

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, D.C. 20460

OFFICE OF PREVENTION, PESTICIDES AND FOXIC SUBSTANCES

SEP 1 1 2007

Ms. Kim Davis
CC, APC, Manager
Consultant/Agent
Gro Tec, Inc.
c/o RegWest Company, LLC
30856 Rocky Road
Greeley, CO 80631-9375

RE: Label Revisions

EPA Reg. No.: 59144-30

Date of Submission: August 10, 2007

Dear Ms. Davis:

The Agency is in receipt of your Application for Pesticide Notification under Pesticide Registration Notice (PRN) 98-10 dated August 10, 2007, for the product Weed Grass Preventer (Contains 0.38% Barricade). The Registration Division (RD) has conducted a review of this request for its applicability under PRN 98-10 and finds that the action(s) requested fall within the scope of PRN 98-10. The label submitted with the application has been stamped "Notification" and will be placed in our records.

If you have any questions, please call me directly at 703-305-6249 or Joyce Edwards of my staff at 703-308-5479.

Sincerely,

Linda Arrington

Notifications & Minor Formulations Team Leader

Registration Division (7505P) Office of Pesticide Programs

Please read instructions on					F	orm App		MB No. 2070-0060.
United States			Registration OPP Identifier Nur		ntifier Number			
Environmental Protection Agency		y	l —	•	1	Nat	:: :	
1200 Pennsylvania Avenue, N.W.					itication			
Washington, DC 20460-0001					Other			
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Company/Product Numb EPA	^{er} Reg. No. 59144-	30	2. EPA Prod Jo	duct Manag anne Mi l		3. Pr	oposed C	lassification
4. Company/ Product (Nam	e)		PM#				None	Restricted
Weed + Grass Preve				23			None	
5. Name and Address of Ap Gro Tec, Inc.	pplicant (Include ZIP Co	oae)						h FIFRA Section
c/o RegWest Compar	ny, LLC		3(c)(3)(b)(i		iuci is simil	ar or ide	enucal IN	composition and
30856 Rocky Road								
Greeley, CO 80631-9	375		EPA Reg. I	No				
_			Product No	ame				
☐ Ch	eck if this is a new add							
			ection – II					
Amendment – Explain	below.		☐ Final pr	rinted labels	s in response	to Agend	cy letter da	ated
Resubmission in respo	nse to Agency letter da	ated	. Me To	o" Applicati	on.			_
Notification – Explain b	elow.		Other -	- Explain be	elow.			
Explanation: Use add		ssary. (For Section						
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This notification is consistent								
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Material This Product V Child Resistant Packaging	Unit Packaging		Water Soluble Pack	aging	2. 1	ype of C	ontainer	
Yes*	Yes		☐ Yes			Metal		
□ No	□ No		□ No		1	Plastic		
*Certification must	If "Yes"	No. Per	If "Yes"	No. Pe	· —	Glass Paner		
be submitted	Unit Packaging Wgt.	Container	Packaging Wgt.	Contain		☐ Paper ☐ Other (Specify):		
Location of Net Contents	Information	4. Size(s) Retail	Container			5. Location of Label Directions		ns
	_				On Label			
☐ Label	Container			On Labeling Accompanying Pro			ying Product	
6 Manner in Which Label is	s Affixed to Product	C Litt	nograph	Stend				
Paper glued Other								
Section - IV								
1. Contact Point (Complete items directly below for identification of individual to be contacted, if necessary, to process this application).								
Name Title Telephone No. (Include Area Code)								
Kim Davis, CC, APC, Manager Consultant				(970) 353-0611				
Kim Davis, CC, A	PC, Manager		Consultant/Agent			kim@	regwes	Application
I certify that the state	amente I have m	Certification	_	hmente (therete e-	a trua	1 Da-	eivad eivad
accurate and complete							1	(Stamped)
punishable by fine or i								
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4. Typed Name 5.				Consultant/Agent				
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	C, APC, Manager		Augus	st 10, 200)7			
EPA Form 8570-1 (Rev. 8-94) Previous editions are obsolete.								

Non-PRIA Submission

RegWest
Company, LLC

August 10, 2007

Ms. Sherada Hobgood
Document Processing Desk – NOTIF
Office of Pesticide Programs – 7504C
U.S. Environmental Protection Agency
2777 South Crystal Drive
One Potomac Yard, Room S-4900
Arlington, VA 22202

Dear Ms. Hobgood:

Subject:

Gro Tec, Inc.

Weed + Grass Preventer (Contains 0.38% Barricade®)

EPA Reg. No. 59144-30

On behalf of *Gro Tec, Inc.*, RegWest Company, LCC is submitting the attached materials as notification of a label revision for subject product. RegWest will act as sole agent in this endeavor.

Attached are the following documents:

- 1. Application for Pesticide: Other (Notification)
- 2. One Reference Label (illustrating the changes)
- 3. Two New Labels (incorporating the changes)
- 4. Two market labels

Please refer to the *Reference Label* for an illustration of all changes (occurring on pages 1, 2, 3, 4, 12 and 13).

Please contact me at (970) 353-0611 or kim@regwest.com if you have any questions concerning this notification.

Regards,

RegWest Company, LLC

Kim Davis, CC, APC, Manager Consultant/Agent

Attachments

pc: CPI - Hacker, S.

30856 Rocky Road Creeley,CO 80631-9375 970-353-0611 970-353-0613 Fax Kim@regwest.com

59144-30 **Reference Label**: Page 1 of 13 05/10/02 SAL + 12/20/04 + 01/23/06 and 08/10/2007 NOTIFs <u>XXXXX</u> = additions; = deletions

Weed + Grass Preventer

(Contains 0.38% Barricade®)

Cut Here to Open {Scissors Graphic}

For Selective Preemergent Control of Grass and Broadleaf Weeds in: Established Turf Grasses (excluding Golf Course Putting Greens) and Lawns Landscape Ornamentals (Including Established Perennials and Wildflower Plantings)

20 Pounds Treats up to 5,128 Sq. Ft. an area approximately 51' x 100' 40 Pounds Treats up to 10,256 Sq. Ft. an area approximately 102.5' x 100' 50 Pounds Treats up to 12,820 Sq. Ft. an area approximately 128' x 100'

Contains 0.38% Barricade® Preemergent Herbicide
Feeds up to 4 Months
Crabgrass Preventer Plus Fertilizer with Barricade® 0.38%
Controls Crabgrass
Season-Long Crabgrass Control

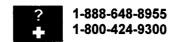
Quality Fertilizers from The Lawn Seed Experts
Crabgrass Preventer + Lawn Fertilizer 5-10-25
28-3-4
20-3-4
Controls Grass and Broadleaf Weeds Before they Germinate
Contains an Effective Pre-emergent Herbicide for Control of Crabgrass
and Many Other Nuisance Grasses and Broadleaf Weeds
Also Controls Barnyardgrass, Annual Bluegrass (*Poa annua*), Crabgrass,
Chickweed, Foxtails, Goosegrass, Henbit, Pigweed and Spurge
Feeds Your Desirable Grass up to 4 Months with a Complete Fertilizer
Featuring Pennington's Coated Slow-Release Nitrogen for a longer lasting green lawn

Pike Family Nurseries Signature Collection Individually Selected by the Pike Family Over forty-five years of knowing what is best for Southern lawns

Active Ingredient: *Prodiamine Other Ingredients *CAS No. 29092-21-2	
CAU	each of Children ITION al precautionary statements.
EPA Reg. No. 59144-30	EPA Est
Net Weight:	_ pounds (kg)

GRO TEC, INC.
P.O. Box 290
Madison, GA 30650
1-800-285-SEED
www.penningtonseed.com

59144-30 **Reference Label**: Page 2 of 13 05/10/02 SAL + 12/20/04 + 01/23/06 and 08/10/2007 NOTIFs <u>XXXXX</u> = additions; = deletions



