

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

OFFICE OF PREVENTION, PESTICIDES AND TOXIC SUBSTANCES

APR 10 2009

Robert F. Bischoff, Agent for Harrell's LLC TotalTurf Consulting 26 A. A. Cooper Rd. Meigs, GA 31765.

Subject: Label Notifications for Pesticide Registration Notice 2007-4

Dear Mr. Bischoff,

The Agency is in receipt of your Applications for Pesticide Notification under Pesticide Registration Notice (PRN) 2007-4 dated March 3, 2009 for the following products:

Fertilizer with Starteem® # 1	EPA Registration Number 52287-10
Fertilizer with Starteem® #3	EPA Registration Number 52287-12
Weed-Free One Eleven	EPA Registration Number 52287-13
Turf Fertilizer with Ronstar 1.20	EPA Registration Number 52287-14
Harrell's Granular Herbicide 75	EPA Registration Number 52287-15
Harrell's Granular Herbicide 63	EPA Registration Number 52287-16
Turf Fertilizer with Pendimethalin 0.75	EPA Registration Number 52287-17
Turf Fertilizer with Pendimethalin 1.0	EPA Registration Number 52287-18
Turf Fertilizer with Barricade 0.38	EPA Registration Number 52287-19
Turf Fertilizer with Barricade 0.3	EPA Registration Number 52287-20

The Registration Division (RD) has conducted its review of these requests for their applicability under PRN 2007-4 and finds that the label changes requested fall within the scope of PRN 2007-4. The labels submitted with the application have been stamped "Notification" and will be placed in our records.

Please be reminded that 40 CFR Part 156.140(a)(4) requires that a batch code, lot number, or other code identifying the batch of the pesticide distributed and sold be placed on nonrefillable containers. The code may appear either on the label (and can be added by non-notification/PR Notice 98-10) or durably marked on the container itself.

If you have any questions, please call me directly at 703-305-6249 or Steve Schaible of my staff at 703-308-9362.

Sincerely,

Linda Arrington

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

Office of Pesticide Programs

SEPA	United States Environmental Protection Agency Washington, DC 20460					✓	Reg	jistrati endm	on	O. Approval expires 2-28-9 OPP Identifier Number
		Application	for	Pesticio	e - Sec	tion	l			
1. Company/Product Number 52287-18	r			2. EPA Product Manager  Jim Tompkins  3. Proposed Classification  None Res						· —
4. Company/Product (Name) Turf Fertilizer with Pend				PM# 25						
5. Name and Address of App Harrell's LLC P. O. Box 807 Lakeland, FL 33802	olicant (Include ZIP Co	de)		(b)(i), m to: EPA R		is sim		r identica NO	ał in co	FIFRA Section 3(c)(3) imposition and labeling ATION 2009
			Sec	tion - I						
Amendment - Explain  Resubmission in resp  Notification - Explain  Explanation: Use addition  Notification of label change p regulations at 40 CFR Parts of Formula for this product. I the amended label is not con FIFRA and I may be subject to	below.  nel page(s) if necessar er PR Notice 2007-4. 156.10, 156.140, 156.1 understand that it is a sistent with the require	y. (For section I This notification is 44, 156.146, and violation of 18 U.S ments of 40 CFR	consis 156.15 S.C. Se Parts 1	tent with the 6. No other c. 1001 to v 56.10, 156.	changes ha illfully make 140, 156.144	PR N ve bee	ed ation. elow. otice 2 en maculse sta	2007-4 and to the latement to	d the red	or the Confidential Statement further understand that if
			Sec	tion - II	ì					
6. Manner in Which Label is	Unit Packaging Yes No If "Yes" Unit Packaging wgt. Information ontainer Affixed to Product	4. Size(s) Retai	If "Ye Packa  I Conta  50  ph uedd  Sec:	ge wgt iner Ibs <b>tion - I\</b>	No. per containe	5. Lo	cation	of Label	Metal Plastic Glass Paper Other (S Directic	Specify)
1. Contact Point (Complete	items directly below 1			idual to be	contacted,	if nec	esser)			
Name Robert F. Bischoff		1	itle Agent, 1	TotalTurf (	Consulting I	LC				e No.ظinclude Area Code) 3-0222 و د د د 
I certify that the stater I acknowledge that an	ments   have made on y knowlinglly false or	Certificati this form and al misleading state	li attaci	nments the	reto are true shable by fi	e, acci	urate i impris	and comp	lete.	6. Date Application

Agent, TotalTurf Consulting LLC

March 3, 2009

5. Date

both under applicable law.

4. Typed Name

Robert F. Bischoff

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

Direct: 843-384-2807

Fax: 229-683-3426

E-Mail: rbcooper@juno.com

March 3, 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: Linda Arrington

Subject: Turf Fertilizer with Pendimethalin 1.0

EPA Reg. No. 52287-18

Notification to Comply with PR Notice 2007-4

Dear Ms. Arrington:

In response to PR Notice 2007-4 concerning container reuse and related container label statements for pesticide products, labeling for the subject product has been revised to comply with this Notice. The revised label is being submitted by notification 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 Highlighted Final Printed Label (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

Agent

Total Turf Consulting LLC 26 A. A. Cooper Road

Meigs, GA 31765





## TURF FERTILIZER WITH 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 1.00%	
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.

