241-421

C

9-12-2003

133 SEP 12 2003

#### UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

NOTICE OF PESTICIDE: <u>x</u> Registration EPA Reg. Number:241-421 Term of Issuance: Conditional Name of Pesticide Product: Pendimethalin 0.66% plus fertilizer

This product is conditionally registered in accordance with FIFRA sec. 3(c)(7)(A) provided that you:

- 1. Submit and/or cite all data required for registration/ reregistration of your product under FIFRA sec. 3(c)(5) when the Agency requires all registrants of similar products to submit such data; and submit acceptable responses required for reregistration of your product under FIFRA section 4.
- 2. Within 18 months of the date of this registration, submit one-year storage stability and corrosion characteristics studies for review and acceptance.
- 3. Add on the front panel, "EPA Reg. No. 241-421" and "EPA Est. No. 241-XX-XX."
- 4. Make the following label changes listed below before you release the product for shipment:
  - a. "Under Caution";

Change "Avoid breathing mist" to "Avoid breathing dust."

b. Under "Personal Protective Equipment":

Replace the glove statement with the following:

"Chemical resistant gloves, made of waterproof materials, such as butyl rubber >14 mils, nitrile rubber >14 mils, or neoprene rubber >14 mils."

c. Under "Direction for Use";

Add "Do not apply this product through any irrigation system. Keep children and Pets out of treated area until dusts have settled."

d. Under "Directions for Use";

Add the following spray drift management statement:

"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."

# Page 2 EPA Reg. No. 241-421

Enclosures

1

e. Under "Agricultural Use Requirements";

Replace the glove statement with the following:

"Chemical resistant gloves, made of waterproof materials, such as butyl rubber >14 mils, nitrile rubber >14 mils, or neoprene rubber >14 mils."

f. "Under Storage and Disposal";

Change "Storage" to "Pesticide Storage."

g. Under "Application Rates for Turf Weed Control";

The maximum application rate for this product is 303 lbs (2 lbs AI) /acre. Adjust the application rate to this limit.

- 5. This product contains an active ingredient and a fertilizer. The fertilizer has different variations in percent concentration of total nitrogen (N), available phosphoric acid (P), and soluble potash (K). Your submission includes labels for the following fertilizer compositions:
  - 0.66% AI + 34%(N) + 3%(P) + 8%(K).
  - 0.66% AI + 25%(N) + 2%(P) + 5%(K).
  - 0.66% AI + 20%(N) + 2%(P) + 5%(K).
  - 0.66% AI + 14%(N) + 0%(P) + 14%(K).
  - 0.66% AI + 14%(N) + 0%(P) + 14%(K).
  - 0.66% AI + 0%(N) + 0%(P) + 13%(K).

Submit one copy of your final printed labeling for the above products before you release these products for shipment.

If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA section 6(e). Your release for shipment of these products constitutes acceptance of these conditions. A stamped copy of each label is enclosed for your records.

Your submission includes the confidential statement of formula (CSF) for each variation in fertilizer composition. The current Agency filing practice for products containing fertilizers is listing all fertilizer compositions as an addendum to the CSF. Please list all fertilizer compositions in an addendum when you submit an alternate CSF in the future.

				· · · · · · · · · · · · · · · · · · ·		···· , ··· ,		
				CONCURRENCES	·			
SINGOL	•	7505C	7505c/					
SUPRIME	•	Bien	Toppins		j			
DATE	•	8-27-03	91403					
EPA Form	1320	)-1 (12-70)	1 4				OFFICIAL FIL	E COPY

# PENDULUM® 0.66% PLUS FERTILIZER Preemergent Weed Control

#### 0.66% pendimethalin + 34-3-8 Fertilizer

# FOR USE ON TURFGRASSES AND ESTABLISHED ORNAMENTALS IN THE LANDSCAPE

ACTIVE INGREDIENT: pendimethalin, N-(1-ethylpropyl)-3,4-dimethyl-2, 6-dinitrobenzenamine	%
INERT INGREDIENTS	<u>%</u>
TOTAL	%

EPA Reg. No. 241-

EPA Est. No.

# **GUARANTEED ANALYSIS**

Total Nitrogen (N).	34.00%
34.00% Urea Nitrogen	
Available Phosphoric Acid (P <sub>2</sub> O <sub>5</sub> )	3.00%
Potassium sulfate (K <sub>2</sub> SO <sub>4</sub> )	8.00%
Derived from: Urea, Diammonium Phosphate and Sulfate of Potash.	

#### 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.)

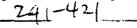
Have the product container or label with you when calling a poison control center or doctor, or for going for treatment.

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

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

ACCEPTED with COMMENTS in EPA Letter Dated

Under the Federal Insecticide. Fungicide, and Rodenticide Act as amended, for the pesticide registered under EPA Reg. No.



SEP 1 2 2003 © 2002 BASF Corporation All rights reserved NVA 2002-04-123-0207

**BASF Corporation** 26 Davis Drive Research Triangle Park, NC 27709



Net Contents:

4/133

# TABLE OF CONTENTS

FIRST AID AND PRECAUTIONARY STATEMENTS
ENVIRONMENTAL HAZARDS
DIRECTIONS FOR USE
STORAGE AND DISPOSAL
GENERAL INFORMATION
APPLICATION INSTRUCTIONS
WEED SPECIES CONTROLLED 9 GRASSES CONTROLLED 9 BROADLEAF WEEDS CONTROLLED 10
TURFGRASSES.       10         APPLICATION RATES FOR TURF WEED CONTROL       10         COOL SEASON GRASSES       10         WARM SEASON GRASSES       11         TURFGRASS PRECAUTIONS       12         INDUSTRIAL ( unimproved )TURF       12
LANDSCAPE AND GROUNDS MAINTENANCE
ORNAMENTALS14TREES14SHRUBS16GROUND COVERS18PERENNIALS19ORNAMENTAL GRASSES21BEDDING PLANTS21

~

5/133

	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 BASF Corporation for emergency medical treatment information: 1-800-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 mist.