Barricade® is a Registered Trademark of Syngenta Crop Protection

<u>N {#}</u>		
<u>Nitrogen</u>		
Produces lush, dark green		
plant growth		

Phosphorous Promotes root growth and development

K {#}
Potassium
Improves lawn's hardiness and
disease resistance

Guaranteed [Fertilizer] Analysis 5-10-25 {Code}

(Code)
Total Nitrogen (N) 5.00%
3.90% Ammoniacal Nitrogen
1.10% Urea Nitrogen
Available Phosphate (P ₂ O ₅)
Potassium (K ₂ O)
Derived from: Urea, Ammonium Phosphate, Muriate of Potash.
Guaranteed [Fertilizer] Analysis 28-3-4 F525
Total Nitrogen (N)
1.17% Ammoniacal Nitrogen
26.83% Urea Nitrogen
Available Phosphate (P ₂ O ₅)
Soluble Potash (K ₂ O) 4.00%
Total Iron (Fe)
0.25%Water Soluble Iron (Fe)
Derived from: Sulfur Coated Urea, Ammonium Phosphate,
Muriate of Potash, Iron Sulfate, Iron Oxide
*Part of the nitrogen in this product has been sulfur coated
to provide 7.00% coated slow-release nitrogen.
Guaranteed [Fertilizer] Analysis 20-3-4
Total Nitrogen (N)
1.00% Ammoniacal Nitrogen
19.00% Urea Nitrogen
Available Phosphate (P ₂ O ₅) 3.00%
Potassium (K ₂ O)
Derived from: Urea, Ammonium Phosphate, Muriate of Potash.

PRECAUTIONARY STATEMENTS

Hazards to Humans and Domestic Animals

CAUTION: Causes moderate eye irritation. Harmful if inhaled or absorbed through skin. Avoid contact with skin, eyes or clothing. Avoid breathing dust. Thoroughly wash with soap and water after handling. Prolonged or frequently repeated skin contact while handling the material may cause allergic reactions in some individuals

First Aid

If in Eyes	Hold eye open and rinse slowly and gently with water for 15-20 minutes.
	Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.
	Call a poison control center or doctor for treatment advice.
If on Skin	Take off contaminated clothing.
	Immediately rinse skin with plenty of water for 15-20 minutes.
	Call a poison control center or doctor for treatment advice.
If Inhaled	Move person to fresh air.
	• If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible.
	Call a poison control center or doctor for further treatment advice.
	roduct container or label with you when calling a poison control center or doctor, or going for
treatment. [You may also contact 1-800-424-9300 for emergency medical treatment information.]

{Note: The First Aid statements' grid format will be used if market label space permits; otherwise a paragraph format will be used.}

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.

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

Storage and Disposal

Do not contaminate water, food or feed by storage or disposal.

Storage: Store in original container [bag] in a cool, dry (preferably locked) storage area. Store away from feed or food stuffs and separated from other fertilizers and pesticides. Keep container [bag] closed when product is not being used. **Pesticide Disposal: If empty:** Do not reuse this container. Place in trash or offer for recycling if available. **If partly filled:** Call your local solid waste agency for disposal instructions. Never place unused product down any indoor or outdoor drain.

For household/domestic use product in bags 25 to 50 pounds:

[Storage and Disposal]

Do not contaminate water, food or feed by storage or disposal.

Storage: Store in original bag in a cool, dry (preferably locked) storage area inaccessible to children and pets. Store away from feed or food stuffs and separated from other fertilizers and pesticides. Keep bag closed when product is not being used. **Pesticide Disposal: If empty:** Do not reuse this container. Place in trash or offer for recycling if available. **If partly filled:** Call your local solid waste agency for disposal instructions. Never place unused product down any indoor or outdoor drain.

For household/domestic use product in bags up to 25 pounds:

[Storage and Disposal]

Storage: Store in original bag in a cool, dry (preferably locked) storage area inaccessible to children and pets. Store away from feed or food stuffs and separated from other fertilizers and pesticides. Keep bag closed when product is not being used. Disposal: If empty: Do not reuse this container. Place in trash or offer for recycling if available. If partly filled: Call your local solid waste agency

Never place unused product down any indoor or outdoor drain.

This product is a selective preemergent herbicide that provides residual control of many grass and broadleaf weeds in

- established turf grasses (excluding golf course putting greens) and lawns
- landscape ornamentals
- established perennials and wildflower plantings.

This product controls susceptible weeds by inhibiting weed seed germination and root development. Most effective weed control is obtained when this product is activated by at least 1/2 inch of rainfall or irrigation, or shallow (1 to 2 inches) incorporation, prior to weed seed germination and within 14 days following application.

Not for use on plants being grown for sale or other commercial use, commercial seed production or 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 (excluding putting greens) 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. Do not apply to golf course putting greens. Failure to follow the directions for use and precautions on this label may result in poor weed control, crop injury or illegal residues.

Application Directions

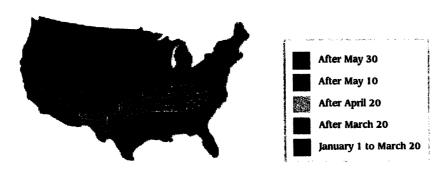
Uniformly apply using suitable, calibrated application equipment.

Established Turf

This product is a selective preemergent herbicide that, when properly applied, controls certain grass and broadleaf weeds in established turf grasses and lawns. The maximum amount of 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 is obtained when this product is activated by at least 1/2 inch of rainfall or irrigation prior to weed seed germination and within 14 days following application. See map for approximate crabgrass seed germination dates.

Crabgrass Seed Germination Dates



Use Precautions

The following precautions apply to the use of this product in turf grasses and lawns. (1) Application of this product may thin emerged annual bluegrass and newly overseeded grasses. (2) 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. (3) Do not cut treated sod within 120 days after application. Do not apply to newly set sod until the following year. (4) Application to turf stressed by drought, low fertility or pest damage may result in turf injury. (5) Disturbing the herbicide barrier with cultural practices such as disking may result in reduced weed control. (6) 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

Apply this product 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. Base the maximum use rate selection 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 of This Product per Calendar Year By Turf Grass Species ¹				
Turf Species	Lbs. Product/100 Sq. Ft.	Lbs. Al/A		
Bermudagrass ² , Bahiagrass, Centipedegrass,	395	0.91	1.5	
Seashore Paspalum, St. Augustinegrass, Tall				
Fescue (including turf-type), Zoysia				
Buffalograss, Kentucky Bluegrass, Perennial	263	0.60	1.0	
Ryegrass				
Creeping Red Fescue	197	0.45	0.75	
Creeping Bentgrass	171	0.39	0.65	

/A = per Acre A.I. = Active Ingredient

- Do not apply more than 395 lbs./A (0.91 lbs./100 sq. ft.) of this product per calendar year.
- Use higher rates of this product to achieve higher levels of fertility and longer periods of weed control for each turf type, but do not exceed the maximum application rates specified in the *Maximum Annual Rates* table.

Weeds Controlled

When used in accordance with this label this product controls the following weeds:

Barnyardgrass Bluegrass, Annual (*Poa annua*) Carpetweed Kochia Lambsquarter, Common Lovegrass

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

²May be used on newly sprigged or plugged Bermudagrass at rates not to exceed 137 lbs./A (0.32 lbs./100 sq. ft.). Newly sprigged or plugged Bermudagrass stolon rooting may be temporarily retarded. Only suppresses Foxtail, Goosegrass and Rescuegrass due to reduced product rates used in sprigging situations.

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Chickweed, Common

Chickweed, Mouseear (from seed)

Crabgrass (Large, Smooth)

Crowfootgrass Cupgrass, Woolly Foxtails, Annual

Goosegrass¹ Henbit Itchgrass

Johnsongrass (from seed)

Junglerice Knotweed Panicum (Texas, Fall, Browntop)

Pigweed

Purslane, Common Pusley, Florida Rescuegrass² Shepherd's Purse³ Signalgrass, Broadleaf

Speedwell, Persian

Sprangletop Spurge, Prostate Witchgrass

Woodsorrel, Yellow (from seed)

¹In many areas a single application of 171 to 395 lbs./A (0.39 to 0.91 lbs./100 sq. ft.) 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 171 to 263 lbs./A (0.39 to 0.61 lbs./100 sq. ft.) followed 60 to 90 days later by a second application that does not exceed the maximum annual rate. Do not exceed the maximum rate for turf grass species listed in the *Maximum Annual Rates* table.

