

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

OFFICE OF PREVENTION, PESTICIDES AND TOXIC SUBSTANCES

JUL 24 2009

Mr. Robert F. Bischoff Product Registration TotalTurf Consulting LLC Agent for Harrell's LLC 26 A.A. Cooper Road Megs, GA 31765

SUBJECT:

Application for Pesticide Notification (PRN 98-10)

Request Alternate Brand Name "Fertilizer W/Pendimethalin 1.0%"

EPA Reg. No. 52287-18

Application Dated June 17, 2009

## Dear Registrant:

The Agency is in receipt of your Application for Pesticide Notification under Pesticide Registration Notice (PRN) 98-10 dated 06/17/09 for the above product. 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 Owen F. Beeder of my staff at 703-308-8899.

Sincerely,

ca

Linda Arrington

Notifications & Minor Formulations Team Leader Registration Division (7505P)

Office of Pesticide Programs

Please read instructions on n	everse hefore completing f			Form Approved	OMB No. 2076	20060	Approval expires 2-28-95
<b>≎</b> EPA		States Otectio			Registratio Amendment Other	n	OPP Identifier Number
	Apr	licatio	n for Pesticid	le - Section	l		
1. Company/Product Number 52287-18			Jim To	roduct Manager mpkins			osed Classification
4. Company/Product (Name) Turf Fertilizer with Pend	limethalin 1.0		PM# 25				·
5. Name and Address of App Harrell's LLC P. O. Box 807 Lakeland, FL 33802	licant (Include ZIP Code) is a new address		(b)(i), m to: EPA R		ilar or identical	in com	IFRA Section 3(c)(3) position and labeling  CATION 4-2009
			Section - I				
Amendment - Explain  Resubmission in responsion - Explain  Notification - Explain  Explanation: Use addition  Notification of Alternate Brand  CFR 152.46, and no other chall U.S.C. Sec. 1001 to willful and 40 CFR 152.46, this process.	below.  al page(s) if necessary. (Figure 1981)  d Name per PR Notice 98-10 anges have been made to the ly make any false statement	or section (IIA). This ne labeling to EPA. I	s notification is cons or the confidential st further understand t	atement of formula	elow.  isions of PR Notice of this product. In the product of the product.	understate understate	and that it is a violation of terms of PR Notice 98-10
		*****	Section - II	]			· · · · · · · · · · · · · · · · · · ·
1. Material This Product Will Child-Resistant Packaging Yes No * Certification must be submitted	Unit Packaging Yes Volume No If "Yes"	o. per ntainer	Water Soluble Pa Yes No If "Yes" Package wgt	ockeging No. per container	√ Pi	etainer letal astic lass aper ther (Spe	acify)
			<u> </u>	l			
	ontainer		50 lbs		On Affixed L		
6. Manner in Which Label is	Affixed to Product	Lithogr Paper of Stencil	aph Jued ed	Other			
			Section - IV				<u></u>
1. Contact Point (Complete	items directly below for ide	ntificetion	of individual to be	contacted, if nec	essary, to proces	s this a	oplication.)
Name Robert F. Bischoff		- 1	<b>Title</b> Agent, TotalTurf (	Consulting LLC	1 .	ephone I   τ ε 73-0	No. (Include Area Code)
I certify that the states	nents I have made on this	Certificat		reto are true, acci	urate and comple	' ' ' ! I	i. Cjate Application Received

I acknowledge that any knowlingly false or misleading statement may be punishable by fine or imprisonment or

5. Date

Agent, TotalTurf Consulting LLC

June 17, 2009

both under applicable law.

4. Typed Name

Robert F. Bischoff

(Stamped)

## TotalTurf Consulting LLC 26 A. A. Cooper Rd. Meigs, GA 31765

Direct: 843-384-2807 Fax: 229-683-3426 E-Mail: rbcooper@juno.com

June 17, 2009

Document Processing Desk (NOTIF)
Office of Pesticide Programs (7505P)
U. S. Environmental Protection Agency
Room S-4900, One Potomac Yard
2777 South Crystal Drive
Arlington, VA 22202-4501

Attn: Jim Tompkins

Subject: Turf Fertilizer with Pendimethalin 1.0

EPA Reg. No. 52287-18

Notification of Alternate Brand Name

Dear Mr. Tompkins:

Enclosed labeling shows the addition of an alternate brand name (Fertilizer W/Pendimethalin 1.0%) for the subject registered product. This notification is being submitted on behalf of Harrell's LLC, P. O. Box 807, Lakeland, FL 33802 by TotalTurf Consulting LLC, an authorized agent for Harrell's LLC.

The following documents are included in the subject submission:

Cover Letter

Application for Pesticide (EPA Form No. 8570-1)

One Copy of Labeling Showing the Alternate Brand Name [Coded as 20090617.Final Label]

One Copy of Current Labeling [Coded as 20090303.Final Label]

If there are any questions or additional information is needed concerning this submission, do not hesitate to contact me at (317) 873-0222 or Raymond B. Cooper at (843) 384-2807.

