

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

OFFICE OF PREVENTION, PESTICIDES AND TOXIC SUBSTANCES

Jeffrey H. Birk, Ph.D.
Product Registration
BASF
26 Davis Drive
Research Triangle Park, NC 27709

JAN 29 2010

SUBJECT:

Application for Pesticide Notification (PRN 98-10)

Request Direction for Use/Spreader Settings

EPA Reg. No. 241-424

Application Dated December 16, 2009

Dear Registrant:

The Agency is in receipt of your Application for Pesticide Notification under Pesticide Registration Notice (PRN) 98-10 dated 12/16/09 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,

Linda Arrington Notifications & Minor Formulations Team Leader Registration Division (7505P) Office of Pesticide Programs

Please read instructions on	reverse before comple	a form.		Form Approve	MR No. 20	70-00 <i>6</i> ¢	ට 2. Approvel expires 2-28-95
\$EPA	U Environmental	nited States		✓	Registrati Amendme Other	ion	OPP Identifier Number
		Application	on for Pestici	de - Section	1		*
1. Company/Product Numbe 241-424	r			Product Manager S Tompkins		3. Pro	posed Classification
4. Company/Product (Name) Pendulum 0.86% Plus			PM# 25				
5. Name and Address of App BASF 26 Davis Drive Research Triangle Pa Check if this		de)	(b)(i), r to: EPA I				FIFRA Section 3(c)(3) nposition and labeling
			Section -				
Amendment - Explair	n below. conse to Agency letter	dated	[/]	Final printed laboragency letter da "Me Too" Applie	ated _		IFICATION
✓ Notification - Explain	below.			Other - Explain t	oelow.	JAI	N 2 9 2010
EPA regulations at 40 CFR 1 that it is a violation of 18 U.S terms of PR Notice 98-10 an sections 12 and 14 of FIFRA or by Email at jeffrey.birk@b	.C. Sec. 1001 to willfully d 40 CFR 152.46, this p . No PRIA fee is require	make any fals roduct may be	e statement to EPA in violation of FIFR it track label amend	. I further understa A and I may be sub ments. Contact Je	ind that if this noti ject to enforceme	fication is ent action	s not consistent with the and penalties under
4 14			Section - I				
1. Material This Product Will Child-Resistant Packaging Yes No * Certification must be submitted	Unit Packaging Yes No If "Yes" Unit Packaging wgt.	No. per container	Water Soluble F Yes No If "Yes" Package wgt	No. per container		ontainer Metal Plastic Glass Paper Other (Si	pecify)
3. Location of Net Contents	Information container	4. Size(s) Ret	ail Container	5. L	ocation of Label	Direction	ns
6. Manner in Which Label is	Affixed to Product	Lithog Paper Stenci	raph glued led	Other			
			Section - I	<u>V</u>	· · · · · · · · · · · · · · · · · · ·		
1. Contact Point <i>(Complete</i> Name Jeffrey H. Birk	items directly below fo	or identificatio	n of individual to b Title Regulatory Mana		To		No. (Include Area Code)
I certify that the state I acknowledge that an both under applicable	y knowlinglly false or a	Certifica this form and misleading sta	all attachments th	ereto are true, acc nishable by fine or	r imprisonmenf o	or 0 0	6. Date Application Received (Stamped)
2. Signature	2 My		3. Title Regulatory Manag	er		(((((((((((((((((((
Timed Name			5 Date		د ر. ز	ا این	¢ 1

Jeffrey H. Birk

December 16, 2009



December 16, 2009

U.S. Environmental Protection Agency Office of Pesticide Programs (H-7505 P) Document Processing Desk 7504P One Potomac Yard 2777 S. Crystal Drive Arlington, VA 22202 Attn: Mr. James A. Tompkins (PM 25)

RE:

Pendulum® 0.86% Plus Fertilizer (EPA Reg. No. 241-424)