Sequential applications may be made provided the total amount of product applied does not exceed the recommended maximum annual application rate 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 seedlings is likely if this product is applied before seedling secondary roots are in the second inch of soil, not thatch plus soil.

When to Overseed After Application

This product inhibits the germination of turf species if overseeded too soon after application. Follow rates and intervals in the table below for best overseeding results.

	Rate of This Product			Months Before Overseeding		
Lbs. / A	Lbs. / 100 Sq. Ft.	Al / Acre	North	Transition	South	
132	0.30	0.50	4	4	4	
171	0.39	0.65	5	4	4	
195	0.45	0.75	6	5	5	
210	0.48	0.80		6	6	
263	0.61	1.00		7	7	
300	0.69	1.14			9	
342	0.79	1.30			10	
395	0.91	1.50			12	

Landscape Ornamentals (including Established Perennials and Wildflower Plantings)

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

² Suppression only.

³Apply in later summer, fall or winter prior to germination.

Use Rates

Apply this product at 171 to 395 lbs./A (0.39 to 0.91 lbs./100 sq. ft.) in fall and/or spring. Use higher application rates for longer control periods. Sequential or single applications may be made provided the total amount of product applied does not exceed the maximum annual application rate of 395 lbs./A.

Application Timing and Information

This product is a preemergent herbicide and will not control emerged weeds. Most effective weed control in ornamentals is obtained when this product is activated by at least 1/2 inch of rainfall or irrigation, or with shallow (1 to 2 inches) 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 postemergent herbicide.

Established Landscape Ornamentals

This product may be applied to 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 this product into the soil.

Newly-Transplanted Landscape Ornamentals

This product may be applied to newly transplanted ornamentals as a broadcast, over the top or directed application. Delay application to allow soil to settle around new transplants and thoroughly water before applying this product. Apply this product after cuttings form roots and become established. Apply before buds/grafts have taken to avoid any inhibition of the tissue union.

Tolerant Ornamental Species

This product will not harm most ornamental trees, shrubs, vines and flowers. The species listed in Table 1 are tolerant to this product. This product is also approved for application, except in California, to the species in Table 2. Best results are obtained when this product is uniformly applied to the soil surface; avoid applying to ornamental shoots as this may prevent uniform distribution on the soil surface. This product may be applied over the top of these species. When plants are under stress, such as heat, drought or frost damage, some cultivars of listed plants may be sensitive to this product.

Table 1 – Tolerant Ornamental Species (All States)

Scientific Name	Common Name		
Abies spp.	Fir species** (Balsam, Fraser, Noble, etc.)		
Acer palmatum	Japanese Maple		
Acer 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		
Barberis julianae	Wintergreen Barberry		
Barberis mentorensis	Mentor Barberry		

Common Name	
Japanese Barberry	
Warty Barberry	
Japanese Boxwood	
Weeping Bottlebrush	
Scotch Heather	
Hottentot Fig (Ice Plant)	
Feathery Cassia	
Wild Lilac	
False Cypress	
Cleyera	
Citrus species*	
Flowering Dogwood	
American Dogwood	
Pampas Grass	
Cranberry Cotoneaster	
Cotoneaster	
Bearberry Cotoneaster	
Rockspray Cotoneaster	
Hawthorne	
Italian Cypress	
White Trailing Ice Plant	
Hop Bush	
Silverberry	
Wintercreeper	
Japanese Spindle Tree (Evergreen Euonymus)	
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 Holly	
Iris species**	
Winter Jasmine	
Chinese Juniper	
Shore Juniper	
Creeping Juniper	
Creeping Juniper Walnut*	

Scientific Name	Common Name
Justicia brandegeana	Shrimp Plant
Lagerstromia indica	Crepe Myrtle
Ligustrum amurense	Amur Privet
Ligustrum japonicum	Japanese Privet
Ligustrum lucidum	Glossy Privet (Wax-leaf)
Lirope muscari	Big Blue Lilyturf
Lonicera japonica	Japanese Honeysuckle
Lonicera tatarica	Tatarian Honeysuckle
Magnolia spp.	Magnolia species**
Malephora luteola	Ice Plant
Malus spp.	Crabapple*
Nandina domestica	Heavenly Bamboo
Narcissus spp.	Narcissus species**
Nerium spp.	Oleander
Olea europaea	Olive*
Ophiopogon japonicus	Mondo Grass
Osteospermum fruticosum	Trailing African Daisy
Oxydendrum arboreum	Sourwood
Persea americana	Avodaco*
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
Pinus canariensis	Canary Island Pine
Pinus elliottii	Slash Pine
Pinus halepensis	Aleppo Pine
Pinus nigra	Austrian Black Pine
Pinus palustris	Longleaf Pine
Pinus radiata	Monterey Pine
Pinus strobus	Eastern White Pine
Pinus sylvestris	Scotch Pine
Pinus taeda	Loblolly Pine
Pinus thunbergiana	Japanese Black Pine
Pinus virginiana	Virginia Pine
Pistachio spp.	Pistachio*
Pittosporum rhombifolium	Queensland Pittosporum
Pittosporum tobira	Japanese Pittosporum
Podocarpus macrophyllus	Japanese Yew
Prunus laurocerasus	English Laurel
Prunus spp.	Almond, Apricot, Nectarnie, Peach, Plum and Prune*
Pseudotsuga menziesii	Douglas Fir**
Pyracantha coccinea	Firethorn Scarlet
Pyracantha fortuneana	Firethorn
Pyracantha koidzumii	Firethorn
Pyrus spp.	Bradford Pear spp.

59144-30 **Reference Label**: Page 10 of 13 05/10/02 SAL + 12/20/04 + 01/23/06 and 08/10/2007 NOTIFs <u>XXXXX</u> = additions; = deletions

Scientific Name	Common Name	
Quercus rubra Oak species		
Raphiolepis indica	Indian Hawthorne	
Rhododendron (including Azalea)	"Coral Bells," "Formosa," "Hino-crimson," "PJM," "Roseum Elegans"	
Rosa banksiae	Lady Bank's Rose	
Rosmarinus officinalis	Rosemary*	
Rumohra adiantiformis	Leatherleaf Fern	
Santolina virens		
Sedum album	Stonecrop	
Syzygium paniculatum	Japanese Boxcherry	
Taxus cuspidata	Japanese Yew	
Taxus media	Yew	
Thuja occidentalis	American Arborvitae	
Trachelospermum asiaticum	Star Jasmine	
Tsuga canadensis	Canada Hemlock	
Tulipa spp.	Tulip species	
Viburnum japonicum	Japanese Viburnum	
Viburnum odoratissimum	Sweet Virurnum	
Viburnum plicatum	Japanese Snowball	
Viburnum rigidum	Canary island Viburnum	
Viburnum tinus	Laurustinus	
Viburnum trilobum	Cranberry Bush	
Viburnum wrightii	Leatherleaf Viburnum	
Vinca major	Vinca	
Vinca minor	Dwarf Periwinkle	
Vitis spp.	Grape*	
Weigela florida	Old Fashioned Weigela	
Yucca aloifolia	Spanish Bayonet	
Yucca filamentosa	Yucca, Adam's Needle	

^{*}Do not use on food producing trees, vines or plants.
**Not for use on container grown plants.