## **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 any waterproof material (such as nitrile, butyl, neoprene, and/or barrier laminate).
- 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.

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 0.66% PLUS FERTILIZER 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.

# 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 any waterproof material (such as nitrile, butyl, neoprene, and/or barrier laminate).
- 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 POOR WEED CONTROL, CROP INJURY, OR RESIDUES.

# STORAGE AND DISPOSAL

**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

8/33

**DISPOSAL:** 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 PENDULUM 0.66% PLUS FERTILIZER. The use of PENDULUM 0.66% PLUS FERTILIZER 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 BASF Corporation (BASF). All such risks shall be assumed by the user.

BASF 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.

BASF makes no other express or implied warranty, including other express or implied warranty of FITNESS or of MERCHANTABILITY.

# **GENERAL INFORMATION**

PENDULUM 0.66% 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 0.66% PLUS FERTILIZER can be used around established ornamentals in the landscape and in established wildflower plantings. PENDULUM 0.66% PLUS FERTILIZER may be used for hardwood and conifer regeneration on conservation reserve program land or similar areas.

PENDULUM 0.66% PLUS FERTILIZER is labeled for use on the following turfgrass species: Kentucky bluegrass, perennial ryegrass, fine fescue, tall fescue, bentgrass, <u>Poa annua</u> (except



putting greens and tees), bermudagrass, St. Augustinegrass, bahiagrass, centipedegrass, zoysiagrass and blends of these grasses.

PENDULUM 0.66% 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 recommended rate using a properly calibrated spreader. The efficacy of PENDULUM 0.66% 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 0.66% 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 0.66% 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 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, PENDULUM 0.66% PLUS FERTILIZER. 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 PENDULUM 0.66% 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 recommended.

Avoid application when winds may cause drift.

# 227 lbs. treats 1 acre delivering 1.5 lb. ai/A and 1.77 lb. N/1,000 ft.2

# **Recommended Rates:**

			lb	s. per acre	
<u>Spreader</u>	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	Ι	K
Scotts R-8,R-8a	3 mph	11 ft.	J	L 1/2	Ν
1 <sub>Lely</sub>	4.5 mph	30 ft.	4 1/4 III	5 1/2 III	6 1/2 Ш
$2_{\rm Vicon}$	4.5 mph	30 ft.	21	25	29

<sup>1</sup>Models WTR, WRF, HR, and 1250 PTO-450 rpm <sup>2</sup>Vicon - All models PTO-540 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

PENDULUM 0.66% 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	Scientific Name
Barnyardgrass	Echinochloa crus-galli
Bluegrass, Annual	Poa annua
Crabgrass	Digitaria spp.
Crowfootgrass	Dactyloctenium aegyptium
Foxtail, Giant	Setaria faberi
Foxtail, Green	Setaria viridis
Foxtail, Yellow	Setaria glauca
Goosegrass	Eleusine indica
Itchgrass	Rottboellia exaltata
Johnsongrass (from seed)	Sorghum halepense
Junglerice	Echinochloa colona
Lovegrass (from seed)	Eragrostis spp.
Panicum, Browntop	Panicum fasciculatum

Panicum, Fall Panicum, Texas Sandbur, Field Signalgrass Sprangletop, Mexican Sprangletop, Red Witchgrass Woolly Cupgrass

7

#### **BROADLEAF WEEDS CONTROLLED**

#### <u>Common Name</u>

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

Panicum dichotomiflorum Panicum texanum Cenchrus incertus Brachiaria platyphylla Leptochloa uninervia Leptochloa filiformis Panicum capillare Eriochloa villosa

# 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. Euphorbia numistrata Oxalis stricta Abutilon theophrasti

<sup>||</sup>||33

# TURFGRASSES



# APPLICATION RATES FOR TURF WEED CONTROL<sup>1</sup>

Turfgrass Species	Weeds	Rates of PENDULUM 0.66% PLUS FERTILIZER	Comments
COOL SEASON GRASSES	,, μ. Ταλλατική διαστογραφικά του		
Bluegrass, Kentucky Fescue, fine Fescue, tall Ryegrass, perennial	crabgrass foxtail <i>Poa annua</i> barnyardgrass fall panicum oxalis prostrate spurge purslane knotweed evening primrose hop clover	227-303 lbs./acre as the initial application prior to weed germination in the spring.	Apply a repeat application of 152-227 lbs./acre after 5 - 8 weeks for extended control or where heavy weed infestations are expected.
	goosegrass	Residential <sup>2</sup> Turf Uses Only : 152-227 Ibs./acre in the spring prior to weed germination. Golf Course and Commercial Turf Uses: 152-455 Ibs./acre in the spring prior to weed germination.	Apply a repeat application of 152 lbs./acre after 5 – 8 weeks if the lower rates was used initially or for extended goosegrass control.
	cudweed <i>Poa annua</i> chickweed lawn burweed henbit corn speedwell	227-303 lbs./acre	Apply in late summer or early fall prior to weed germination.