Label Notification

Dear Mr. Tompkins:

BASF is hereby submitting a notification for a minor label change for Pendulum 0.86% Plus Fertilizer (EPA Reg. No. 241-424). As a product which uses a non-specified granular fertilizer as a carrier, the label currently does not provide fertilizer spreader settings for application purposes, since it is not possible without knowing the exact fertilizer being used as the carrier. The state of South Dakota has refused to approve the current label without some reference to spreader settings. Therefore, BASF has added a simple generic reference to spreader settings, which will allow the specific spreader setting to be included on the label once a given fertilizer carrier is selected for the product.

Enclosed please find:

- Application form 8570-1
- Compact Disc containing electronic version of the Pendulum 0.86% Plus Fertilizer label.
- Citation with Respect to Label Integrity
- Annotated Pendulum 0.86% Plus Fertilizer label.

A Bull

• Pendulum 0.86% Plus Fertilizer label.

No PRIA fee is required for submission

Thank you for your assistance with this matter. If you should have any questions, please feel free to call me at (919) 547-2622.

Regards

Jeffrey H. Birk, Ph.D. Regulatory Manager Phone 919-547-2622

Fax: 919-547-2850

Email: jeffrey.birk@basf.com

Pendulum[®] 0.86% Plus Fertilizer Preemergent Weed Control

0.86% pendimethalin + X-X-X Fertilizer

FOR USE ON TURFGRASSES AND ESTABLISHED ORNAMENTALS IN THE LANDSCAPE

NOTIFICATION

JAN 2 9 2010

Active Ingredient: pendimethalin: N-(1-ethylpropyl)-3,4-dimethyl-2	2,6-dinitrobenzenamine 0.86%
Other Ingredients:	<u>99.14%</u>
Total:	100.00%
EPA Reg. No. 241-424	EPA Est. No.
GUARANTEEI	ANALYSIS
Total Nitrogen (N)	X.X%
X.X % Ammoniacal Nitrogen	
X.X % Urea Nitrogen	
X.X % Slowly Available Nitrogen*	
Available Phosphoric Acid (P2O5)	
Soluble Potash (K ₂ O)	X.X%
Derived from: Urea, Diammonium Phosphate, Sulfi	r Coated Urea, and Muriate of Potash
*X.X % Slowly Available Nitrogen from Sulfu	r Coated Urea

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 going for treatment.

In case of emergency endangering life or property involving this product, call day or night 1-800-832-HELP (4357).

See inside leaflet for additional Precautionary Statements and Directions For Use.

Net Contents:

BASF Corporation 26 Davis Drive Research Triangle Park, NC 27709



The Chemical Company

TABLE OF CONTENTS

FIRST AID and PRECAUTIONARY STATEMENTS	3
ENVIRONMENTAL HAZARDS	4
DIRECTIONS FOR USE	4
STORAGE AND DISPOSAL	5
GENERAL INFORMATION	6
APPLICATION INSTRUCTIONS	6
WEED SPECIES CONTROLLED	
GRASSES CONTROLLED	
BROADLEAF WEEDS CONTROLLED	9
TURFGRASS	
APPLICATION RATES FOR TURF WEED CONTROL	10
COOL SEASON GRASS	
WARM SEASON GRASS	12
TURFGRASS PRECAUTIONS	
INDUSTRIAL (UNIMPROVED) TURF	13
LANDSCAPE AND GROUNDS MAINTENANCE	13
ORNAMENTAL BULBS	
WILDFLOWERS	
ORNAMENTAL PRECAUTIONS	
ORNAMENTALS	14
TREES	
SHRUBS	
GROUND COVERS	
PERENNIALS	
ORNAMENTAL GRASS	
BEDDING PLANTS	



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

HOTLINE 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 BASF Corporation for emergency medical treatment information: 1-800-832-HELP (4357).

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 dust.