Table 2 – Tolerant Ornamental Species/Varieties (All States Except California)

Scientific Name	Common Name
Abelia grandiflora	Abelia: Sherwood
Achillea spp.	Yarrow: King Edward
Agapanthus orientalis	
Akebia quinata	Five-Leaf or Chocolate Vine
Allium cemuum	Lady's Leek, Nodding Onion
Anemone hybrida	Japanese Anemone
Aquilegia spp.	Aquilegia: Red and Gold
Artemisia spp.	Wormwood: Silver Mound, Castle
Aster spp.	Aster: Bonny Blue, Purple Dome

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Scientific Name	Common Name		
Aster X frikartii			
Athyrium filix-femina	Lady Fern; Fern Lady		
Begonia spp.	Fibrous Begonia: Hardy Grandis		
Bergenia cordifolia			
Boltonia asteroides	Snowbank		
Bougainvillea spp.	Bougainvillea		
Buddleia davidii	Butterfly-Brush (Dwarf Blue); Royal Red		
Callistemon citrinus	Crimson Bottlebrush		
Campanula carpatica	Tussock Bellflower (White Clips)		
Campis X tagliabuana	Trumpet Creeper, Trumpet Flower; Madame Galen		
Ceratostigma plumbaginoides			
Crhysanthemum nipponicum			
Coreopsis spp.	Coreopsis (Calliopsis): Early Sunrise, Moonbeam		
Crocosmia spp.	Lucifer		
Delosperma spp.	Cooperi Pink		
Delphinium spp.	Larkspur; Blue Elf		
Dianthus deltoides	Dianthus, maiden Pinks "Zing"		
Dianthus gratianopolitanus	Cheddar Pink		
Echinacea pupurea	Coneflower, Purple; Magnus		
Forsythia suspensa	Weeping Forsythia		
Gaillardia spp.	Gaillardia, Blanket Flower: "Goblin"		
Gentiana dahurica	Gentian		
Geranium cinereum	Cranesbill		
Gypsophila repens	Baby's Breath		
Helianthemum spp.	Sunrose		
Hemerocallis spp.	Daylily: Aztec Gold, Stella De Oro, Tender Love		
Heucherella spp.	Coral Bell; Bridget Bloom		
Hibiscus spp.	Mallow; Disco Belle White		
Hosta plantaginea	Hosta, Plantain Lily (Fragrant)		
Hosta sieboldiana	Hosta, "Searsucker"		
Houttuynia cordata var. variegata			
Hydrangea macrophylla	Bigleaf Hydrangea		
Inula ensifolia			
Iris ensata	Sword-Leaved Iris; Jodlesong		
Iris siberica	Siberian Iris; Cabernet		
Juniperus davurica	Parsoni		
Lagerstromia indica x fauriel	Crape Myrtle; Tuscarora		
Lantana montevidensis	Weeping Lantana		
Lavender spp.	Lavender; Munstead		
Leontopodium alpinum	Edelweiss		
Ligstrum sinense	Chinese Privet; Variegata		
Lilium spp.	Lily: Jazz		
Lirope muscari var. variegata	Lirope, Variegated		
Lirope spicata	Lirope, Creeping		

Scientific Name	Common Name
Lobelia cardinalis	Cardinal Flower, Indian Pink
Loropetalum chinenseq	Burgundy
Lythrum spp.	Loosestrife; Modern Pink
Miscanthus sinensis	Yaku Jima, Silberfeder
Oenothera missourensis	Evening Primrose
Osmanthus heterophyllus	Osmanthus (False Holly): Gulf Tide
Paeonia suffruticosa	Tree Peony
Pennisetum setaceum	Fountain Grass (Dwarf)
Perovskia atriplicifolia	
Physostegia virginiana	Dragonhead, False; Vivid
Quercus shumardii	Oak, Shumard's Red
Rhaphiolepis umbellata	Yedda Hawthorne
Rhododendron (including azalea)	"Delaware Valley White," "Flame Creeper," "Girard
, , ,	Crimson," "George L. Tabor," Wakeiebisu, White
	Gumpo
Rudbeckia spp.	Black-Eyes Susan: Goldstrum
Saxifraga spp.	Saxifrage; Purple Dome
Scabiosa spp.	Pincushion Flower
Sedum cauticola	Stonecrop; Lidakense
Sedum dasyphyllum	Stonecrop
Sedum spurium	Stonecrop; Dragon's Blood
Spiraea bumalda	Spirea: Anthony Waterer
Syzyglum paniculatum	Austrialian Brushcherry
Teucrium spp.	Germander
Thalictrum dipterocarpum	Meadow Rue
Veronica spp.	Veronica, Speedwell; Sunny Border
Viburmum suspensum	Arrowood Virburmum

^{*}Do not use on food producing trees, vines or plants.

Spreader Settings

Rotary spreaders are easier to use and reduce streaking that's often caused by drop spreaders. While drop spreaders work well, they require more care to avoid gaps and streaks that appear as light green stripes about a week after fertilizer application. Always apply with a properly calibrated rotary or drop type fertilizer spreader. Never apply by hand. Refer to and follow the spreader manufacturer's calibration and setting instructions.

Broadcast Spreaders		Drop Spreaders	
Pennington 2000B	13	Scotts 1000	8
Pennington 2050SU	13	Scotts 3000	7
		Red Devil	5
Scotts SG3000	8		
Red Devil	9		

The above spreader settings are approximate. Calibrate your spreader on 100 square feet and adjust to apply at the rate of 0.91 pound of product per 100 square feet.

^{**}Not for use on container grown plants.

	Broadcast Spreaders		Drop Spreaders
{Broadcast	For best results, apply in a circular path	{Drop	Apply 2 strips along each end. Then
Spreader	starting on the outside and working	<u>Spreader</u>	apply along length of lawn, overlappling
<u>Graphic</u> }	toward the center overlapping slightly to	Graphic}	slightly and shutting off the spreader
	ensure complete coverage.		before each turn at edge of border
<u> </u>			<u>strips.</u>

Warranty & Disclaimer

This product conforms to its chemical description and is reasonably fit for the purpose stated on the label when used in accordance with directions under normal conditions of use. To the extent not prohibited by applicable law, Manufacturer is not responsible for the use of this product contrary to the label instructions, under abnormal conditions or under conditions not reasonably foreseeable to the manufacturer and/or seller, and buyer assumes the risk of any such use. If you decide, after reading this label, that you can't use this product immediately return the unopened package to the point of purchase.

In case of emergency, call 800-424-9300

[TurfKing™ products distributed by Inter-American Products, Cincinnati, OH 45202]

{This product is marketed under the following additional brand names:
Pennington® Crabgrass Preventer + Lawn Fertilizer 5-10-25 (01/06/2000)
Pike Family Signature Collection Crabgrass Preventer + Lawn Fertilizer 5-10-25 (12/20/2004)
Expert Gardener Crabgrass Preventer Plus Lawn Fertilizer (12/20/2004)
Turf King™ Lawn Fertilizer Plus (01/23/2006)}

"/33 33

Weed + Grass Preventer

(Contains 0.38% Barricade®)

Cut Here to Open {Scissors Graphic}

For Selective Preemergent Control of Grass and Broadleaf Weeds in:
Established Turf Grasses (excluding Golf Course Putting Greens) and Lawns
Landscape Ornamentals (Including Established Perennials and Wildflower Plantings)

20 Pounds Treats up to 5,128 Sq. Ft. an area approximately 51' x 100' 40 Pounds Treats up to 10,256 Sq. Ft. an area approximately 102.5' x 100' 50 Pounds Treats up to 12,820 Sq. Ft. an area approximately 128' x 100'

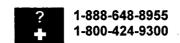
Contains 0.38% Barricade® Preemergent Herbicide
Feeds up to 4 Months
Crabgrass Preventer Plus Fertilizer with Barricade® 0.38%
Controls Crabgrass
Season-Long Crabgrass Control

Quality Fertilizers from The Lawn Seed Experts
Crabgrass Preventer + Lawn Fertilizer 5-10-25
28-3-4
20-3-4
Controls Grass and Broadleaf Weeds Before they Germinate
Contains an Effective Pre-emergent Herbicide for Control of Crabgrass
and Many Other Nuisance Grasses and Broadleaf Weeds
Also Controls Barnyardgrass, Annual Bluegrass (*Poa annua*), Crabgrass,
Chickweed, Foxtails, Goosegrass, Henbit, Pigweed and Spurge
Feeds Your Desirable Grass up to 4 Months with a Complete Fertilizer
Featuring Pennington's Coated Slow-Release Nitrogen for a longer lasting green lawn

Pike Family Nurseries Signature Collection Individually Selected by the Pike Family Over forty-five years of knowing what is best for Southern lawns