<u>م</u>

' -//33
---------

Bentgrass or established <i>Poa annua</i> <sup>3</sup> (1/2 inch height or taller)	crabgrass foxtail <i>Poa annua</i> barnyardgrass fall panicum oxalis prostrate spurge purslane knotweed evening primrose hop clover	227 lbs./acre in the spring prior to weed germination.	Apply a repeat application of 152- 227 lbs./acre after 5 - 8 weeks where heavy weed infestations are expected.
	goosegrass	227 lbs./acre in the spring prior to weed germination. Apply a repeat application of 227 lbs./acre after5 6- 8 weeks.	
	cudweed Poa annua chickweed lawn burweed henbit corn speedwell	227-303 lbs./acre	Apply in late summer or early fall prior to weed germination.
WARM SEASON GRASSES			
Bahiagrass Bermudagrass Buffalograss Centipedegrass Fescue, tall St. Augustinegrass Zoysiagrass	Crabgrass foxtail, <i>Poa annua</i> Barnyardgrass fall panicum oxalis prostrate spurge purslane knotweed evening primrose hop clover	Residential <sup>2</sup> Turf Uses Only: 227-303 lbs./acre in the spring prior to weed germination. Golf Course and Commerical Turf Uses: 227-455 lbs./acre in the spring prior to weed germination.	Apply a repeat application of 152- 227 lb./acre after 5-8 weeks if necessary.
	goosegrass	227 lbs./acre prior to weed germination in the spring. Apply a repeat application of	An additional application of 227 lbs./acre may be applied for extended goosegrass control 8 weeks

r

14/133

	227-303 lbs./acre after 5 – 8 weeks.	after the second application.
cudweed Poa annua chickweed lawn burweed henbit corn speedwell	227-303 lbs./acre	Apply in late summer or early fall prior to weed germination.

<sup>1</sup> DO NOT exceed a maximum rate of 303 pounds <u>per acre per application</u> for use on residential turfgrass.

- <sup>2</sup> Residential is defined as turf in any residential situation as well as schools, parks and playgrounds.
- <sup>3</sup> DO NOT exceed a maximum rate of 303 pounds <u>per acre per application</u> for use on sod farms.
- <sup>4</sup> 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 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 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 0.66% 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 grasses 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 0.66% 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 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 <u>shallow</u> 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 0.66% PLUS FERTILIZER. PENDULUM 0.66% PLUS FERTILIZER 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 PENDULUM 0.66% PLUS FERTILIZER treatment may be followed by any registered herbicide to control weeds not listed on the PENDULUM 0.66% PLUS FERTILIZER label.

#### **ORNAMENTAL BULBS**

1

PENDULUM 0.66% 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 0.66% 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 0.66% PLUS FERTILIZER 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.). PENDULUM 0.66% PLUS FERTILIZER may be applied to established perennial wildflowers before emergence of weeds or wildflowers. For wildflowers being established from seed, apply PENDULUM 0.66% 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 0.66% PLUS FERTILIZER may vary greatly. Careful testing on desirable species is recommended to determine if area-wide applications can be made.

#### **ORNAMENTAL PRECAUTIONS**

16/133

Apply PENDULUM 0.66% 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 0.66% 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 0.66% PLUS FERTILIZER is safe around and over the top of the established plants listed below.

#### TREES

r

#### 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 Cottonwood Crabapple Crepe Myrtle Cryptomeria, Japanese Cedar Cypress, Bald Cypress, Leyland Dogwood, Flowering Dogwood, Korean Dogwood, Silky Dogwood, Shrub Elm Fir, Balsam

#### 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 serrulata Prunus tomentosa Populus deltoides Malus spp. Lagerstroemia indica Cryptomeria japonica Taxodium distichum Cupressocyparis levlandii Cornus florida Cornus kousa Cornus amomum Cornus spp. Ulmus japonica Abies balsamae

17/133

Fir. Douglas Fir, Fraser Fir, White Franklinia Ginkgo Gum, Black Gum, Sour Haw, Black Hawthorn Hemlock, Canada Hemlock, Eastern Holly, American Honevlocust 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, 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

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 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

~

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 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

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

#### 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

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 Mahonia Mock Orange Myrtle, Compact Myrtle, Wax Nandina Oleander Oregon Grape Osmanthus Palm, European Fan Palm, Mediterranean Fan

Cupressocyparis leylandii Deutzia gracilis Cornus sericea Elaeagnus ebbingei Escallonia fradesii Euonymus fortunei Euonymus japonica Euonymus alata Pvracantha 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 Prunus schipkanensis Viburnum tinus Lavandula angustifolia Leucothoe fontanesiana Leucothoe axillaris Syringa laciniata Agapanthus africanus Mahonia aquifolium Pittosporum tobira Myrtus communis Mvrica cerifera Nandina domestica Nerium oleander Mahonia aquifolium Osmanthus fragrans Chamaerops humilis Chamaerops spp.