Personal Protective Equipment (PPE):

Some materials that are chemically 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 material, such as butyl rubber >14 mils, nitrile rubber >14 mils, 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 exist, 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 or rinsate.

For Florida Only: DO NOT apply near water, storm drains or drainage ditches. DO NOT apply if heavy rain is expected. Apply only to lawn, and sweep any product that lands on the driveway, sidewalk or street, back onto lawn.

DIRECTIONS FOR USE

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

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

BASF Corporation 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 Pendulum® 0.86% Plus Fertilizer in greenhouses, shadehouses or other enclosed structures.

NOT FOR USE on grass grown for commercial seed production.

DO NOT apply this product through any irrigation system. Keep children and pets out of treated area until dust has settled.

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, pasture, rangeland, or animals.

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.

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 material, such as butyl rubber >14 mils, nitrile rubber >14 mils, or neoprene rubber >14 mils
- Shoes plus socks

NONAGRICULTURAL 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 POOR WEED CONTROL, CROP INJURY, OR RESIDUES.

STORAGE AND DISPOSAL

DO NOT contaminate water, food, or feed by storage or disposal.

Pesticide Storage

DO NOT store above 120°F. Store in original container and keep closed. Store in a cool, dry place.

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

(for paper or plastic bags)

Nonrefillable Container. DO NOT reuse or refill this container. After completely emptying container into application equipment, dispose of empty bag in a sanitary landfill, or by incineration, or by other procedures approved by state and local authorities.

Observe all cautions and limitations on this label and the labels of products used in combination with Pendulum[®] 0.86% Plus Fertilizer. The use of Pendulum 0.86% Plus Fertilizer not consistent with this label can result in injury to crops, animals, or persons. Keep containers closed to avoid spills and contamination.

GENERAL INFORMATION

Pendulum 0.86% Plus Fertilizer 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. Pendulum 0.86% Plus Fertilizer can be used around established ornamentals in the landscape and in established wildflower plantings. Pendulum 0.86% Plus Fertilizer may be used for hardwood and conifer regeneration on conservation reserve program land or similar areas.

Pendulum 0.86% Plus Fertilizer 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.

Pendulum 0.86% Plus Fertilizer 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 specified rate using a properly calibrated spreader. The efficacy of **Pendulum 0.86% Plus Fertilizer** 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 **Pendulum 0.86% Plus Fertilizer** 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.

Pendulum 0.86% Plus Fertilizer can be applied before or after postemergence herbicides used to control emerged weeds in turfgrasses. For annual grass control, applications can be made with Segment herbicide, Acclaim Extra® herbicide, or MSMA-containing products, to control

10/26

emerged weeds. Broadleaf weeds can be controlled using TrimecTM herbicide, Three-WayTM herbicide, 2,4-D, and other similar products.

Applied according to label directions, and under normal growing conditions, Pendulum[®] 0.86% Plus Fertilizer will not cause injury to desirable plants. Overapplication 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 **Pendulum 0.86% Plus Fertilizer**.

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 specified. Avoid application when winds may cause drift.

Spreader Settings



Maximum Application Rate by Use Sites

<u>Use Site</u>	lbs Product/A	lbs Product/1000 ft ²	lbs a.i./A
Residential* and Sod Farm Turf	233	5.3	2.0
Golf Course, Commercial and	349	8.0	3.0

^{*}Residential is defined as turf in any residential situation as well as home lawns, schools, parks and playgrounds.

Florida Specific Requirements for Fertilizer Use

For applications to sports turf at golf courses, parks and athletic fields: DO NOT exceed fertilizer rates recommended in the document titled SL 191, "Recommendations for N, P, K and Mg for Golf Course and Athletic Field Fertilization Based on Mehlich I Extractant" dated March 2007. Copies may be downloaded from http://edi.ifas.ufl.edu/SS404.