Active Ingredient: *Prodiamine			
*CAS No. 29092-21-2	<u>99.629</u>		
CAS No. 29092-21-2	Total 100.00%		
Keep Out of Reach of Children			
1	JTION		
See back panel for addition	al precautionary statements.		
EPA Reg. No. 59144-30	EPA Est.		
N-414 + 1-4	n a consider () . I a N		
Net Weight:	pounds (kg)		

GRO TEC, INC.
P.O. Box 290
Madison, GA 30650
1-800-285-SEED
www.penningtonseed.com



Barricade® is a Registered Trademark of Syngenta Crop Protection

N {#}
Nitrogen
Produces lush, dark green
plant growth

P {#} Phosphorous Promotes root growth and development

K {#} Potassium Improves lawn's hardiness and disease resistance

Guaranteed [Fertilizer] Analysis 5-10-25

{Code}
Total Nitrogen (N)
3.90% Ammoniacal Nitrogen
1.10% Urea Nitrogen
Available Phosphate (P ₂ O ₅) 10.00%
Potassium (K ₂ O)
Derived from: Urea, Ammonium Phosphate, Muriate of Potash.
Guaranteed [Fertilizer] Analysis 28-3-4 F525
Total Nitrogen (N)
1.17% Ammoniacal Nitrogen
26.83% Urea Nitrogen
Available Phosphate (P ₂ O ₅)
Soluble Potash (K ₂ O)
Total Iron (Fe)
0.25%Water Soluble Iron (Fe)
Derived from: Sulfur Coated Urea, Ammonium Phosphate,
Muriate of Potash, Iron Sulfate, Iron Oxide
*Part of the nitrogen in this product has been sulfur coated
to provide 7.00% coated slow-release nitrogen.
Guaranteed [Fertilizer] Analysis 20-3-4
Total Nitrogen (N)
1.00% Ammoniacal Nitrogen
19.00% Urea Nitrogen
Available Phosphate (P ₂ O ₅)
Potassium (K ₂ O)
Derived from: Urea, Ammonium Phosphate, Muriate of Potash.

PRECAUTIONARY STATEMENTS Hazards to Humans and Domestic Animals

CAUTION: Causes moderate eye irritation. Harmful if inhaled or absorbed through skin. Avoid contact with skin, eyes or clothing. Avoid breathing dust. Thoroughly wash with soap and water after handling. Prolonged or frequently repeated skin contact while handling the material may cause allergic reactions in some individuals.

First Aid

If in Eyes	Hold eye open and rinse slowly and gently with water for 15-20 minutes.
	Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.
	Call a poison control center or doctor for treatment advice.
If on Skin	Take off contaminated clothing.
	Immediately rinse skin with plenty of water for 15-20 minutes.
	Call a poison control center or doctor for treatment advice.
If Inhaled	Move person to fresh air.
	• If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably
	by mouth-to-mouth, if possible.
	Call a poison control center or doctor for further treatment advice.
	roduct container or label with you when calling a poison control center or doctor, or going for
treatment. [You may also contact 1-800-424-9300 for emergency medical treatment information.]

{Note: The First Aid statements' grid format will be used if market label space permits; otherwise a paragraph format will be used.}

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.

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

Storage and Disposal

Do not contaminate water, food or feed by storage or disposal.

Storage: Store in original container [bag] in a cool, dry (preferably locked) storage area. Store away from feed or food stuffs and separated from other fertilizers and pesticides. Keep container [bag] closed when product is not being used. **Pesticide Disposal: If empty:** Do not reuse this container. Place in trash or offer for recycling if available. **If partly filled:** Call your local solid waste agency for disposal instructions. Never place unused product down any indoor or outdoor drain.

For household/domestic use product in bags 25 to 50 pounds:

[Storage and Disposal]

Do not contaminate water, food or feed by storage or disposal.

Storage: Store in original bag in a cool, dry (preferably locked) storage area inaccessible to children and pets. Store away from feed or food stuffs and separated from other fertilizers and pesticides. Keep bag closed when product is not being used. **Pesticide Disposal: If empty:** Do not reuse this container. Place in trash or offer for recycling if available. **If partly filled:** Call your local solid waste agency for disposal instructions. Never place unused product down any indoor or outdoor drain.

For household/domestic use product in bags up to 25 pounds:

[Storage and Disposal]

Storage: Store in original bag in a cool, dry (preferably locked) storage area inaccessible to children and pets. Store away from feed or food stuffs and separated from other fertilizers and pesticides. Keep bag closed when product is not being used. **Disposal: If empty:** Do not reuse this container. Place in trash or offer for recycling if available. **If partly filled:** Call your local solid waste agency for disposal instructions. Never place unused product down any indoor or outdoor drain.

This product is a selective preemergent herbicide that provides residual control of many grass and broadleaf weeds in

- established turf grasses (excluding golf course putting greens) and lawns
- landscape ornamentals
- established perennials and wildflower plantings.

This product controls susceptible weeds by inhibiting weed seed germination and root development. Most effective weed control is obtained when this product is activated by at least 1/2 inch of rainfall or irrigation, or shallow (1 to 2 inches) incorporation, prior to weed seed germination and within 14 days following application.

Not for use on plants being grown for sale or other commercial use, commercial seed production or 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 (excluding putting greens) 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. Do not apply to golf course putting greens. Failure to follow the directions for use and precautions on this label may result in poor weed control, crop injury or illegal residues.

Application Directions

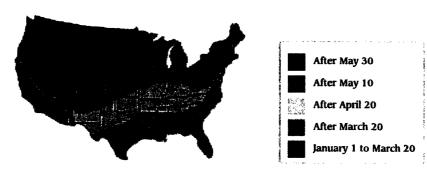
Uniformly apply using suitable, calibrated application equipment.

Established Turf

This product is a selective preemergent herbicide that, when properly applied, controls certain grass and broadleaf weeds in established turf grasses and lawns. The maximum amount of 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 is obtained when this product is activated by at least 1/2 inch of rainfall or irrigation prior to weed seed germination and within 14 days following application. See map for approximate crabgrass seed germination dates.

Crabgrass Seed Germination Dates



Use Precautions

The following precautions apply to the use of this product in turf grasses and lawns. (1) Application of this product may thin emerged annual bluegrass and newly overseeded grasses. (2) 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. (3) Do not cut treated sod within 120 days after application. Do not apply to newly set sod until the following year. (4) Application to turf stressed by drought, low fertility or pest damage may result in turf injury. (5) Disturbing the herbicide barrier with cultural practices such as disking may result in reduced weed control. (6) 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

Apply this product 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. Base the maximum use rate selection 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 of This Product per Calendar Year By Turf Grass Species ¹				
Turf Species	Lbs. Product/A	Lbs. Product/100 Sq. Ft.	Lbs. Al/A	
Bermudagrass ² , Bahiagrass, Centipedegrass,	395	0.91	1.5	
Seashore Paspalum, St. Augustinegrass, Tall				
Fescue (including turf-type), Zoysia				
Buffalograss, Kentucky Bluegrass, Perennial	263	0.60	1.0	
Ryegrass				
Creeping Red Fescue	197	0.45	0.75	
Creeping Bentgrass	171	0.39	0.65	

/A = per Acre A.I. = Active Ingredient

²May be used on newly sprigged or plugged Bermudagrass at rates not to exceed 137 lbs./A (0.32 lbs./100 sq. ft.). Newly sprigged or plugged Bermudagrass stolon rooting may be temporarily retarded. Only suppresses Foxtail, Goosegrass and Rescuegrass due to reduced product rates used in sprigging situations.

- Do not apply more than 395 lbs./A (0.91 lbs./100 sq. ft.) of this product per calendar year.
- Use higher rates of this product to achieve higher levels of fertility and longer periods of weed control for each turf type, but do not exceed the maximum application rates specified in the *Maximum Annual Rates* table.