## NOTIFICATION

APR 1 0 2009



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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 n.ięt, 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 Inc. 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 TURF FERTILIZER WITH 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, aurseries, or greenhouses.

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

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## FAILURE TO FOLLOW THE DIRECTIONS FOR USE AND PRECAUTIONS ON THIS LABEL MAY RESULT EN POOR WEED 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, one 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 refillathis 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 TURF FERTILIZER WITH PENDIMETHALIN 1.0. The use of TURF FERTILIZER WITH 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**

TURF FERTILIZER WITH 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. TURF FERTILIZER WITH PENDIMETHALIN 1.0 can be used around established ornamentals in the landscape and in established wildflower plantings. TURF FERTILIZER WITH PENDIMETHALIN 1.0 may be used for hardwood and conifer regeneration on conservation reserve program.

TURF FERTILIZER WITH 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.

TURF FERTILIZER WITH 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 TURF FERTILIZER WITH 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 TURF FERTILIZER WITH 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.

TURF FERTILIZER WITH 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, OT</sup> 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, TURF FERTILIZER WITH PENDIMETHALIN 1.0 without 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 weaker seedlings and plants, and increase the possibility of plant damage from TURF FERTILIZER WITH PENDIMETHALIN 1.0.

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

Avoid application when winds may cause drift.

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## 150 lbs. treats 1 acre delivering 1.5 lb. ai/A

Reco	mmei	nded	Da	tee.

			1	bs. 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

Models WTR, WRF, HR, and 1250

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

TURF FERTILIZER WITH 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**

Common 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 dichotomiflorum 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

## Scientific Name

Soliva pterosperma Mollugo verticillata Stellaria media Cerastium vulgatum Trifolium procumbens Gnaphalium spp: Oenothera bienris Amsinckia intermedia. Polygonum aviculare Kochia scoparia Chenopodium album Amaranthus spp. Tribulus terrestris Portulaca oleracea Richardia scabra

PTO-450 rpm

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

Rocket, London
Shepherdspurse
Smartweed, Pennsylvania
Speedwell, Corn
Spurge, Annual
Spurge, Prostrate
Woodsorrel, Yellow
Velvetleaf (Buttonweed)

Sisymbrium irio
Capsella bursa-pastoris
Polygonum pensylvanicum
Veronica arvensis
Euphorbia spp.
Euphorbia numistrata
Oxalis stricta
Abutilon theophrasti

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## APPLICATION RATES FOR TURF WEED CONTROL $^{\rm 1}$

Turfgrass Species	Weeds	Rates of Turf Fertilizer With Pendimethalin 1.0	Comments
COOL SEASON GRASSES Bluegrass, Kentucky	crabgrass	150-200 lbs./acre	Apply a repeat
Fescue, fine	foxtail	as the initial	application of
Fescue, tall	Poa annua	application prior	100-150 lbs./acre
Ryegrass, perennial	barnyardgrass	to weed germination	after 5 - 8 weeks
	fall panicum oxalis	in the spring.	for extended control or where
	prostrate spurge		heavy weed
	purslane		infestations are
	knotweed		expected.
	evening primrose hop clover		
	goosegrass	Residential <sup>2</sup> Turf Uses Only: 100-150 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
		Golf Course and Commercial Turf Uses: 100-300 lbs./acre in the spring prior to weed germination.	
	cudweed	150-200 lbs./acre	Apply in late
	Poa annua		summer or early
	chickweed		fall prior to
	lawn burweed		weed germination.
	henbit		
	corn speedwell		( ( ( ( ( ( ( ( ( ( ( ( ( ( ( ( ( ( (
Bentgrass or	crabgrass	200 lbs./acre in the spring prior to	Apply a repeat application of
established Poa annua <sup>4</sup>	foxtail	weed germination.	100-200 lbs./acre after 5-8
(1/2 inch height or taller)	Poa annua barnyardgrass fall panicum		weeks where heavy weed infestations are expected.
	oxalis		(60610 0000
	prostrate spurge purslane		
	knotweed		,,,,,
	evening primrose hop clover		ocerc c
	010101		(
	goosegrass	200 lbs./acre	£ ( £
			,,,,,

to weed germination.

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

<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. TURF FERTILIZER WITH 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

TURF FERTILIZER WITH 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 TURF FERTILIZER WITH PENDIMETHALIN 1.0. TURF FERTILIZER WITH PENDIMETHALIN 1.0 may be used before or after applications of herbicides registered for postemergence use (i.e. Vantage®, Roundup PRO®5 or Finale®6) 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 TURF FERTILIZER WITH PENDIMETHALIN 1.0 treatment may be followed by any registered herbicide to control weeds not listed on the TURF FERTILIZER WITH PENDIMETHALIN 1.0 label.