Sincerely,

Robert F. Bischoff
Robert F. Bischoff

Agent

TotalTurf Consulting LLC 26 A. A. Cooper Road

Meigs, GA 31765



## FERTILIZER W/PENDIMETHALIN 1.0% Preemergent Weed Control

## FOR USE ON TURFGRASSES AND ESTABLISHED ORNAMENTALS IN THE LANDSCAPE

ACTIVE INGREDIENT:	
pendimethalin, N-(1-ethylpropyl)-3,4-dimethyl-2, 6-dinitrobenzenamine	
INERT INGREDIENTS99.00%	
TOTAL	
EPA Reg. No. 52287-18	EPA Est. No. 52287-FL-1

	GUARANTEED FERTILIZER ANALYSIS	
Total Nitrogen (N)	Variable %	
Available Phosphoric Acid (P2O5)	Variable %	
Soluble Potash (K2O)	Variable %	

## KEEP OUT OF REACH OF CHILDREN CAUTION PRECAUCION!

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand this label, find someone to explain it to you in detail.)

Have the product container or label with you when calling a poison control center or doctor, or for going for treatment.

In case of emergency endangering life or property involving this product, call day or night 1-800-424-9300.

See Inside Leaflet For Additional Precautionary Statements and Directions For Use.

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	FIRST AID
If swallowed	<ul> <li>Call a poison control center or doctor immediately for treatment advice.</li> <li>Have a person sip a glass of water if able to swallow.</li> <li>Do not induce vomiting unless told to do so by a poison control center or doctor.</li> <li>Do not give anything by mouth to an unconscious person.</li> </ul>
If on skin or clothing	<ul> <li>Take off contaminated clothing.</li> <li>Rinse skin immediately with plenty of water for 15-20 minutes.</li> <li>Call a poison control center or doctor for treatment advice.</li> </ul>
If in eyes	<ul> <li>Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li> <li>Remove contact lense, if present, after the first 5 minutes, then continue rinsing eye.</li> <li>Call a poison control center or doctor for advice.</li> </ul>
If inhaled	<ul> <li>Move person to fresh air.</li> <li>If person is not breathing, call 911 or ambulance, then give artificial respiration, preferably by mouth-to-mouth if possible.</li> <li>Call a poison control center or doctor for advice.</li> </ul>

## **HOT LINE NUMBER**

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

## **Precautionary Statements**

# Hazards to Humans and Domestic Animals CAUTION

Harmful if swallowed or absorbed through skin. Causes eye irritation. Avoid contact with skin, eyes or clothing. Avoid breathing mixt. Avoid breathing dust.

## Personal Protective Equipment (PPE):

Some materials that are chemical-resistant to this product are listed below. If you want more options, follow the instructions for Category A on an EPA chemical resistance category selection chart.

Applicators and other handlers must wear:

- · Long-sleeved shirt and long pants
- Chemical resistant gloves, made of waterproof materials, such as butyl rubber >14 mils, nitrile rubber >14 mills, or neoprene rubber >14 mils
  - · Shoes plus socks
  - Protective eyewear

Follow manufacturer's instructions for cleaning and maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

## **User Safety Recommendations**

Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.
- Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash
  thoroughly and change into clean clothing.

## **ENVIRONMENTAL HAZARDS**

This product is 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 aquatic 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

This labeling must be in the possession of the user at time of pesticide application.

Harrell's LLC does not recommend or authorize the use of this product in manufacturing, processing or preparing custom blends with other products for application to turf or ornamentals.

DO NOT APPLY FERTILIZER W/PENDIMETHALIN 1.0% in greenhouses, shadehouses or other enclosed structures.

NOT FOR USE on for commercial seed production.

DO NOT APPLY this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation. NO NOT APPLY this product through any irrigation system.

DO NOT ALLOW dust to drift from the application site and contact people, structures people occupy at any time and the associated property, parks and recreation areas, nontarget crops, aquatic and wetland areas, woodlands, pastures, rangelands, or animals.

#### AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE), and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 24 hours.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water, is:

- Coveralls
- Chemical resistant gloves, made of waterproof materials, such as butyl rubber >14 mils, nitrile rubber >14 mils, or neoprene rubber >14 mils
- Shoes plus socks

## NON-AGRICULTURAL USE REQUIREMENTS

The requirements in this box apply to uses of this product that are NOT within the scope of the Worker Protection Standard for agricultural pesticides (40 CFR Part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries, or greenhouses.

Do not enter or allow others to enter the treated area until dusts have settled.

FAILURE TO FOLLOW THE DIRECTIONS FOR USE AND PRECAUTIONS ON THIS LABEL MAY RESULT IN POCK WEFD CONTROL, CROP INJURY, OR RESIDUES.

## STORAGE AND DISPOSAL

PESTICIDE STORAGE: Do not store above 120°F. Store in original containers and keep closed. Store in a cool, dry place. Do not contaminate water, food, or feed by storage or disposal.

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: Nonrefillable container. Do not reuse or refill this container, offer for recycling if available. Completely empty bag into application equipment. Dispose of empty bag in a sanitary landfill or by incineration, or if allowed by state and local authorities, by burning. If burned, stay out of smoke.

Observe all cautions and limitations on this label and the labels of products used in combination with FERTILIZER W/PENDIMETHALIN 1.0%. The use of FERTILIZER W/PENDIMETHALIN 1.0% not consistent with this label can result in injury to crops, animals, or persons. Keep containers closed to avoid spills and contamination.

## DISCLAIMER

The label instructions for use of this product reflect the opinion of experts based on field use and tests. The directions are believed to be reliable and should be followed carefully. However, it is impossible to eliminate all risks inherently associated with 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 use or application of the product contrary to label instructions, all of which are beyond the control of Harrell's, LLC. All such risks shall be assumed by the user.