Weeds Controlled

When used in accordance with this label this product controls the following weeds:

Barnyardgrass
Bluegrass, Annual (*Poa annua*)
Carpetweed
Chickweed, Common
Chickweed, Mouseear (from seed)

Kochia Lambsquarter, Common Lovegrass

Panicum (Texas, Fall, Browntop)

Pigweed

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

Crabgrass (Large, Smooth) Crowfootgrass Cupgrass, Woolly Foxtails, Annual Goosegrass1 Henbit Itchgrass

Johnsongrass (from seed)

Junalerice Knotweed⁻ Purslane, Common Pusley, Florida Rescuegrass² Shepherd's Purse³ Signalgrass, Broadleaf Speedwell, Persian Sprangletop Spurge, Prostate

Witchgrass

Woodsorrel, Yellow (from seed)

In many areas a single application of 171 to 395 lbs./A (0.39 to 0.91 lbs./100 sq. ft.) 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 171 to 263 lbs./A (0.39 to 0.61 lbs./100 sq. ft.) followed 60 to 90 days later by a second application that does not exceed the maximum annual rate. Do not exceed the maximum rate for turf grass species listed in the Maximum Annual Rates table.

Sequential applications may be made provided the total amount of product applied does not exceed the recommended maximum annual application rate 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 seedlings is likely if this product is applied before seedling secondary roots are in the second inch of soil, not thatch plus soil.

When to Overseed After Application

This product inhibits the germination of turf species if overseeded too soon after application. Follow rates and intervals in the table below for best overseeding results.

Rate of This Product		Months Before Overseeding			
Lbs. / A	Lbs. / 100 Sq. Ft.	Al / Acre	North	Transition	South
132	0.30	0.50	4	4	4
171	0.39	0.65	5	4	4
195	0.45	0.75	6	5	5
210	0.48	0.80		6	6
263	0.61	1.00		7	7
300	0.69	1.14			9
342	0.79	1.30			10
395	0.91	1.50			12

Landscape Ornamentals (including Established Perennials and Wildflower Plantings)

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

² Suppression only.

³Apply in later summer, fall or winter prior to germination.

Use Rates

Apply this product at 171 to 395 lbs./A (0.39 to 0.91 lbs./100 sq. ft.) in fall and/or spring. Use higher application rates for longer control periods. Sequential or single applications may be made provided the total amount of product applied does not exceed the maximum annual application rate of 395 lbs./A.

Application Timing and Information

This product is a preemergent herbicide and will not control emerged weeds. Most effective weed control in ornamentals is obtained when this product is activated by at least 1/2 inch of rainfall or irrigation, or with shallow (1 to 2 inches) 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 postemergent herbicide.

Established Landscape Ornamentals

This product may be applied to 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 this product into the soil.

Newly-Transplanted Landscape Ornamentals

This product may be applied to newly transplanted ornamentals as a broadcast, over the top or directed application. Delay application to allow soil to settle around new transplants and thoroughly water before applying this product. Apply this product after cuttings form roots and become established. Apply before buds/grafts have taken to avoid any inhibition of the tissue union.

Tolerant Ornamental Species

This product will not harm most ornamental trees, shrubs, vines and flowers. The species listed in Table 1 are tolerant to this product. This product is also approved for application, except in California, to the species in Table 2. Best results are obtained when this product is uniformly applied to the soil surface; avoid applying to ornamental shoots as this may prevent uniform distribution on the soil surface. This product may be applied over the top of these species. When plants are under stress, such as heat, drought or frost damage, some cultivars of listed plants may be sensitive to this product.

Table 1 – Tolerant Ornamental Species (All States)

Scientific Name	Common Name
Abies spp.	Fir species** (Balsam, Fraser, Noble, etc.)
Acer palmatum	Japanese Maple
Acer 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
Barberis julianae	Wintergreen Barberry
Barberis mentorensis	Mentor Barberry

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Scientific Name	Common Name
Barberis thunbergii	Japanese Barberry
Barberis 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
Cornus stolonifera	American Dogwood
Cortaderia sellonana	Pampas Grass
Cotoneaster apiculatus	Cranberry Cotoneaster
Cotoneaster buxifolius	Cotoneaster
Cotoneaster dammeri	Bearberry Cotoneaster
Cotoneaster microphyllus	Rockspray Cotoneaster
Cretaegus spp.	Hawthorne
Cupressus sempervirens	Italian Cypress
Delasperma alba	White Trailing Ice Plant
Dodonea viscosa	Hop Bush
Elaeagnus pungens	Silverberry
Euonymus fortunei	Wintercreeper
Euonymus japonica	Japanese Spindle Tree (Evergreen Euonymus)
Euonymus kiautschovicks	Spreading Euonymus
Fatsia japonica	Japanese Aralia
Forsythia intermedia	Border Forsythia
Forsythia 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
llex cornuta	Chinese Holly
Ilex crenata	Japanese Holly
llex opaca	American Holly
llex pernyi	Holly
llex vomitoria	Yaupon Holly
Iris spp.	Iris species**
Jasminium nudiflorum	Winter Jasmine
Juniperus chinensis	Chinese Juniper
Juniperus conferta	Shore Juniper
Juniperus horizontalis	Creeping Juniper
Juglans spp.	Walnut*
augiana app.	vvaniut

Scientific Name	Common Name
Justicia brandegeana	Shrimp Plant
Lagerstromia indica	Crepe Myrtle
Ligustrum amurense	Amur Privet
Ligustrum japonicum	Japanese Privet
Ligustrum lucidum	Glossy Privet (Wax-leaf)
Lirope muscari	Big Blue Lilyturf
Lonicera japonica	Japanese Honeysuckle
Lonicera tatarica	Tatarian Honeysuckle
Magnolia spp.	Magnolia species**
Malephora luteola	Ice Plant
Malus spp.	Crabapple*
Nandina domestica	Heavenly Bamboo
Narcissus spp.	Narcissus species**
Nerium spp.	Oleander
Olea europaea	Olive*
	Mondo Grass
Ophiopogon japonicus	
Osteospermum fruticosum	Trailing African Daisy Sourwood
Oxydendrum arboreum Persea americana	Avodaco*
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
Pinus canariensis	Canary Island Pine
Pinus elliottii	Slash Pine
Pinus halepensis	Aleppo Pine
Pinus nigra	Austrian Black Pine
Pinus palustris	Longleaf Pine
Pinus radiata	Monterey Pine
Pinus strobus	Eastern White Pine
Pinus sylvestris	Scotch Pine
Pinus taeda	Loblolly Pine
Pinus thunbergiana	Japanese Black Pine
Pinus virginiana	Virginia Pine
Pistachio spp.	Pistachio*
Pittosporum rhombifolium	Queensland Pittosporum
Pittosporum tobira	Japanese Pittosporum
Podocarpus macrophyllus	Japanese Yew
Prunus laurocerasus	English Laurel
Prunus spp.	Almond, Apricot, Nectarnie, Peach, Plum and Prune*
Pseudotsuga menziesii	Douglas Fir**
Pyracantha coccinea	Firethorn Scarlet
Pyracantha fortuneana	Firethorn
Pyracantha koidzumii	Firethorn
Pyrus spp.	Bradford Pear spp.

Scientific Name	Common Name	
Quercus rubra	Oak species	
Raphiolepis indica	Indian Hawthorne	
Rhododendron (including Azalea)	"Coral Bells," "Formosa," "Hino-crimson," "PJM," "Roseum Elegans"	
Rosa banksiae	Lady Bank's Rose	
Rosmarinus officinalis	Rosemary*	
Rumohra adiantiformis	Leatherleaf Fern	
Santolina virens		
Sedum album	Stonecrop	
Syzygium paniculatum	Japanese Boxcherry	
Taxus cuspidata	Japanese Yew	
Taxus media	Yew	
Thuja occidentalis	American Arborvitae	
Trachelospermum asiaticum	Star Jasmine	
Tsuga canadensis	Canada Hemlock	
Tulipa spp.	Tulip species	
Viburnum japonicum	Japanese Viburnum	
Viburnum odoratissimum	Sweet Virurnum	
Viburnum plicatum	Japanese Snowball	
Viburnum rigidum	Canary island Viburnum	
Viburnum tinus	Laurustinus	
Viburnum trilobum	Cranberry Bush	
Viburnum wrightii	Leatherleaf Viburnum	
Vinca major	Vinca	
Vinca minor	Dwarf Periwinkle	
Vitis spp.	Grape*	
Weigela florida	Old Fashioned Weigela	
Yucca aloifolia	Spanish Bayonet	
Yucca filamentosa	Yucca, Adam's Needle	

^{*}Do not use on food producing trees, vines or plants.