Follow "Best Management Practices for the Enhancement of Environmental Quality on Florida Golf Courses," published by the Florida Department of Environmental Protection, dated January 2007. Copies may be downloaded from http://www.dep.state.fl.us/water/nonpoint/pubs.htm.

For all fertilizer uses other than as a specialty fertilizer on urban turf: DO NOT exceed rates recommended in the document titled Best Management Practices for Protection of Water Resources in Florida, June 2002, Florida Green Industries. This document may be downloaded from http://www.dep.state.fl.us/water/nonpoint/docs/nonpoint/BMP_Book.

WEED SPECIES CONTROLLED

Pendulum[®] 0.86% Plus Fertilizer 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

Dieusine maicu

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

Evening primrose

Fiddleneck

Filaree

Henbit

Knotweed, prostrate

Kochia

Lambsquarters

Pigweed

Puncturevine

Purslane

Pusley, Florida

Rocket, London

Shepherdspurse

Smartweed, Pennsylvania

Speedwell, Corn

Spurge, Annual

Spurge, Prostrate

Woodsorrel, Yellow

Velvetleaf (Buttonweed)

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

Capsella bursa-pastoris

Polygonum pensylvanicum

Veronica arvensis

Euphorbia spp.

Chamaesyce humistrata

Oxalis stricta

Abutilon theophrasti

TURFGRASS

RESIDENTIAL, GOLF COURSE, COMMERCIAL AND OTHER NON-RESIDENTIAL TURFGRASS USES

Application Rates For Preemergence Weed Control¹

Turfgrass Species	Weed	Pendulum [®] 0.86% Plus Fertilizer Rate	Comment
COOL SEASON GRASS			
Bluegrass, Kentucky Fescue, fine Fescue, tall Ryegrass, perennial	crabgrass foxtail Poa annua barnyardgrass fall panicum oxalis prostrate spurge purslane knotweed evening primrose hop clover	All Turf Uses 175-233 lbs/acre as the initial application prior to weed germination in the spring	Apply a repeat application of 116-175 lbs/acre after 5-8 weeks for extended control or where heavy weed infestations are expected.
	goosegrass	Residential and Sod Farm Turf Uses Only ² 175-233 lbs/acre in the spring prior to weed germination	Apply a repeat application of 116 lbs/acre after 5-8 weeks if the lower rate was used initially or for extended goosegrass control.
		Golf Course, Commercial and Other Non- Residential Turf Uses Only 175-349 lbs/acre in the spring prior to weed germination	

	cudweed Poa annua chickweed lawn burweed henbit corn speedwell	All Turf Uses 175-233 lbs/acre	Apply in late summer or early fall prior to weed germination. Apply a repeat application of 175-233 lbs/acre after 5-8 weeks for extended <i>Poa annua</i> control.
Bentgrass or established Poa annua (1/2 inch or taller)	crabgrass foxtail Poa annua barnyardgrass fall panicum oxalis prostrate spurge purslane knotweed evening primrose hop clover	All Turf Uses (Non-Greens and Tees) 175 lbs/acre in the spring prior to weed germination	Apply a repeat application of 116-175 lbs/acre after 5-8 weeks where heavy weed infestations are expected.
	goosegrass	All Turf Uses (Non-Greens and Tees) 175 lbs/acre in the spring prior to weed germination	Apply a repeat application of 175 lbs/acre after 5-8 weeks for extended control.
	cudweed Poa annua chickweed lawn burweed henbit corn speedwell	All Turf Uses (Non-Greens and Tees) 175-233 lbs/acre	Apply in late summer or early fall prior to weed germination.