#### ORNAMENTAL BULBS

TURF FERTILIZER WITH 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 TURF FERTILIZER WITH 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

TURF FERTILIZER WITH 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.). TURF FERTILIZER WITH PENDIMETHALIN 1.0 may be applied to established perennial wildflowers before emergence of weeds or wildflowers. For wildflowers being established from seed, apply TURF FERTILIZER WITH 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 TURF FERTILIZER WITH 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 TURF FERTILIZER WITH 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 TURF FERTILIZER WITH 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

TURF FERTILIZER WITH PENDIMETHALIN 1.0 is safe around and over the top of the established plants listed below.

## TREES

Common Name Alder, European Black 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	Scientific Name 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 tomentosa
	Prunus serrulata

Cryptomeria, Japanese Cedar 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, Chinquapin Oak, Live Oak, Pin

Oak, Swamp Chestnut

Oak, Red

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

Cryptomeria japonica Taxodium distichum Cupressocyparis leylandii

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 Ouercus rubra Quercus michauxii Quercus nigra Quercus alba Quercus phellos Olea europaea Phoenix spp. Washingtonia spp. Butia spp.

Prunus persica Pyrus calleryana 'Bradford'

Carya illinoensis Pinus nigra Pinus pinea Pinus taeda Pinus radiata Pinus resinosa Pinus sylvestris

Washingtonia spp.

Pinus virginiana Pinus strobus Prunus cerasifera Populus nigra Juniperus virginiana Thuja plicata (CCCC

Eucalyptus sideroxylon 'Rosea' Metasequoia glyptoctroboides

Sequoiadendron gigartcum Amelanchier laevis Oxydendrum arboreum

Picea pungens

Picea glauca 'albertiana'

Picea abies Picea glauca

Liquidambar styraciflua

Sycamore 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 Lily-of-the-Nile

Platanus occidentalis 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'
Ilex 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
Viburnum tinus
Lavandula angustifolia
Leucothoe fontanesiana
Leucothoe axillaris
Syringa laciniata
Agapanthus africanus

Mahonia aquifolium

Pittosporum tobira

Nandina domestica

Myrtus communis

Myrica cerifera

Mahonia

Mock Orange

Myrtle, Wax

Nandina

Myrtle, Compact

Oleander 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, Anthony Waterer

Spiraca, Anthony w Spiraca, Japanese Sweet Bay Trumpet Bush Verbena, Lemon

Viburnum Vitex Weigela Wild Lilac Wisteria Xylosma

Yellowbells Yew Yew, Japanese

Yew, Southern Yucca, Adam's Needle

Vucca Weening

Yucca, Weeping

## **GROUND COVERS**

## Common Name

Ajuga Baby Sun Rose

Beach Strawberry

Capeweed

Cinquefoil, Spring Coyotebrush, Dwarf Daisy, Trailing African

Dymondia Connin

Gazania

Iceplant, Large Leaf

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

Manzanita, Bearberry Miscanthus Mondograss Morninglory Myoporum

Pachysandra

Pacnysanora Potentilla

rotentnia

Periwinkle, Common Red Apple Rosemary Rose-Of-Sharon Sand Strawberry Sedum

St. Johnswort, Creeping

Stonecrop

Nerium oleander 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 filamento 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 japonicae co Convolvulus spp. Myoporum parviflolium Pachysandra terminulis

Potentilla fruticosa Vinca minor "CAptenia cordifolià"

Rosemarinus officinalis

Hypericum calycinum

Fragaria chiloensis

Sedum spurium Hypericum calycinum

Sedum spurium

Verbena, Peruvian

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 Lily

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

Verbena peruviana 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

Crocosmia crocosmi flera

Acidanthera bicolor Chrysanthemum leucantkemum

4 C C C

Paeonia lactiflora

Rosmarinus officinalis

Ruscus hypophyllum Perovskia atriplicifolia

Carex spp.

Chrysanthemum x superbum

Acorus calamus

Tickseed
Teyes Bluebons

Texas Bluebonnet

Tulip Twinspur Wonder Flower Yarrow

Zephyr Lily

Coreopsis lanceolata
Lupinus texenis
Tulipa spp.
Diasciascia barbaerae
Ornithogalum thyrsoides
Achillea millefolium

Zephyranthes spp.

Scientific Name

## ORNAMENTAL GRASSES

Common Name
Beach Grass
Fescue, Blue
Fescue, Sheep
Fountain Grass
Pampas Grass
Reed Canary Grass
Reed, Giant
Ribbon Grass

Ammophila breviligulata Festuca ovina Festuca ovina Pennisetum setaceum Cortaderia selloana Phalaris arundinacea

Arundo spp.
Phalaris arundinacea
Deschampsia caespitosa

## BEDDING PLANTS\*

## Common Name

**Tufted Hair Grass** 

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

Ageratum houstonianum Alyssum saxatile Anemone coronaria Artemesia spp. Platycodon grandiflorum

Begonia 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.

TURF FERTILIZER WITH 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.

<sup>\*</sup> Applications of TURF FERTILIZER WITH PENDIMETHALIN 1.0 to immature fems (during periods of new growth of fronds) may result in some injury.

<sup>\*</sup>After planting bedding plants and before TURF FERTILIZER WITH 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.

NOTIFICATION APR 1 0 2009