Harrell's, LLC. warrants only that the material contained herein conforms to the chemical description on the label and is reasonably fit for the use therein described when used in accordance with the directions for use, subject to the risk referred to above.

Any damages arising from a breach of this warranty shall be limited to direct damages and shall not include consequential commercial damages such as loss of profits or values or any other special or indirect damages.

Harrell's, LLC. makes no other express or implied warranty, including other express or implied warranty of FITNESS or of MERCHANTABILITY.

#### **GENERAL INFORMATION**

FERTILIZER W/PENDIMETHALIN 1.0% is a combination preemergent herbicide and fertilizer formulated to provide control of most annual grasses and certain broadleaf weeds found in any turfgrass site (lawns, sod, turf areas). Examples of such sites include, but are not limited to: golf courses, lawns in residential, commercial establishments, or grounds around military or other institutions, parks, airports, roadsides, schools or cemeteries; athletic fields or recreational areas; prairiegrass areas; and sod farms. FERTILIZER W/PENDIMETHALIN 1.0% can be used around established ornamentals in the landscape and in established wildflower plantings. FERTILIZER W/PENDIMETHALIN 1.0% may be used for hardwood and conifer regeneration on conservation reserve program.

FERTILIZER W/PENDIMETHALIN 1.0% is labeled for use on the following turfgrass species: Kentucky bluegrass, perennial ryegrass, fine fescue, tall fescue, bentgrass, Poa annua (except putting greens and tees), bermudagrass, St. Augustinegrass, bahiagrass, centipedegrass, zoysiagrass and blends of these grasses.

FERTILIZER W/PENDIMETHALIN 1.0% controls weeds as they germinate, but will not control established weeds. Therefore, areas to be treated should be free of established weeds. Unusually cold, excessively wet, or hot and dry conditions that delay germination or extend germination over a long period of time can reduce weed control.

## APPLICATION INSTRUCTIONS

Apply product uniformly at the recommended rate using a properly calibrated spreader. The efficacy of FERTILIZER W/PENDIMETHALIN 1.0% will be improved if the application is followed by one-half inch of rainfall or its equivalent in sprinkler irrigation. This will remove the product from the turfgrass foliage and establish a preemergent herbicide barrier in the soil. If FERTILIZER W/PENDIMETHALIN 1.0% is not activated by rainfall or irrigation within 30 days, erratic weed control may result.

Avoid contact of product with porous surfaces such as driveways, stone, or wood. Removing particles will help prevent staining.

FERTILIZER W/PENDIMETHALIN 1.0% can be applied before or after postemergence herbicides used to control emerged weeds in turfgrasses. For annual grass control, applications can be made with Vantage®<sup>1</sup>, Acclaim Extra®<sup>2</sup>, or MSMA containing products, to control emerged weeds. Broadleaf weeds can be controlled using Trimec<sup>TM3</sup> Three-Way<sup>TM4</sup>, 2-4,D, and other similar products.

Applied according to label directions, and under normal growing conditions, FERTILIZER W/PENDIMETHALIN 1.0% will not cause injury to desirable plants. Over-application can result in stand loss, plant injury, or soil residues. Uneven application can decrease weed control or cause plant injury.

Seedling diseases, cold weather, excessive moisture, high soil pH, high soil salt concentration, or drought can weaken seedlings and plants, and increase the possibility of plant damage from FERTILIZER W/PENDIMETHALIN 1.0%,

Apply with properly calibrated spreader equipment to provide uniform distribution. Check application routinely to determine proper calibration. Avoid overlaps that will increase rates above those recommended.

Avoid application when winds may cause drift.

#### Recommended Rates:

			lbs. per acre		
Spreader	Ground Speed	Spreading Width	<u>152</u>	<u>227</u>	<u>303</u>
LESCO Rotary	3 mph	9 ft.	C 1/2 10"/32	D 1/2 12"/32	E 1/2 14"/32
Scotts R-7,R-7x	3 mph	12 ft.	F	I	K
Scotts R-8,R-8a	3 mph	11 ft.	j	L 1/2	N
Lely	4.5 mph	30 ft.	4 1/4 III	5 1/2 III	6 1/2 III
<sup>2</sup> Vicon	4.5 mph	30 ft.	21	25	29

I Models WTR, WRF, HR, and 1250 PTO-450 rpm

Important: Spreader settings are only approximate. Age, condition of spreader, and operator speed can cause wide variation in application rate. Spreader should be calibrated prior to each application by the operator.

## WEED SPECIES CONTROLLED

FERTILIZER W/PENDIMETHALIN 1.0% is recommended for preemergence control of the weed species listed. Applications can be made around and over the top of the ornamentals and to the sites listed on this label.

#### GRASSES CONTROLLED

	C	ommon	Name			
--	---	-------	------	--	--	--

Barnyardgrass Bluegrass, Annual Crabgrass Crowfootgrass Foxtail, Giant Foxtail, Green

Foxtail, Yellow Goosegrass Itchgrass

Johnsongrass (from seed)

Junglerice

Lovegrass (from seed) Panicum, Browntop Panicum, Fall Panicum, Texas Sandbur, Field Signalgrass Sprangletop, Mexican

Sprangletop, Red Witchgrass Woolly Cupgrass

## Scientific Name

Echinochloa crus-galli

Poa annua

Digitaria spp.