ŗ

20/1.33

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 **Xylosma** 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 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

r

Iceplant, Large Leaf Ivv. 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 Vervain Vetch, Crown Vinca or Greater Periwinkle Wintercreeper

#### PERENNIALS

۴

#### <u>Common Name</u>

Acacia Asparagus Aster, New York Aster, Stokes Astilibe (False Spirea) **Babys Breath** Beard-Tongue Bellflower Bird of Paradise Black-eved Susan **Blanket Flower Bleeding Heart Butterfly Weed** California Poppy Calla Lily Canna, Common Garden Carex

Carpobrotus edulis Hedera helix Pelargonium peltatum Trachelospermum asiaticum Jasminum mesnvi 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 Verbena peruviana Vicia sativa Vinca major Euonymous fortunei

#### 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.



Cast Iron plant Chincherinchee Clover, Crimson Columbine Coreopsis Crinum Lily Crocus Daffodil Davlilv False dragonhead Fiary Duster Fern, Asparagus Fern. Tree Fern, Boston Fern, Leatherleaf\* Fortnight Lily Foxglove, Common Freesia Fushcia, Arizona Gavfeather 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

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

~



Tickseed Texas Bluebonnet Tulip Twinspur Wonder Flower Yarrow Zephyr Lily

 $\boldsymbol{r}$ 

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

\* Applications of PENDULUM 0.66% PLUS FERTILIZER 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

#### Scientific Name

Ammophila breviligulata Festuca ovina Festuca ovina Pennisetum setaceum Cortaderia selloana Phalaris arundinacea Arundo spp. Phalaris arundinacea Deschampsia caespitosa

#### Scientific Name

Ageratum houstonianum Alvssum 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.

24/133

Kale, Ornamental Marigold, African Moss Rose Mum, Garden Pansy, Garden Periwinkle, Rose

6

Petunia Plumosa Cockscomb Portulaca Salvia Snapdragon Statice Sweet William Vinca or Periwinkle Zinnia

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.

\*After planting bedding plants and before PENDULUM 0.66% PLUS FERTILIZER is applied, area to be treated should be watered sufficiently to pack soil around roots.

PENDULUM 0.66% 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 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. <u>Do not treat plants grown for food or feed.</u> <u>Do not use treated plants for food or feed.</u>

<sup>1</sup> PENDULUM and Vantage are registered trademarks of BASF Corporation

- 2, 6 Acclaim Extra and Finale are registered trademarks of Aventis Environmental Sciences
- <sup>3</sup> Trimec is a trademark of PBI Gordon Corporation
- 4 Three-Way is a trademark of Lesco Inc.
- 5 Roundup PRO is a registered trademark of Monsanto Company

© 2002 BASF Corporation NVA 2002-04-123-0207

BASF Corporation P.O. Box 13258 Research Triangle Park, NC 27709



#### **Specialty Products**

#### PENDULUM® 0.66% PLUS FERTILIZER Preemergent Weed Control

#### 0.66% pendimethalin + 25-2-5 Fertilizer

# FOR USE ON TURFGRASSES AND ESTABLISHED ORNAMENTALS IN THE LANDSCAPE

ACTIVE INGREDIENT: pendimethalin, N-(1-ethylpropyl)-3,4-dimethyl-2, 6-dinitrober	nzenamine0.66%
INERT INGREDIENTS	<u>99.34%</u>
TOTAL	
EPA Reg. No. 241-	EPA Est. No.

#### **GUARANTEED ANALYSIS**

Total Nitrogen (N).	25.00%
25.00 % Urea Nitrogen*	
Available Phosphoric Acid (P <sub>2</sub> O <sub>5</sub> ).	2.00%
Potassium Sulfate ( $K_2SO_4$ ).	. 5.00%
Derived from: Urea, Diammonium Phosphate, and Sulfate of Potash.	

#### 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 800-832-HELP (4357).

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

ACCEPTED with COMMENTS in EPA Letter Dated

Under the Federal Insecticide, Fungicide, and Rodenticide Act as amended, for the pesticide registered under EPA Reg. No.

24 -42

SEP 1 2 2003 NVA

© 2002 BASF Corporation All rights reserved NVA 2002-04-123-0207

#### **BASF Corporation**

26 Davis Drive Research Triangle Park, NC 27709



Net Contents:

26/<sub>133</sub>

# TABLE OF CONTENTS

r

FIRST AID AND PRECAUTIONARY STATEMENTS 4	
ENVIRONMENTAL HAZARDS	
DIRECTIONS FOR USE	
STORAGE AND DISPOSAL	
GENERAL INFORMATION	
APPLICATION INSTRUCTIONS	
WEED SPECIES CONTROLLED	
BROADLEAF WEEDS CONTROLLED	
TURFGRASSES       14         APPLICATION RATES FOR TURF WEED CONTROL       14         COOL SEASON GRASSES       14         WARM SEASON GRASSES       14         TURFGRASS PRECAUTIONS       15         INDUSTRIAL ( unimproved )TURF       15         LANDSCAPE AND GROUNDS MAINTENANCE       15         WILDFLOWERS       15	0 0 1 2 3 3
ORNAMENTAL PRECAUTIONS 1	
ORNAMENTALS	4 6 8 9 1

27/133

	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	Take off contaminated clothing.
clothing	<ul> <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 of	container or label with you when calling a poison control center or doctor or
	t. You may also contact BASF Corporation for emergency medical treatment

## **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 mist.

# **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 any waterproof material (such as nitrile, butyl, neoprene, and/or barrier laminate).
- 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.

#### 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.

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 0.66% PLUS FERTILIZER 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.

# 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 any waterproof material (such as nitrile, butyl, neoprene, and/or barrier laminate).
- 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 POOR WEED CONTROL, CROP INJURY, OR RESIDUES.

# STORAGE AND DISPOSAL

**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:** 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 PENDULUM 0.66% PLUS FERTILIZER. The use of PENDULUM 0.66% PLUS FERTILIZER 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 BASF Corporation (BASF). All such risks shall be assumed by the user.