WARM SEASON GRASS			
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 and Sod Farm Turf Uses Only ² 175-233 lbs/acre in the spring prior to weed germination Golf Course, Commerical and Other Non-Residential Turf Uses Only 175-349 lbs/acre in the spring prior to weed germination	Apply a repeat application of 116-175 lbs/acre after 5-8 weeks if necessary.
	goosegrass	All Turf Uses (Non-Greens and Tees) 175 lbs/acre prior to weed germination in the spring. Apply a repeat application of 175-233 lbs/acre after 5-8 weeks.	An additional application of 175 lbs/acre may be applied for extended goosegrass control 8 weeks after the second application.
	cudweed Poa annua chickweed lawn burweed henbit corn speedwell	All Turf Uses 175-233 lbs/acre	Apply in late summer or early fall prior to weed germination. Apply a repeat application of 175-233 lbs/acre after 5-8 weeks for extended <i>Poa annua</i> control.

¹DO NOT exceed a maximum rate of 233 pounds <u>per acre per application</u> for use on residential turfgrass and sod farm turfgrass.

DO NOT exceed a maximum rate of 349 pounds <u>per acre per application</u> for use on golf course turfgrass, commercial or other non-residential turfgrass.

² Residential is defined as turf in any residential situation as well as home lawns, schools, parks and playgrounds.

³ Not for use on bentgrass or *Poa annua* greens or tees.

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 turfgrass 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 **Pendulum**® 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. Pendulum® 0.86% Plus Fertilizer 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 grass in rights-of-way, roadsides, construction sites, parks, substations, lots, or similar areas:

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

Pendulum 0.86% Plus Fertilizer 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 not 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 Pendulum 0.86% Plus Fertilizer. Pendulum 0.86% Plus Fertilizer may be used before or after application of herbicides registered for postemergence use (i.e. Segment herbicide, Roundup PRO herbicide or Finale herbicide) for the control of established weeds.

DO NOT apply sprays containing Roundup[®] herbicide or Finale[®] herbicide over the top of desirable plants, and follow the label restrictions. A Pendulum[®] 0.86% Plus Fertilizer treatment may be followed by any registered herbicide to control weeds not listed on the Pendulum 0.86% Plus Fertilizer label.

ORNAMENTAL BULBS

Pendulum 0.86% Plus Fertilizer may be applied for control of susceptible annual weeds in ornamental bulbs listed on the label (crocus, daffodil (narcissus), gladiolus, tulip, etc.). Apply Pendulum 0.86% Plus Fertilizer prior to, during or after bulb emergence. If weeds have already germinated, use a labeled postemergence herbicide to control emerged weeds.

WILDFLOWERS

Pendulum 0.86% Plus Fertilizer 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.). Pendulum 0.86% Plus Fertilizer may be applied to established perennial wildflowers before emergence of weeds or wildflowers. For wildflowers being established from seed, apply Pendulum 0.86% Plus Fertilizer 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 **Pendulum 0.86% Plus Fertilizer** may vary greatly. Careful testing on desirable species is recommended to determine if area-wide applications can be made.

ORNAMENTAL PRECAUTIONS

Apply Pendulum 0.86% Plus Fertilizer 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 Pendulum 0.86% Plus Fertilizer 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 Pendulum® product or injury may occur.

RECOMMENDED ORNAMENTAL SPECIES

Pendulum 0.86% Plus Fertilizer is safe around and over the top of the established plants listed below.

TREES

Common.	N	ame
---------	---	-----

Alder, European Black Apple Arborvitae, American Arbutus Ash, Red Ash, White

Scientific Name

Alnus glutinosa Malus spp. Thuja occidentalis Arbutus spp. Fraxinus pennsylvanica Fraxinus americana 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 Crape Myrtle

Cryptomeria, Japanese Cedar

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

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 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 Taxodium distichum Cupressocyparis leylandii

Cornus florida
Cornus kousa
Cornus spp.
Cornus amomum
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 Nannyberry, Rusty Oak, Chinquapin

Oak, Live Oak, Pin Oak, Red

Oak, Swamp Chestnut

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, Western Red Ironbark Redwood, Dawn Sequoia, Giant Serviceberry Sourwood

Redcedar, Eastern

Spruce, Colorado Blue Spruce, Dwarf Alberta

Spruce, Norway
Spruce, White
Sweetgum
Sycamore
Trachycarpus
Tulip tree
Walnut, Black
Willow, Weeping
Yellowwood

Viburnum rufidulum
Quercus muehlenbergii
Quercus virginiana
Quercus palustris
Quercus rubra
Quercus michauxii
Quercus nigra
Quercus alba
Quercus phellos
Olea europaea
Phoenix spp.
Washingtonia spp.