Dactyloctenium aegyptium

Setaria faberi Setaria viridis Setaria glauca Eleusine indica Rottboellia exaltata Sorghum halepense Echinochloa colona Eragrostis spp. Panicum fasciculatum Panicum dichotomislorum Panicum texanum Cenchrus incertus

Brachiaria platyphylla Leptochloa uninervia Leptochloa filiformis Panicum capillare Eriochloa villosa

## **BROADLEAF WEEDS CONTROLLED**

## Common Name

Burweed, Lawn Carpetweed

Chickweed, Common . Chickweed, Mouseear

Clover, Hop Cudweed Eveningprimrose Fiddleneck Filaree Henbit

Knotweed, prostrate Kochia Lambsquarters Pigweed Puncturevine Purslane Pusley, Florida Rocket, London

## Scientific Name

Soliva pterosperma Mollugo verticillata Stellaria media Cerastium vulgatum Trifolium procumbens Gnaphalium spp. Oenothera biennis Amsinckia intermedia Erodium spp. Lamium amplexicaule Polygonum aviculare Kochia scoparia Chenopodium album Amaranthus spp. Tribulus terrestris Portulaca oleracea Richardia scabra Sisymbrium irio

<sup>&</sup>lt;sup>2</sup>Vicon - All models PTO-540 rpm

Shepherdspurse Smartweed, Pennsylvania Speedwell, Corn Spurge, Annual Spurge, Prostrate Woodsorrel, Yellow Velvetleaf (Buttonweed) Capsella bursa-pastoris Polygonum pensylvanicum Veronica arvensis Euphorbia spp. Euphorbia numistrata Oxalis stricta Abutilon theophrasti

## TURIGRASSES

## APPLICATION RATES FOR TURF WEED CONTROL 1

Turfgrass Species	Weeds	Rates of Fertilizer W/Pendimethalin 1.0%	Comments
COOL SEASON GRASSES			
Bluegrass, Kentucky Fescue, fine Fescue, tall Ryegrass, perennial	crabgrass foxtail  Poa annua barnyardgrass fall panicum oxalis prostrate spurge purslane knotweed evening primrose hop clover	150-200 lbs./acre as the initial application prior to weed germination in the spring.	Apply a repeat application of 100-150 lbs./acre after 5 - 8 weeks for extended control or where heavy weed infestations are expected.
	goosegrass	Residential <sup>2</sup> Turf Uses Only: 100-150 lbs./acre in the spring prior to weed germination.  Golf Course and Commercial Turf Uses: 100-300 lbs./acre in the spring prior to weed germination.	Apply a repeat application of 100 lbs./acre after 5 – 8 weeks if the lower rates was used initially or for extended goosegrass control
	cudweed	150-200 lbs./acre	Apply in late
	Poa annua		summer or early
	chickweed		fall prior to
	lawn burweed		weed germination.
	henbit		-
	com speedwell		
Bentgrass or established <i>Poa annua<sup>4</sup></i> (1/2 inch height or taller)	crabgrass foxtail Poa annua barnyardgrass fall panicum oxalis prostrate spurge purslane knotweed evening primrose hop clover	200 lbs./acre in the spring prior to weed germination.	Apply a repeat application of 100-200 lbs./acre after 5-8 weeks where heavy weed infestations are expected.
	goosegrass	200 lbs./acre	· · · · · · · · · · · · · · · · · · ·
		in the spring prior	
		to weed germination.	

WARM SEASON GRASSES

Apply a repeat application of 200 lbs./acre after5 6- 8 weeks.

cudweed	100-300 lbs./acre	Apply in late
Poa annua		summer or early
chickweed		fall prior to
lawn burweed		weed germination.
henbit		
corn speedwell		

Bahiagrass	Crabgrass	Residential <sup>2</sup> Turf Uses Only:	Apply a repeat application of
Bermudagrass	foxtail,	150-200 lbs./acre in the spring	100-150lb./acre after 5-8 weeks
Buffalograss	Poa annua	prior to weed germination.	if necessary.
Centipedegrass	Barnyardgrass		
Fescue, tall	fall panicum	Golf Course and Commerical	
St. Augustinegrass	oxalis	Turf Uses: 150-300 lbs./acre in	
Zoysiagrass	prostrate spurge	the spring prior to weed	
	purslane	germination.	
	knotweed		
	evening primrose		
	hop clover		
	goosegrass	150 lbs./acre	An additional
		prior to weed	application of
		germination in	150 lbs./acre may
		the spring.	be applied for
		Apply a repeat	extended goosegrass control 8 weeks
		application of	***************************************
		150-200 lbs./acre	after the second
		after 5 – 8 weeks.	application.
	cudweed	175-233 lbs./acre	Apply in late
	Poa annua		summer or early
	chickweed		fall prior to
	lawn burweed		weed germination.
	henbit		
	corn speedwell		

<sup>&</sup>lt;sup>1</sup> DO NOT exceed a maximum rate of 200 pounds per acre per application for use on residential turfgrass.

## TURFGRASS PRECAUTIONS

Use on well established turfgrass with a dense and uniform stand. On newly planted areas, application should not be made until the turfgrass has filled in and has been mowed at least four times. On turf that has been thinned or damaged due to winter injury, excessive moisture, etc., allow for turf recovery prior to making an application.