BASF 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.

BASF makes no other express or implied warranty, including other express or implied warranty of FITNESS or of MERCHANTABILITY.

## **GENERAL INFORMATION**

PENDULUM 0.66% 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 0.66% PLUS FERTILIZER can be used around established ornamentals in the landscape and in established wildflower plantings. PENDULUM 0.66% PLUS FERTILIZER may be used for hardwood and conifer regeneration on conservation reserve program land or similar areas.

PENDULUM 0.66% PLUS FERTILIZER is labeled for use on the following turfgrass species: Kentucky bluegrass, perennial ryegrass, fine fescue, tall fescue, bentgrass, <u>Poa annua</u> (except putting greens and tees), bermudagrass, St. Augustinegrass, bahiagrass, centipedegrass, zoysiagrass and blends of these grasses.

31/133

PENDULUM 0.66% 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 recommended rate using a properly calibrated spreader. The efficacy of PENDULUM 0.66% 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 0.66% 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 0.66% 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 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>™3</sup> Three-Way<sup>™4</sup>, 2-4,D, and other similar products.

Applied according to label directions, and under normal growing conditions, PENDULUM 0.66% PLUS FERTILIZER. 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 PENDULUM 0.66% 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 recommended.

Avoid application when winds may cause drift.

ç

# 227 lbs. treats 1 acre delivering 1.5 lb. ai/A and 0.73 lb. N/1,000 ft.<sup>2</sup>

....

#### **Recommended Rates:**

 $\sim$ 

			lbs. per acre		
Spreader	Ground Speed	Spreading Width	<u>152</u>	227	<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	Ι	K
Scotts R-8,R-8a	3 mph	11 ft.	J	L 1/2	Ν
<sup>1</sup> Lely	4.5 mph	30 ft.	4 1/4 III	5 1/2 III	6 1/2 Ш
$2_{Vicon}$	4.5 mph	30 ft.	21	25	29

<sup>1</sup>Models WTR, WRF, HR, and 1250 PTO-450 rpm <sup>2</sup>Vicon - All models PTO-540 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

PENDULUM 0.66% 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	Scientific Name	
Barnyardgrass	Echinochloa crus-galli	
Bluegrass, Annual	Poa annua	
Crabgrass	Digitaria spp.	
Crowfootgrass	Dactyloctenium aegyptium	
Foxtail, Giant	Setaria faberi	
Foxtail, Green	Setaria viridis	
Foxtail, Yellow	Setaria glauca	
Goosegrass	Eleusine indica	
Itchgrass	Rottboellia exaltata	
Johnsongrass (from seed)	Sorghum halepense	
Junglerice	Echinochloa colona	
Lovegrass (from seed)	Eragrostis spp.	
Panicum, Browntop	Panicum fasciculatum	
Panicum, Fall	Panicum dichotomiflorum	

Panicum, Texas Sandbur, Field Signalgrass Sprangletop, Mexican Sprangletop, Red Witchgrass Woolly Cupgrass

r

# **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 Shepherdspurse Smartweed, Pennsylvania Speedwell, Corn Spurge, Annual Spurge, Prostrate Woodsorrel, Yellow Velvetleaf (Buttonweed)

Panicum texanum Cenchrus incertus Brachiaria platyphylla Leptochloa uninervia Leptochloa filiformis Panicum capillare Eriochloa villosa

## 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. Euphorbia numistrata Oxalis stricta Abutilon theophrasti

# TURFGRASSES

34/133

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

Turfgrass Species	Weeds	Rates of PENDULUM 0.66% PLUS FERTILIZER	Comments
COOL SEASON GRASSES			
Bluegrass, Kentucky Fescue, fine Fescue, tall Ryegrass, perennial	crabgrass foxtail <i>Poa annua</i> barnyardgrass fall panicum oxalis prostrate spurge purslane knotweed evening primrose hop clover	227-303 lbs./acre as the initial application prior to weed germination in the spring.	Apply a repeat application of 152-227 lbs./acre after 5 - 8 weeks for extended control or where heavy weed infestations are expected.
	goosegrass	Residential <sup>2</sup> Turf Uses Only : 152-227 lbs./acre in the spring prior to weed germination. Golf Course and	Apply a repeat application of 152 lbs./acre after 5 – 8 weeks if the lower rates was used initially or for extended goosegrass control.
		<b>Commercial Turf</b> <b>Uses:</b> 152-455 Ibs./acre in the spring prior to weed germination.	
	cudweed <i>Poa annua</i> chickweed lawn burweed henbit corn speedwell	227-303 lbs./acre	Apply in late summer or early fall prior to weed germination.

after 5 – 8 weeks.

227-303 lbs/acre

cudweed *Poa annua* chickweed lawn burweed henbit corn speedwell Apply in late summer or early fall prior to weed germination.

application.

<sup>1</sup> DO NOT exceed a maximum rate of 303 pounds <u>per acre per application</u> for use on residential turfgrass.

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

<sup>3</sup> DO NOT exceed a maximum rate of 303 pounds <u>per acre per application</u> for use on sod farms.

<sup>4</sup> 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 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 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 0.66% 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 grasses 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 0.66% 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 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 <u>shallow</u> 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 0.66% PLUS FERTILIZER. PENDULUM 0.66% PLUS FERTILIZER 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 PENDULUM 0.66% PLUS FERTILIZER treatment may be followed by any registered herbicide to control weeds not listed on the PENDULUM 0.66% PLUS FERTILIZER label.

