536 lbs /A of this product will control goosegrass. However, under heavy goosegrass pressure and / or an extended growing season, apply an initial treatment of 264 lbs/A followed after 60 days with a second treatment of 186 to 300 lbs/A for season long goosegrass control.

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

³Suppression 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

Overseeding / Reseeding Interval (months) Based Upon Seeding Method and Predominant Soil Conditions for the Season

This Product Rate (Lbs /A)	Broadcast Seeding		Drill Seeding	
	Wet & Warm	Cool & Dry	Wet & Warm	Cool & Dry
186	4	6	3	4
357	8	12	6	8
536	12	18	9	12

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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 over seeded grasses. Do not apply to OVER-SEEDED TURF for 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 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 530 lbs./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 turfgrass species. All applications must be made prior to germination of the target weed seeds. This product will not control established weeds.

Manufactured by:
The Andersons Lawn Fertilizer Division
d/b/a
Free Flow Fertilizer
P. O. Box 119, Maumee, OH 43537

EPA Reg. No. 9198-124

EPA Est. No. 9198-OH-1

Net Wt. 50 Lbs.

10-50-00

0-0-0

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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 ~~2.36 to 3.61 lb/A~~ **3.61 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 **3.61 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 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 inches) 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.

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.

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

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

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

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F. viridissima
Gardenia jasminoides
Hedera helix
Hibiscus rosa-sinensis
Ilex cornuta
I. crenata
I. opaca
I. pomifolia

Jasminum nudiflorum
Juniperus chinensis
J. conferta
J. horizontalis
Juglans sp.
Justicia brandegeana
Lagerströmia indica
Ligustrum amurense
L. japonicum
L. lucidum
Liriodendron muscari
Lonchocarpus japonica
L. tatarica
Maleaphora luteola
Malus sp.
Nandina domestica
Olea europaea
Ophiopogon japonicus
Osteospermum fruticosum
Oxydendrum arboreum
Persea americana
Photinia fraseri
Picea abies
Pieris japonica
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.

Pyraeantha coccinea
P. fortuneana
P. koidzumi
Pyrus sp.
Quercus rubra
Raphiolepis indica

Greenstem Forsythia
Gardenia, Cape-Jasmine
English Ivy
Chinese Hibiscus
Chinese Holly
Japanese Holly
American Holly
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*
Fraser's Photinia
Norway Spruce
Lily-of-the-Valley Shrub
Calabrian Pine
Canary Island Pine
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
Firethorn
Bradford Pear sp.
Red Oak
Indian Hawthorne

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.

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