**Not for use on container grown plants.

Table 2 – Tolerant Ornamental Species/Varieties (All States Except California)

Scientific Name	Common Name
Abelia grandiflora	Abelia: Sherwood
Achillea spp.	Yarrow: King Edward
Agapanthus orientalis	
Akebia quinata	Five-Leaf or Chocolate Vine
Allium cemuum	Lady's Leek, Nodding Onion
Anemone hybrida	Japanese Anemone
Aquilegia spp.	Aquilegia: Red and Gold
Artemisia spp.	Wormwood: Silver Mound, Castle
Aster spp.	Aster: Bonny Blue, Purple Dome

Scientific Name	Common Name
Aster X frikartii	
Athyrium filix-femina	Lady Fern; Fern Lady
Begonia spp.	Fibrous Begonia: Hardy Grandis
Bergenia cordifolia	
Boltonia asteroides	Snowbank
Bougainvillea spp.	Bougainvillea
Buddleia davidii	Butterfly-Brush (Dwarf Blue); Royal Red
Callistemon citrinus	Crimson Bottlebrush
Campanula carpatica	Tussock Bellflower (White Clips)
Campis X tagliabuana	Trumpet Creeper, Trumpet Flower; Madame Galen
Ceratostigma plumbaginoides	
Crhysanthemum nipponicum	
Coreopsis spp.	Coreopsis (Calliopsis): Early Sunrise, Moonbeam
Crocosmia spp.	Lucifer
Delosperma spp.	Cooperi Pink
Delphinium spp.	Larkspur; Blue Elf
Dianthus deltoides	Dianthus, maiden Pinks "Zing"
Dianthus gratianopolitanus	Cheddar Pink
Echinacea pupurea	Coneflower, Purple; Magnus
Forsythia suspensa	Weeping Forsythia
Gaillardia spp.	Gaillardia, Blanket Flower: "Goblin"
Gentiana dahurica	Gentian
Geranium cinereum	Cranesbill
Gypsophila repens	Baby's Breath
Helianthemum spp.	Sunrose
Hemerocallis spp.	Daylily: Aztec Gold, Stella De Oro, Tender Love
Heucherella spp.	Coral Bell; Bridget Bloom
Hibiscus spp.	Mallow; Disco Belle White
Hosta plantaginea	Hosta, Plantain Lily (Fragrant)
Hosta sieboldiana	Hosta, "Searsucker"
Houttuynia cordata var. variegata	
Hydrangea macrophylla	Bigleaf Hydrangea
Inula ensifolia	
Iris ensata	Sword-Leaved Iris; Jodlesong
Iris siberica	Siberian Iris; Cabernet
Juniperus davurica	Parsoni
Lagerstromia indica x fauriel	Crape Myrtle; Tuscarora
Lantana montevidensis	Weeping Lantana
Lavender spp.	Lavender; Munstead
Leontopodium alpinum	Edelweiss
Ligstrum sinense	Chinese Privet; Variegata
Lilium spp.	Lily: Jazz
Lirope muscari var. variegata	Lirope, Variegated
Lirope spicata	Lirope, Creeping

Calandilla Nama	Common Nome
Scientific Name	Common Name
Lobelia cardinalis	Cardinal Flower, Indian Pink
Loropetalum chinenseq	Burgundy
Lythrum spp.	Loosestrife; Modern Pink
Miscanthus sinensis	Yaku Jima, Silberfeder
Oenothera missourensis	Evening Primrose
Osmanthus heterophyllus	Osmanthus (False Holly): Gulf Tide
Paeonia suffruticosa	Tree Peony
Pennisetum setaceum	Fountain Grass (Dwarf)
Perovskia atriplicifolia	
Physostegia virginiana	Dragonhead, False; Vivid
Quercus shumardii	Oak, Shumard's Red
Rhaphiolepis umbellata	Yedda Hawthorne
Rhododendron (including azalea)	"Delaware Valley White," "Flame Creeper," "Girard
· -	Crimson," "George L. Tabor," Wakeiebisu, White
	Gumpo
Rudbeckia spp.	Black-Eyes Susan: Goldstrum
Saxifraga spp.	Saxifrage; Purple Dome
Scabiosa spp.	Pincushion Flower
Sedum cauticola	Stonecrop; Lidakense
Sedum dasyphyllum	Stonecrop
Sedum spurium	Stonecrop; Dragon's Blood
Spiraea bumalda	Spirea: Anthony Waterer
Syzyglum paniculatum	Austrialian Brushcherry
Teucrium spp.	Germander
Thalictrum dipterocarpum	Meadow Rue
Veronica spp.	Veronica, Speedwell; Sunny Border
Viburmum suspensum	Arrowood Virburmum

^{*}Do not use on food producing trees, vines or plants.

Spreader Settings

Rotary spreaders are easier to use and reduce streaking that's often caused by drop spreaders. While drop spreaders work well, they require more care to avoid gaps and streaks that appear as light green stripes about a week after fertilizer application. Always apply with a properly calibrated rotary or drop type fertilizer spreader. Never apply by hand. Refer to and follow the spreader manufacturer's calibration and setting instructions.

Broadcast Spreaders		Drop Spreaders	
Pennington 2000B	13	Scotts 1000	8
Pennington 2050SU	13	Scotts 3000	7
Scotts SG3000	8	Red Devil	5
Red Devil	9		

The above spreader settings are approximate. Calibrate your spreader on 100 square feet and adjust to apply at the rate of 0.91 pound of product per 100 square feet.

^{**}Not for use on container grown plants.

	Broadcast Spreaders		Drop Spreaders
{Broadcast Spreader Graphic}	For best results, apply in a circular path starting on the outside and working toward the center overlapping slightly to ensure complete coverage.	{Drop Spreader Graphic}	Apply 2 strips along each end. Then apply along length of lawn, overlappling slightly and shutting off the spreader before each turn at edge of border strips.

Warranty & Disclaimer

This product conforms to its chemical description and is reasonably fit for the purpose stated on the label when used in accordance with directions under normal conditions of use. To the extent not prohibited by applicable law, Manufacturer is not responsible for the use of this product contrary to the label instructions, under abnormal conditions or under conditions not reasonably foreseeable to the manufacturer and/or seller, and buyer assumes the risk of any such use. If you decide, after reading this label, that you can't use this product immediately return the unopened package to the point of purchase.

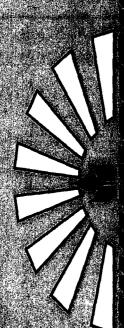
In case of emergency, call 800-424-9300

[TurfKing[™] products distributed by Inter-American Products, Cincinnati, OH 45202]

{This product is marketed under the following additional brand names: Pennington® Crabgrass Preventer + Lawn Fertilizer 5-10-25 (01/06/2000)
Pike Family Signature Collection Crabgrass Preventer + Lawn Fertilizer 5-10-25 (12/20/2004)
Expert Gardener Crabgrass Preventer Plus Lawn Fertilizer (12/20/2004)
Turf King™ Lawn Fertilizer Plus (01/23/2006)}

TREATS UP TO 5,128 Sq. Ft.

An Area Approximately 51' x 100'



Crabgrass Preventer

Controls Grass & Broadleaf Weeds Before They Germinate Contains An Effective Pre-emergent Herbicide For Control of Crabgrass and Many Other Nuisance Grasses and Broadleaf Weeds

Also Controls Barnyardgrass, Annual Bluegrass (Poa annua), Crabgrass, Chickweed, Foxtails, Goosegrass, Henbit, Pigweed, And Spurge

KEEP OUT OF REACH OF CHILDREN CAUTION See Back Panel For Addi

Crabgrass Preventer

oes mun The Lann Seed



NITROGEN

PHOSPHORUS

Crabgrass Preventer + Lawn Fertilizer 5-10-25

Guaranteed Analysis 5-10-25

	F525
Total Nitrogen (N)	5,00%
3.90% Ammoniacal Nitrogen	
1.10% Urea Nitrogen	
Available Phosphate (P ₂ O ₅)	10.00%
Soluble Potash (K ₂ O)	25.00%
Derived from: Urea, Ammonium Phosphate, Muriate of Polash.	