Applications made to overseeded warm-season turfgrasses may cause thinning or injury of the overseeded species.

Do not use on bentgrass or Poa annua greens and tees or injury may occur.

Delay reseeding or winter overseeding of treated turfgrass for at least three (3) months following the last Pendimethalin application. Delay sprigging turfgrass for five (5) months after application.

## INDUSTRIAL (UNIMPROVED) TURF

Industrial, or unimproved turf areas often have a different spectrum of weeds to be controlled than those found in fine turf as described elsewhere in this leaflet. FERTILIZER W/PENDIMETHALIN 1.0% will control annual grasses and broadleaf weeds mentioned in that section of this label as well as the following weeds that might germinate in established grasses in rights-of-way, roadsides, construction sites, parks, substations, lots, or similar areas:

<sup>&</sup>lt;sup>2</sup> Residential is defined as turf in any residential situation as well as schools, parks and playgrounds.

<sup>&</sup>lt;sup>3</sup> DO NOT exceed a maximum rate of 200 pounds per acre per application for use on sod farms.

<sup>&</sup>lt;sup>4</sup> Not for use on bentgrass or *Poa annua* greens or tees.

Crowfootgrass, Itchgrass, Johnsongrass (from seed), Junglerice, Lovegrass (from seed), Browntop Panicum, Texas Panicum, Field Sandbur, Signalgrass, Mexican Sprangletop, Red Sprangletop, Witchgrass, Woolly Cupgrass, Carpetweed, Fiddleneck, Filaree, Kochia, Lambsquarters, Pigweed, Puncturevine, Florida Pusley, London Rocket, Shepherdspurse, Pennsylvania Smartweed, Annual Spurge, and Velvetleaf.

Apply before weeds germinate. A postemergence herbicide such as 2,4-D, MCPA, MSMA, or similar product is recommended to control established weeds.

## LANDSCAPE AND GROUNDS MAINTENANCE

FERTILIZER W/PENDIMETHALIN 1.0% can be incorporated into landscape and grounds maintenance programs to provide extended preemergence control of most annual grasses and certain broadleaf weeds. Areas to be treated include but are limited to established trees or ornamentals in the landscape or in mulch beds; or, other commercially maintained landscape areas such as borders, around statuary or monuments in parks or in parking areas. If emerged weeds are present at time of application either shallow cultivate to destroy existing weeds or, where practical, remove by hand, or apply a postemergence product labeled for such use prior to an application of FERTILIZER W/PENDIMETHALIN 1.0%. FERTILIZER W/PENDIMETHALIN 1.0% may be used before or after applications of herbicides registered for postemergence use (i.e. Vantage®, Roundup PRO®<sup>5</sup> or Finale®<sup>6</sup>) for the control of established weeds. Do not apply sprays containing Roundup or Finale over the top of desirable plants, and follow the label restrictions. A FERTILIZER W/PENDIMETHALIN 1.0% treatment may be followed by any registered herbicide to control weeds not listed on the FERTILIZER W/PENDIMETHALIN 1.0% label.

## ORNAMENTAL BULBS

FERTILIZER W/PENDIMETHALIN 1.0% may be applied for control of susceptible annual weeds in ornamental bulbs listed on the label (crocus, daffodil (narcissus), gladiolus, tulip, etc.). Apply FERTILIZER W/PENDIMETHALIN 1.0% prior to, during or after bulb emergence. If weeds have already germinated use a labeled postemergence herbicide to control emerged weeds.

#### WILDFLOWERS

FERTILIZER W/PENDIMETHALIN 1.0% herbicide may be applied for control of susceptible annual weeds in plantings of wildflowers listed on the label (Black-eyed Susan, California Poppy, Coreopsis, Oxeye Daisy, etc.). FERTILIZER W/PENDIMETHALIN 1.0% may be applied to established perennial wildflowers before emergence of weeds or wildflowers. For wildflowers being established from seed, apply FERTILIZER W/PENDIMETHALIN 1.0% after wildflowers have emerged but prior to weed germination. If weeds have already germinated, use a labeled postemergence product to control emerged weeds.

Due to the diversity of species and varieties which exist in areas where wildflowers are grown, the response to FERTILIZER W/PENDIMETHALIN 1.0% may vary greatly. Careful testing on desirable species is recommended to determine if area-wide applications can be made.

## ORNAMENTAL PRECAUTIONS

Apply FERTILIZER W/PENDIMETHALIN 1.0% to established plantings. Care must be taken that soil or planting mixes have settled firmly following transplanting and that there are no cracks that would allow direct contact of FERTILIZER W/PENDIMETHALIN 1.0% with roots. Applications where soil and media surfaces are uniformly covered will result in best weed control and ornamental tolerance. Plant only those desirable plant species listed on this label into soil treated the previous season with any Pendimethalin product or injury may occur.

## RECOMMENDED ORNAMENTAL SPECIES

FERTILIZER W/PENDIMETHALIN 1.0% is safe around and over the top of the established plants listed below.