#### **ORNAMENTAL BULBS**

PENDULUM 0.66% 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 0.66% 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 0.66% PLUS FERTILIZER 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.). PENDULUM 0.66% PLUS FERTILIZER may be applied to established perennial wildflowers before emergence of weeds or wildflowers. For wildflowers being established from seed, apply PENDULUM 0.66% 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 0.66% 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 0.66% 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 0.66% 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 0.66% PLUS FERTILIZER is safe around and over the top of the established plants listed below.

#### TREES

C

#### 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 Cottonwood Crabapple Crepe Myrtle Cryptomeria, Japanese Cedar Cypress, Bald Cypress, Leyland Dogwood, Flowering Dogwood, Korean Dogwood, Silky Dogwood, Shrub Elm Fir. Balsam

# 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 serrulata Prunus tomentosa Populus deltoides Malus spp. Lagerstroemia indica Cryptomeria japonica Taxodium distichum Cupressocyparis leylandii Cornus florida Cornus kousa Cornus amomum Cornus spp. Ulmus japonica Abies balsamae

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, 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

c

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 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

39

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 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

Pinus strobus Prunus cerasifera Populus nigra Juniperus virginiana Thuja plicata Eucalyptus sideroxylon 'Rosea' Metaseauoia 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

# 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, 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 Luvken Laurel, Schipka Laurustinus Lavender, English Leucothoe 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

r

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 svriacus 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 Nandina domestica Nerium oleander Mahonia aquifolium Osmanthus fragrans Chamaerops humilis Chamaerops spp. Leptodactylon californicum Photinia X Fraseri

41/133

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

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

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 Vervain Vetch. Crown Vinca or Greater Periwinkle Wintercreeper

#### 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

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 Verbena peruviana Vicia sativa Vinca major Euonymous fortunei

# 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** 

Clover, Crimson Columbine Coreopsis Crinum Lily Crocus Daffodil Daylily False dragonhead Fiary 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 **Texas Bluebonnet** Tulip

ç

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 Lupinus texenis Tulipa spp.

Twinspur Wonder Flower Yarrow Zephyr Lily

¢

Diasciascia barbaerae Ornithogalum thyrsoides Achillea millefolium Zephyranthes spp.

\* Applications of PENDULUM 0.66% PLUS FERTILIZER 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

### 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. 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.

22

Pansy, Garden Periwinkle, Rose

Petunia Plumosa Cockscomb Portulaca Salvia Snapdragon Statice Sweet William Vinca or Periwinkle Zinnia

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.

\*After planting bedding plants and before PENDULUM 0.66% PLUS FERTILIZER is applied, area to be treated should be watered sufficiently to pack soil around roots.

PENDULUM 0.66% 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 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>1</sup> PENDULUM and Vantage are registered trademarks of BASF Corporation
- 2, 6 Acclaim Extra and Finale are registered trademarks of Aventis Environmental Sciences <sup>3</sup> Trimec is a trademark of PBI Gordon Corporation
- 4 Three-Way is a trademark of Lesco Inc.
- 5 Roundup PRO is a registered trademark of Monsanto Company

© 2002 BASF Corporation NVA 2002-04-123-0207

**BASF** Corporation P.O. Box 13258 Research Triangle Park, NC 27709

**Specialty Products** 

# PENDULUM® 0.66% PLUS FERTILIZER Preemergent Weed Control

### 0.66% pendimethalin + 20-2-5 Fertilizer

# FOR USE ON TURFGRASSES AND ESTABLISHED ORNAMENTALS IN THE LANDSCAPE

ACTIVE INGREDIENT: pendimethalin, N-(1-ethylpropyl)-3,4-dimethyl-2, 6-dinitrobenzenamine 0.66%	
INERT INGREDIENTS	
TOTAL	)
EPA Reg. No. 241- EPA Est. No.	

#### **GUARANTEED ANALYSIS**

Total Nitrogen (N)	
20.00% Urea Nitrogen	
Available Phosphoric Acid (P <sub>2</sub> O <sub>5</sub> )	
Potassium sulfate (K <sub>2</sub> SO <sub>4</sub> ) 5.00%	
Derived from: Urea, Diammonium Phosphate and Sulfate of Potash.	

#### 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 800-832-HELP (4357).

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

ACCEPTED with COMMENTS in EPA Letter Dated

Under the Federal Insecticide, Fungicide, and Rodenticide Act as amended, for the pesticide registered under EPA Reg. No.

SEP 1 2 2003<sup>©</sup> 2002 BASF Corporation All rights reserved NVA 2002-04-123-0207

**BASF Corporation** 26 Davis Drive Research Triangle Park, NC 27709



Net Contents:

41/33

# TABLE OF CONTENTS

r

FIRST AID AND PRECAUTIONARY STATEMENTS	4
ENVIRONMENTAL HAZARDS	4
DIRECTIONS FOR USE	4
STORAGE AND DISPOSAL	6
GENERAL INFORMATION	7
APPLICATION INSTRUCTIONS	7
WEED SPECIES CONTROLLED GRASSES CONTROLLED BROADLEAF WEEDS CONTROLLED	9
TURFGRASSES APPLICATION RATES FOR TURF WEED CONTROL COOL SEASON GRASSES WARM SEASON GRASSES TURFGRASS PRECAUTIONS INDUSTRIAL ( unimproved )TURF	10 10 11 12
LANDSCAPE AND GROUNDS MAINTENANCE ORNAMENTAL BULBS WILDFLOWERS ORNAMENTAL PRECAUTIONS	13 13
ORNAMENTALS TREES SHRUBS GROUND COVERS PERENNIALS ORNAMENTAL GRASSES BEDDING PLANTS	14 16 18 19 21

	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
	container or label with you when calling a poison control center or doctor or at. You may also contact BASF Corporation for emergency medical treatment

information: 1-800-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 mist.