Precautionary StatementsHazards to Humans and Domestic Animals

CAUTION: Causes moderate eve irritation. Harmful if inhaled or absorbed through skin. Avoid contact with skin, eves. or clothing. Avoid breathing dust. Thoroughly wash with soap and water after handling. Prolonged or frequently repeated skin contact while handling the material may cause allergic reactions in some individuals.

First Aid

If In Eyes: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.

If on Skin: Take off contaminated clothing. Immediately rinse skin with plenty of water for 15-20 minutes. Call a poison

control center or doctor for treatment advice.

If finhaled: Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth if possible. Call a poison control center or doctor for further treatment advice.

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact 1-800-424-9300 for emergency medical treatment information.

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 confaminate water when disposing of equipment washwaters.

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 preemergent herbicide that provides residual control of many grass and broadleaf weeds in established turl grasses (excluding golf course putting greens) and lawns. This product controls susceptible weeds by inhibiting weed seeds germination and root development. Most effective weed control is obtained when this product is activated by at least 1/2 inch of rainfall or irrigation, or shallow (1 to 2 inches) incorporation, prior to weed seed germination and within 14 days following application.

Not for use on plants being grown for sale or other commercial use, commercial seed production or 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 (excluding putting greens) 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. Do not apply to golf courses or putting greens. Failure to follow the directions for use and precautions on this label may result in poor weed control, crop injury of illegal residues.

Application Directions

CRABGRASS SEED GERMINATION DATES



USE PRECAUTIONS

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

- (i) Application of this product may thin emerged annual bluegrass and newly overseeded grasses.
- (2) 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.
- (3) Do not cut treated sod within 120 days after application. Do not apply to newly set sod until the following year.
- (4) Application to turf stressed by drought, low fertility or pest damage may result in turf injury.
- (5) Disturbing the herbicide barrier with cultural practices such as disking may result in reduced weed control.
- (6) Do not apply this product to putting greens or areas where dichondra, Colonial bentgrass, velvet bentgrass or annual bluegrass (Pog annua) are desirable species.

Rates of Application

Apply this product 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. Base the 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 Rates of This Product per Calendar Year By Turf Grass Species(1)

Turf Species	Lbs. Product/A	Lbs, Product/ 100 sq. ft	Lbs. A.L./A	
Bermudagrass, ² Bahiagrass, Centipedegrass, Seashore Paspalum, St. Augustinegrass, Tall Fescue (including turf-type), Zoysía	395	0.91	1.5	
Buffalograss, Kentucky Bluegrass, Perennial Ryegrass	263	0.60	1.0	
Creeping Red Fescue	197	0.45	0.75	
Creeping Bentgrass	171	0.39	0.65	

- (1) 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 137 lbs./A(0 32 lbs./100 sq. ft.) Newly sprigged or plugged Bermudagrass stolon rooting may be temporarily retarded. Only suppresses Foxfail, Goosegrass and Rescuegrass due to reduced product rates used in sprigging situations.
- A.I. = Active Ingredient

• Do not apply more than 395 lbs./A (0.91 lbs./100 sq. ft.) of this product per calendar year.

Use higher rates of this product to achieve higher levels of fertility and longer periods of weed control for each turf type, but do not exceed the maximum application rates specified in the Maximum Annual Rates table.

Application Directions

Uniformly apply using suitable, calibrated application equipment.

ESTABLISHED TURF

This product is a selective preemergent herbicide that, when properly applied, controls certain grass and broadleaf weeds in established turf grasses and lawns. The maximum amount of 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 is obtained when this product is activated by at least 1/2 inch of rainfall or irrigation prior to weed seed germination and within 14 days following application. See map for approximate crabgrass seed permination dates.

Spreader Settings

Always apply with a properly calibrated rotary or drop type fertilizer spreader. Never apply by hand. Refer to and follow the spreader manufacturer's calibration and setting instructions.

BROADCAST SPREADERS

DROP SPREADERS

Pennington 2000B	13	Scotts 1000	8
I Chilligion 2000D	10	Decito 1000	•
Pennington 2050SU	13	Scotts 3000	7
renningion 200000	10	SCORS SOOO	,
Scotts ŠG3000	8	Red Devil	5
Scous Sosooo	O	Red Devii	J
Red Devil	α		
Keu Devii	7		

The above spreader settings are approximate. Calibrate your spreader on 100 square feet and adjust to apply at the rate of 0.91 pound of product per 100 square feet.



BROADCAST SPREADERS

For best results, apply in a circular path starting on the outside and working toward the center overlapping slightly to insure complete coverage.



DROP SPREADERS

Apply 2 strips along each end. Then apply along length of lawn, overlapping slightly and shutting off the spreader before each turn at edge of border strips.

WARRANTY & DISCLAIMER: This product conforms to its chemical description and is reasonably fit for the purpose stated on the label when used in accordance with directions under normal conditions of use. To the extent not prohibited by applicable. Manufacturer is not responsible for the use of this product contrary to the label instructions, under abnormal conditions or under conditions not reasonably forseeable to the manufacturer and/or seller, and buyer assumes the risk of any such use. If you decide, after reading this label, that you can't use this product, immediately return the unopened package to the point of purchase. (051002EPA/PR2001-6)(REV051407)

1-800-285-SEED www.penningtonseed.com

Manufactured by Gro Tec, Inc. P.O. Box 290 • Madison, GA 30650

 Do not apply more than 395 lbs./A (0.91 lbs./100 sq. ft.) of this product per calendar year.
 Use higher rates of this product to achieve higher levels of fertility and longer periods of weed control for each turf type, but do not exceed the maximum application rates specified in the Maximum Annual Rates table.

Weeds Controlled

When used in accordance with this label this product controls the following weeds:

Henbit

Barnyardgrass Bluegrass, Annual (Poa annua)

Carpetweed Chickweed, common Chickweed, Mouseear (from seed)

Crabgrass (Large, Smooth) Crowlootgrass Cupgrass, Woolly

Kochia

Foxtails Annual Lambsquarter, common Goosegrass (1) Lovegråss Panicum (Texas, Fall, Browntop) Itchgrass Johsongrass (from seed) Pigweed

lunglerice Purslane, Common Pusley, Florida Knotweed Rescuegrass (2)

Shepherspurse (3) Signalgrass, Broadleaf Speedwell, Persian Sprangletop Spurge, Prostrate Witchgrass Woodsorrel, Yellow (from seed)

(1) In many areas a single application of 171 to 395 lbs./A (0.39 to 0.91 lbs./100 sq. ft.) 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 171 to 263 lbs./A (0.39 to 0.61 lbs./100 sq. ft.) of this product followed 60 to 90 days later by a second application that does not exceed the maximum annual rate. Do not exceed the maximum rate for turf grass species listed in the **Maximum Annual Rates** table

(3) Apply in late summer, fall or winter prior to gennination.

Sequential applications may be made provided the total amount of product applied does not exceed the recommended maximum annual application rate 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 seedlings is likely if this product is applied before seedling secondary roots are in the second inch of soil, not thatch

WHEN TO OVERSEED AFTER APPLICATION

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

Rate of This Product		Months Before Overseeding			
Lbs./A	Lbs./100 sq. ft.	A.I./Acre	North	Transition	South
132 171 195 210 263 300 342	0.30 0.39 0.45 0.48 0.61 0.69 0.79	0.50 0.65 0.75 0.80 1.00 1.14 1.30	4 5 6	4 4 5 6 7	4 5 6 7 9

Storage And Disposal

Storage: Store in original bag in a cool, dry (preferably locked) storage area inaccessible to children and pets. Store away from feed or foodstuffs and separated from other fertilizers and pesticides. Keep bag closed when product is not being used. Disposal: If empty: Do not reuse this container. Place in trash or offer for recycling if available. If partly filled: Call your local solid waste agency for disposal instructions. Never place unused product down any indoor or outdoor drain.

IN CASE OF EMERGENCY, CALL 800-424-9300