#### TREES

Apple
Arborvitae, American
Arbutus
Ash, Red
Ash, White
Aspen, Bigtooth
Aspen, Quaking
Basswood
Birch, European Weeping
Birch, River
Buckeye, Red
Cedar, White
Chamaecyparis, Boulevard
Cherry, Black
Cherry, Choke
Cherry, Kwanzan
Cherry, Nanking
Cottonwood
Crabapple
Crepe Myrtle
Cryptomeria, Japanese Cedar

Common Name

Alder, European Black

## Alnus glutinosa Malus spp. Thuja occidentalis Arbutus spp. Fraxinus pennsylvanica Fraxinus americana Populus grandidentata Populus tremuloides Tilia spp. Betula pendula Betula nigra Aesculus pavia Thuja occidentalis Chamaecyparis pisifera Prunus serotina Prunus virginiana Prunus serrulata Prunus tomentosa Populus deltoides Malus spp. Lagerstroemia indica Cryptomeria japonica

Scientific Name

Cypress, Bald Cypress, Leyland Dogwood, Flowering Dogwood, Korean Dogwood, Silky Dogwood, Shrub

Elm Fir, Balsam Fir, Douglas Fir. Fraser Fir, White Franklinia Ginkgo Gum, Black Gum, Sour Haw, Black

Hawthorn Hemlock, Canada Hemlock, Eastern Holly, American Honeylocust Lilac, Common Lilac, Japanese Tree

Linden Magnolia, Saucer Magnolia, Southern Magnolia, Star Maidenhair Tree Maple, Paper-bark Maple, Norway Maple, Japanese Maple, Red Maple, Sugar Nannyberry, Rusty

Oak, Red Oak, Swamp Chestnut

Oak, Chinquapin

Oak, Live

Oak, Pin

Oak, Water Oak, White Oak, Willow Olive Palm, Date Palm, Fan Palm, Pindo Palm, Washington Peach

Pear, Bradford Pecan

Pine, Austrian Pine, Italian Stone Pine, Loblolly Pine, Monterey Pine, Red Pine, Scotch Pine, Virginia Pine, White

Plum, Purple Leaf Poplar, Black Redcedar, Eastern

Redcedar, Western Red Ironbark Redwood, Dawn Sequoia, Giant

Serviceberry Sourwood

Spruce, Colorado Blue Spruce, Dwarf Alberta Spruce, Norway Spruce, White

Sweetgum Sycamore

Taxodium distichum Cupressocyparis levlandii

Cornus florida Cornus kousa Cornus amomum Cornus spp. Ulmus japonica Abies balsamae Pseudotsuga menziesii

Abies fraseri Abies concolor Franklinia spp. Ginkgo biloba Nyssa sylvatica Nyssa sylvatica Viburnum prunifolium Crataegus spp. Tsuga canadensis Tsuga canadensis Ilex opaca

Gleditsia triacanthos Syringa vulgaris Syringa reticulata

Tilia spp.

Magnolia soulangiana Magnolia grandiflora Magnolia stellata Ginkgo biloba Acer griseum Acer platanoides Acer palmatum Acer rubrum Acer saccharum Viburnum rufidulum Quercus muehlenbergii Quercus virginiana Quercus palustris Quercus rubra Ouercus michauxii Quercus nigra Quercus alba

Olea europaea Phoenix spp. Washingtonia spp. Butia spp. Washingtonia spp.

Quercus phellos

Prunus persica Pyrus calleryana 'Bradford'

Carya illinoensis Pinus nigra Pinus pinea Pinus taeda Pinus radiata Pinus resinosa Pinus sylvestris Pinus virginiana Pinus strobus Prunus cerasifera Populus nigra Juniperus virginiana Thuja plicata

Eucalyptus sideroxylon 'Rosea' Metasequoia glyptostroboides Sequoiadendron giganteum Amelanchier laevis Oxydendrum arboreum

Picea pungens

Picea glauca 'albertiana'

Picea abies

Picea glauça

Liquidambar styraciflua Platanus occidentalis

Trachycarpus Tulip tree Walnut, Black Willow, Weeping Yellowwood

## **SHRUBS**

Common Name Abelia, Glossy Aucuba, Gold Azalea Bamboo, Heavenly Barberry Barberry, Japanese Blue Indigo Bush Bottlebrush, Lemon Boxwood, Common Boxwood, Japanese Brittlebush Buttonbush Camellia Cape Jasmine Cassia, Feathery Cordyline Correa Cotoneaster Cotoneaster, Bearberry Cotoneaster, Rock Cypress, Italian Cypress, Leyland Deutzia, Slender Dogwood, Red Twig Elaeagnus Escallonia Euonymus Euonymus, Golden Euonymus, Winged Firethorn Forsythia, Border Fragrant Olive Fuschia, California Gardenia Hawthorne, Indian Hibiscus Holly, Chinese Holly, Japanese Holly, Fosters Holly, Savannah Holly, Yaupon Honeysuckle, Bush Hopseed Bush Hopbush Hydrangea Juniper Juniper, Chinese Juniper, Shore Juniper, Trailing Laurel, Cherry Laurel, Mountain Laurel, Otto Luyken Laurel, Schipka Laurustinus Lavender, English Leucothoe

Leucothoe, Coast

Lilac, Cut-leaf

Mock Orange

Myrtle, Wax

Nandina

Oleander

Myrtle, Compact

Mahonia

Lily-of-the-Nile

Trachycarpus spp. Liriodendron tulipifera Juglans nigra Salix babylonica Cladrastis lutea