# **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 any waterproof material (such as nitrile, butyl, neoprene, and/or barrier laminate).
- 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.

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 0.66% PLUS FERTILIZER 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.

# 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 any waterproof material (such as nitrile, butyl, neoprene, and/or barrier laminate).
- 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 POOR WEED CONTROL, CROP INJURY, OR RESIDUES.

# STORAGE AND DISPOSAL

**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:** 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 PENDULUM 0.66% PLUS FERTILIZER. The use of PENDULUM 0.66% PLUS FERTILIZER 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 BASF Corporation (BASF). All such risks shall be assumed by the user.

BASF 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.

BASF makes no other express or implied warranty, including other express or implied warranty of FITNESS or of MERCHANTABILITY.

### **GENERAL INFORMATION**

PENDULUM 0.66% 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 0.66% PLUS FERTILIZER can be used around established ornamentals in the landscape and in established wildflower plantings. PENDULUM 0.66% PLUS FERTILIZER may be used for hardwood and conifer regeneration on conservation reserve program land or similar areas.

PENDULUM 0.66% PLUS FERTILIZER is labeled for use on the following turfgrass species: Kentucky bluegrass, perennial ryegrass, fine fescue, tall fescue, bentgrass, <u>Poa annua</u> (except putting greens and tees), bermudagrass, St. Augustinegrass, bahiagrass, centipedegrass, zoysiagrass and blends of these grasses.

PENDULUM 0.66% 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 recommended rate using a properly calibrated spreader. The efficacy of PENDULUM 0.66% 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 0.66% 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 0.66% 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 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, PENDULUM 0.66% PLUS FERTILIZER. 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 PENDULUM 0.66% 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 recommended.

Avoid application when winds may cause drift.

6

# 227 lbs. treats 1 acre delivering 1.5 lb. ai/A and 1.04 lb N/1000 ft.<sup>2</sup>

133

# **Recommended Rates:**

 $\hat{}$ 

			lbs. per acre		
Spreader	Ground Speed	Spreading Width	<u>152</u>	227	<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	Ν
1 <sub>Lely</sub>	4.5 mph	30 ft.	4 1/4 III	5 1/2 III	6 1/2 III
2 <sub>Vicon</sub>	4.5 mph	30 ft.	21	25	29

<sup>1</sup>Models WTR, WRF, HR, and 1250 PTO-450 rpm <sup>2</sup>Vicon - All models PTO-540 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

PENDULUM 0.66% 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	Scientific Name
Barnyardgrass	Echinochloa crus-galli
Bluegrass, Annual	Poa annua
Crabgrass	Digitaria spp.
Crowfootgrass	Dactyloctenium aegyptium
Foxtail, Giant	Setaria faberi
Foxtail, Green	Setaria viridis
Foxtail, Yellow	Setaria glauca
Goosegrass	Eleusine indica
Itchgrass	Rottboellia exaltata
Johnsongrass (from seed)	Sorghum halepense
Junglerice	Echinochloa colona
Lovegrass (from seed)	Eragrostis spp.
Panicum, Browntop	Panicum fasciculatum
Panicum, Fall	Panicum dichotomiflorum

Panicum, Texas Sandbur, Field Signalgrass Sprangletop, Mexican Sprangletop, Red Witchgrass Woolly Cupgrass

r

# **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 Shepherdspurse Smartweed, Pennsylvania Speedwell, Corn Spurge, Annual Spurge, Prostrate Woodsorrel, Yellow Velvetleaf (Buttonweed)

Panicum texanum Cenchrus incertus Brachiaria platyphylla Leptochloa uninervia Leptochloa filiformis Panicum capillare Eriochloa villosa

# 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. Euphorbia numistrata Oxalis stricta Abutilon theophrasti

# TURFGRASSES

2

55/33

Turfgrass Species	Weeds	Rates of PENDULUM 0.66% PLUS FERTILIZER	Comments
COOL SEASON GRASSES			
Bluegrass, Kentucky Fescue, fine Fescue, tall Ryegrass, perennial	crabgrass foxtail <i>Poa annua</i> barnyardgrass fall panicum oxalis prostrate spurge purslane knotweed evening primrose hop clover	227-303 lbs./acre as the initial application prior to weed germination in the spring.	Apply a repeat application of 152-227 lbs./acre after 5 - 8 weeks for extended control or where heavy weed infestations are expected.
	goosegrass	Residential <sup>2</sup> Turf Uses Only : 152-227 lbs./acre in the spring prior to weed germination.	Apply a repeat application of 152 lbs./acre after 5 – 8 weeks if the lower rates was used initially or for extended goosegrass
		Golf Course and Commercial Turf Uses: 152-455 lbs./acre in the spring prior to weed germination.	control.
	cudweed <i>Poa annua</i> chickweed lawn burweed henbit corn speedwell	227-303 lbs./acre	Apply in late summer or early fall prior to weed germination.