Butia spp.

Washingtonia spp.
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 glauca

Liquidambar styraciflua Platanus occidentalis Trachycarpus spp. Liriodendron tulipifera

Juglans nigra Salix babylonica Cladrastis lutea

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, Fosters
Holly, Japanese
Holly, Savannah
Holly, Yaupon
Honeysuckle, Bush
Hopseed Bush

Hopbush Hydrangea Juniper

Juniper, Chinese

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 attenuata 'Fosteri'

Ilex cornuta

Ilex crenata
Ilex attenuata
Ilex vomitoria
Diervilla lonicera
Dodonaea viscosa
Dodonaea viscosa
Hydrangea macrophylla

Juniperus sp.

Juniperus chinensis v. pfitzer

Juniper, Shore
Juniper, Trailing
Laurel, Cherry
Laurel, Mountain
Laurel, Otto Luyken
Laurel, Schipka
Laurustinus

Lavender, English

Leucothoe, Coast Lilac, Cut-leaf Lily-of-the-Nile

Mahonia
Mock Orange
Myrtle, Compact
Myrtle, Wax
Nandina
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

Spiraea, Anthony Waterer

Spiraea, Japanese

Sweet Bay Trumpet Bush Verbena, Lemon

Viburnum Vitex Weigela Wild Lilac 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
Nandina domestica
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 Xylosma

Yellowbells

Yew

Yew, Japanese Yew, Southern

Yucca, Adam's Needle

Yucca, Weeping

Wisteria spp.

Xylosma congestum

Tecoma stans Taxus media

Taxus cuspidata

Podocarpus macrophyllus

Yucca filamentosa Yucca pendula

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 Morningglory Myoporum Pachysandra

Periwinkle, Common

Potentilla
Red Apple
Rosemary
Rose-of-Sharon
Sand Strawberry
Sedum

St. Johnswort, Creeping

Stonecrop

Verbena, Peruvian

Vervain Vetch, Crown

Vinca or Greater Periwinkle

Wintercreeper

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

Vinca minor

Potentilla fruticosa
Aptenia cordifolia
Rosemarinus officinalis
Hypericum calycinum
Fragaria chiloensis
Sedum spurium
Hypericum calycinum
Sedum spurium
Verbena peruviana
Verbena peruviana

Vicia sativa Vinca major

Euonymous fortunei

PERENNIALS

Common Name

Acacia Asparagus

Aster, New York

Aster, Stokes Astilibe (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, Boston Fern, Leatherleaf*

Fern, Tree Fortnight Lily Foxglove, Common

Freesia

Fuschia, Arizona Gayfeather Gaillardia Geum Gladiolus Heather, Dwarf

Hosta

Hyssop, Sunset Indian Blanket Lantana, Weeping Leopards Bane

Lily

Scientific Name

Acacia redolens Asparagus spp. Aster novi-belgii Stokesia laevis Astilibe 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
Nephrolepis exaltata
Rumohra adiantiformis

Asparagus virgatus 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, Big Blue Liriope, Creeping Liriope, Variegated Loosestrife, Garden

Montbretia Moonbeam Nightshade Orchid, Peacock Oxeye Daisy Peony, Chinese

Purple Coneflower Purple Loosestrife

Rosemary Ruscus, Israeli Sage, Russian

Sedge

Shasta Daisy Sweet Flag

Texas Bluebonnet

Tickseed Tulip Twinspur Wonder Flower

Yarrow Zephyr Lily Liriope muscari
Liriope spicata
Liriope muscari
Lysimachia punctata
Crocosmia crocosmiiflora
Coreopsis verticillata

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 Lupinus texenis Coreopsis lanceolata

Tulipa spp.