Scientific Name Abelia grandiflora\_ Aucuba japonica Rhododendron sp. Nandina domestica Berberis gladwynensis Berberis thunbergii Dalea gregii Callistemon citrinus Buxus sempervirens Buxus microphylla Encelia farinosa Cephalanthus occidentalis Camellia japonica Gardenia jasminoides Cassia artemisioides Cordyline spp. Correa spp. Cotoneaster apiculatus Cotoneaster dammeri Cotoneaster horizontalis Cupressus sempervirens Cupressocyparis leylandii Deutzia gracilis Cornus sericea Elaeagnus ebbingei Escallonia fradesii Euonymus fortunei Euonymus japonica Euonymus alata Pyracantha coccinea Forsythia intermedia Osmanthus fragrans Zauschineria californica Gardenia jasminoides Raphiolepis indica Hibiscus syriacus Ilex cornuta Ilex crenata Ilex attenuata 'Fosteri' llex attenuata Ilex vomitoria Diervilla lonicera Dodonaea viscosa Dodonaea viscosa Hydrangea macrophylla Juniperus sp. Juniperus chinensis v. pfitzer Juniperus conferta Juniperus horizontalis Prunus laurocerasus Kalmia latifolia Prunus laurocerasus Prunus schipkanensis Viburnum tinus Lavandula angustifolia Leucothoe fontanesiana Leucothoe axillaris Syringa laciniata Agapanthus africanus Mahonia aquifolium Pittosporum tobira Myrtus communis

Myrica cerifera

Nerium oleander

Nandina domestica

Oregon Grape Osmanthus

Palm, European Fan Palm. Mediterranean Fan

Phlox, Prickly Photinia, Fraser Pieris, Japanese Pine, Mugo Plum. Natal Privet, California Privet, Glossy Privet, Variegated

Privet, Waxleaf Pyracantha Quince, Flowering

Ranger, Texas Redroot Rhododendron Robira

Rose Spice Plant Spiraea

Spiraea, Anthony Waterer

Spiraea, Japanese Sweet Bay Trumpet Bush Verbena, Lemon Viburnum

Vitex Weigela Wild Lilac Wisteria Xvlosma Yellowbells

Yew

Yew, Japanese Yew, Southern Yucca, Adam's Needle

Yucca, Weeping

## **GROUND COVERS**

Common Name

Ajuga Baby Sun Rose Beach Strawberry Capeweed Cinquefoil, Spring Coyotebrush, Dwarf Daisy, Trailing African

Dymondia Gazania

Iceplant, Large Leaf

Ivy, English Ivy, Geranium Jasmine, Asiatic Jasmine, Primrose Jessamine, Carolina Manzanita, Bearberry

Miscanthus Mondograss Morninglory Myoporum Pachysandra

Potentilla

Periwinkle, Common

Red Apple Rosemary Rose-Of-Sharon Sand Strawberry Sedum

St. Johnswort, Creeping

Stonecrop Verbena, Peruvian Mahonia aquifolium Osmanthus fragrans Chamaerops humilis Chamaerops spp. Leptodactylon californicum Photinia X Fraseri Pieris japonica Pinus mugo Carissa grandiflora Ligustrum ovalifolium Ligustrum lucidum Ligustrum sinensis Ligustrum japonicum Pyracantha coccinea Chaenomeles japonica Leucophyllum frutescens Ceanothus spp. Rhododendron spp. Pittosporum tobira Rosa spp. Illicium parviflorum Spiraea vanhouttei Spiraea X bumalda Spiraea japonica

Laurus nobilis Tecoma stans Aloysia triphylla Viburnum suspensum Vitex spp. Weigela florida Ceanothus spp. Wisteria spp.

Xylosma congestum Tecoma stans Taxus media

Taxus cuspidata

Podocarpus macrophyllus Yucca filamentosa Yucca pendula

Scientific Name Ajuga reptans Aptenia cordifolia Fragaria chiloensis Arctotheca calendula Potentilla verna Baccharis pitularis Osteospermum fruticosum Dymondia margaretae Gazania splendens Carpobrotus edulis Hedera helix Pelargonium peltatum Trachelospermum asiaticum Jasminum mesnyi Gelsemium sempervirens Arctostaphylos uva-ursi Miscanthus spp. Ophiopogon japonica Convolvulus spp. Myoporum parviflolium Pachysandra terminalis Potentilla fruticosa Vinca minor Aptenia cordifolia Rosemarinus officinalis Hypericum calycinum Fragaria chiloensis Sedum spurium

Hypericum calycinum

Sedum spurium

Verbena peruviana

Vervain

Vetch, Crown

Vinca or Greater Periwinkle

Wintercreeper

## **PERENNIALS**

Common Name

Acacia

Asparagus Aster, New York

Aster, Stokes

Astilbe (False Spirea)

Babys Breath

Beard-Tongue

Bellflower

Bird of Paradise

Black-eyed Susan

Blanket Flower

Bleeding Heart

Butterfly Weed

California Poppy

Calla Lilv

Canna, Common Garden

Carex

Cast Iron plant

Chincherinchee

Clover, Crimson

Columbine

Coreopsis

Crinum Lily

Crocus

Daffodil

Daylily

False dragonhead

Fairy Duster

Fern, Asparagus

Fern, Tree

Fern, Boston

Fern, Leatherleaf\*

Fortnight Lily Foxglove, Common

Freesia

Fushcia, Arizona

Gayfeather

Gaillardia

Geum

Gladiolus Heather, Dwarf

Hosta

Hyssop, Sunset

Indian Blanket

Lantana, Weeping

Leopards Bane

Lily

Liriope, Big Blue

Liriope, Creeping

Liriope, Variegated

Loosestrife, Garden Moonbeam

Montbretia Nightshade

Orchid, Peacock

Oxeye Daisy

Peony, Chinese

Purple Coneflower Purple Loosestrife

Rosemary

Ruscus, Israeli

Sage, Russian

Sedge

Shasta Daisy

Sweet Flag

Tickseed

Verbena peruviana

Vicia sativa

Vinca major

Euonymous fortunei

Scientific Name

Acacia redolens

Asparagus spp.

Aster novi-belgii

Stokesia laevis

Astilbe spp.

Gypsophila elegans

Penstemon spp.

Campanula spp.

Caesalpinia pulcherrima

Rudbeckia hirta

Gaillardia x grandiflora

Dicentra spectabilis

Asclepias tuberosa Eschscholzia california

Zantedeschia aethiopica

Canna generalis 'Lucifer'

Carex spp.

Aspidistra elatior

Ornithogalum thyrsoides

Trifolium incarnatum

Aquilegia 'McKana Giant'

Coreopsis lanceolata

Crinum spp.

Crocus spp.

Narcissus spp.

Hemerocallis spp.

Physostegia virginiana Calliandra eriophylla

Asparagus officinalis

Asparagus virgatus

Nephrolepis exaltata

Rumohra adiantiformis

Moraea spp.

Digitalis purpurea

Freesia x hybrida Zauschneria Californica

Liatris spp.

Gaillardia pulchella

Geum spp.

Gladiolus spp.

Calluna vulgaris

Hosta spp.

Agastache rupestris Gaillardia pulchella

Lantana montevidensis

Doronicum cordatum Lillium spp.

Liriope muscari

Liriope spicata

Liriope muscari

Lysimachia punctata

Coreopsis verticillata Crocosmia crocosmiiflora

Solanum spp.

Acidanthera bicolor

Chrysanthemum leucanthemum

Paeonia lactiflora

Echinacea purpurea

Lythrum virgatum

Rosmarinus officinalis

Ruscus hypophyllum Perovskia atriplicifolia

Carex spp.

Chrysanthemum x superbum

Acorus calamus

Coreopsis lanceolata

Texas Bluebonnet

Tulip Twinspur

Wonder Flower

Yarrow Zephyr Lily Lupinus texenis Tulipa spp.

Diasciascia barbaerae Ornithogalum thyrsoides Achillea millefolium Zephyranthes spp.

\* Applications of FERTILIZER W/PENDIMETHALIN 1.0% to immature ferns (during periods of new growth of fronds) may result in some injury.

## ORNAMENTAL GRASSES

Common Name
Beach Grass

Fescue, Blue

Fescue, Sheep

Fountain Grass

Pampas Grass

Reed Canary Grass

Reed, Giant

Ribbon Grass

**Tufted Hair Grass** 

## BEDDING PLANTS\*

Common Name

Ageratum

Alyssum

Anemone, Poppy-flowered

Artemesia

Balloonflower

Begonia

Cabbage, Ornamental

Caladium

China Aster

Crocosmia, Montebretia

Dahlia Dianthus

Dusty Miller

Gazania, Treasure Flower

Gazania, Trailing

Geranium

Gloxinia

Impatiens Kale, Ornamental

Marigold, African

Moss Rose

Mum, Garden

Pansy, Garden

Periwinkle, Rose

Petunia

Plumosa Cockscomb

Portulaca

Salvia

Snapdragon

Statice

Sweet William Vinca or Periwinkle

Zinnia

Scientific Name

Ammophila breviligulata

Festuca ovina

Festuca ovina

Pennisetum setaceum Cortaderia selloana

Phalaris arundinacea

Arundo spp.

Phalaris arundinacea

Deschampsia caespitosa

Scientific Name

Ageratum houstonianum

Alyssum saxatile Anemone coronaria

Artemesia spp.

Platycodon grandiflorum

Begonia spp.

Degonia spp.

Brassica olereacea

Caladium spp.

Callistephus chinensis Crocosmia x crocosmiiflora

Dahlia spp.

Dianthus barbatus

Senecio cineraria Gazania rigens

Gazania rigens leucolaena

Geranium sp.

Gloxinia simningia

Impatiens sp.

Brassica napus

Tagetes erecta

Portulaca grandiflora

Chrysanthemum spp.

Viola x Wittrockiana

Catharanthus roseus

or Vinca rosea

Petunia spp.

Celosia cristata

Portulaca grandiflora Salvia splendens

Antirrhinum majus

Limonium spp.

Dianthus barbatus

Catharanthus roseus

Zinnia sp.

FERTILIZER W/PENDIMETHALIN 1.0% may be used on plant species not listed on this label. The suitability for such uses should be determined by treating a small number of such plants at the recommended rate. Treated plants should be evaluated 1-2 months following treatment for possible injury. THE USER ASSUMES RESPONSIBILITY FOR ANY CROP DAMAGE OR OTHER LIABILITY. Do not treat plants grown for food or feed. Do not use treated plants for food or feed.

<sup>\*</sup>After planting bedding plants and before FERTILIZER W/PENDIMETHALIN 1.0% is applied, area to be treated should be watered sufficiently to pack soil around roots.

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Net Contents 50 Pounds

Harrell's, LLC P. O. Box 807 Lakeland, FL 33802

Batch No.