Diasciascia barbaerae Ornithogalum thyrsoides Achillea millefolium Zephyranthes spp.

ORNAMENTAL GRASS

Common Name

Beach Grass
Fescue, Blue
Fescue, Sheep
Fountain Grass
Pampas Grass
Reed Canary Grass

Reed, Giant Ribbon Grass Tufted Hair Grass

Scientific Name

Ammophila breviligulata

Festuca ovina Festuca ovina

Pennisetum setaceum Cortaderia selloana Phalaris arundinacea

Arundo spp.

Phalaris arundinacea Deschampsia caespitosa

^{*}Applications of Pendulum® 0.86% Plus Fertilizer to immature ferns (during periods of new growth of fronds) may result in some injury.

BEDDING PLANTS*

Common Name

Ageratum Alyssum

Anemone, Poppy-flowered

Artemesia Balloonflower Begonia

Cabbage, Ornamental

Caladium China Aster

Crocosmia, Montebretia

Dahlia Dianthus Dusty Miller Gazania, Trailing

Gazania, Treasure Flower

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 leucolaena

Gazania rigens 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.

Pendulum 0.86% Plus Fertilizer 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 specified rate. Treated plants should be evaluated 1-2 months following treatment for possible injury. TO THE FULLEST EXTENT PERMITTED BY LAW, 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.

^{*}After planting bedding plants and before Pendulum® 0.86% Plus Fertilizer is applied, area to be treated should be watered sufficiently to pack soil around roots.

Conditions of Sale and Warranty

The Directions For Use of this product reflect the opinion of experts based on field use and tests. The directions are believed to be reliable and must be followed carefully. However, it is impossible to eliminate all risks inherently associated with the use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as weather conditions, presence of other materials, or use of the product in a manner inconsistent with its labeling, all of which are beyond the control of BASF CORPORATION ("BASF") or the Seller. To the extent consistent with applicable law, all such risks shall be assumed by the Buyer.

BASF warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes referred to in the **Directions For Use**, subject to the inherent risks, referred to above.

TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, BASF MAKES NO OTHER EXPRESS OR IMPLIED WARRANTY OF FITNESS OR MERCHANTABILITY OR ANY OTHER EXPRESS OR IMPLIED WARRANTY.

TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, BUYER'S EXCLUSIVE REMEDY AND BASF'S EXCLUSIVE LIABILITY, WHETHER IN CONTRACT, TORT, NEGLIGENCE, STRICT LIABILITY, OR OTHERWISE, SHALL BE LIMITED TO REPAYMENT OF THE PURCHASE PRICE OF THE PRODUCT.

TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, BASF AND THE SELLER DISCLAIM ANY LIABILITY FOR CONSEQUENTIAL, EXEMPLARY, SPECIAL OR INDIRECT DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT.

BASF and the Seller offer this product, and the Buyer and User accept it, subject to the foregoing **Conditions of Sale and Warranty** which may be varied only by agreement in writing signed by a duly authorized representative of BASF.

Pendulum is a registered trademark of BASF.

Segment is a trademark of BASF.

Acclaim Extra and Finale are registered trademarks of Bayer Environmental Sciences.

Trimec is a trademark of PBI Gordon Corporation.

Three-Way is a trademark of Lesco Inc.

Roundup and Roundup PRO are registered trademarks of Monsanto Company.

© 2009 BASF Corporation All rights reserved.

000241.00424.20091215.**NVA 2009-04-123-0253**

Supersedes: NVA 2009-04-123-0080

BASF Corporation 26 Davis Drive Research Triangle Park, NC 27709



The Chemical Company