# APPLICATION RATES FOR TURF WEED CONTROL<sup>1</sup>

56/33

Bentgrass or established <i>Poa annua</i> <sup>3</sup> (1/2 inch height or taller)	crabgrass foxtail <i>Poa annua</i> barnyardgrass fall panicum oxalis prostrate spurge purslane knotweed evening primrose hop clover	227 lbs./acre in the spring prior to weed germination.	Apply a repeat application of 152- 227 lbs./acre after 5 - 8 weeks where heavy weed infestations are expected.
	goosegrass	227 lbs./acre in the spring prior to weed germination. Apply a repeat application of 227 lbs./acre after5 6- 8 weeks.	
	cudweed Poa annua chickweed lawn burweed henbit corn speedwell	227-303 lbs./acre	Apply in late summer or early fall prior to weed germination.
WARM SEASON GRASSES			
Bahiagrass Bermudagrass Buffalograss Centipedegrass Fescue, tall St. Augustinegrass Zoysiagrass	Crabgrass foxtail, <i>Poa annua</i> Barnyardgrass fall panicum oxalis prostrate spurge purslane knotweed evening primrose	Residential <sup>2</sup> Turf Uses Only: 227-303 lbs./acre in the spring prior to weed germination. Golf Course and Commerical Turf Uses: 227-455 lbs./acre in the spring	Apply a repeat application of 152- 227 lb./acre after 5-8 weeks if necessary.
	hop clover goosegrass	prior to weed germination. 227 lbs./acre prior to weed germination in the spring. Apply a repeat	An additional application of 227 lbs./acre may be applied for extended goosegrass

ŕ.

57/33
-------

cudweed	227-303 lbs./acre	Apply in late
Poa annua		summer or early
chickweed		fall prior to
lawn burweed		weed germination.
henbit		_
corn speedwell		

application.

after 5 – 8 weeks.

<sup>1</sup> DO NOT exceed a maximum rate of 303 pounds <u>per acre per application</u> for use on residential turfgrass.

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

<sup>3</sup> DO NOT exceed a maximum rate of 303 pounds <u>per acre per application</u> for use on sod farms.

<sup>4</sup> 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 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 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 0.66% 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 grasses 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 0.66% 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 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 <u>shallow</u> 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 0.66% PLUS FERTILIZER. PENDULUM 0.66% PLUS FERTILIZER 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 PENDULUM 0.66% PLUS FERTILIZER treatment may be followed by any registered herbicide to control weeds not listed on the PENDULUM 0.66% PLUS FERTILIZER label.

# **ORNAMENTAL BULBS**

PENDULUM 0.66% 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 0.66% 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 0.66% PLUS FERTILIZER 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.). PENDULUM 0.66% PLUS FERTILIZER may be applied to established perennial wildflowers before emergence of weeds or wildflowers. For wildflowers being established from seed, apply PENDULUM 0.66% 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 0.66% 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 0.66% 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 0.66% 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 0.66% PLUS FERTILIZER is safe around and over the top of the established plants listed below.

#### TREES

 $\sim$ 

#### 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 Cottonwood Crabapple Crepe Myrtle Cryptomeria, Japanese Cedar Cypress, Bald Cypress, Leyland Dogwood, Flowering Dogwood, Korean Dogwood, Silky Dogwood, Shrub Elm Fir, Balsam

# Scientific Name

Alnus glutinosa Malus spp. Thuja occidentalis Arbutus spp. Fraxinus pennsvlvanica 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 Taxodium distichum Cupressocyparis leylandii Cornus florida Cornus kousa Cornus amomum Cornus spp. Ulmus japonica Abies balsamae

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, 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

~

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 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

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 Trachycarpus Tulip tree Walnut, Black Willow, Weeping Yellowwood

#### SHRUBS

r

#### 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

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

### 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, 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 Mahonia Mock Orange Myrtle, Compact Myrtle, Wax Nandina Oleander Oregon Grape Osmanthus Palm, European Fan Palm, Mediterranean Fan Phlox, Prickly Photinia, Fraser

,-

Deutzia gracilis Cornus sericea Elaeagnus ebbingei Escallonia fradesii Euonymus fortunei Euonymus japonica Euonymus alata Pvracantha 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 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

63/133

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

r

# **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 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 Alovsia 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

64/133

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 Vervain Vetch, Crown Vinca or Greater Periwinkle Wintercreeper

### 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

Pelargonium peltatum Trachelospermum asiaticum Jasminum mesnvi 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 Verbena peruviana Vicia sativa Vinca major Euonymous fortunei

# 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

65/133

Clover, Crimson Columbine Coreopsis Crinum Lily Crocus Daffodil Daylily False dragonhead Fiary Duster Fern, Asparagus Fern. Tree Fern, Boston Fern, Leatherleaf\* Fortnight Lily Foxglove, Common Freesia Fushcia, Arizona Gavfeather 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 **Texas Bluebonnet** Tulip

r

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 Lupinus texenis Tulipa spp.

66/133

Twinspur Wonder Flower Yarrow Zephyr Lily

~

Diasciascia barbaerae Ornithogalum thyrsoides Achillea millefolium Zephyranthes spp.

\* Applications of PENDULUM 0.66% PLUS FERTILIZER 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\***

# <u>Common Name</u>

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

#### 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. 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.

Pansy, Garden Periwinkle, Rose

r

Petunia Plumosa Cockscomb Portulaca Salvia Snapdragon Statice Sweet William Vinca or Periwinkle Zinnia 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.

\*After planting bedding plants and before PENDULUM 0.66% PLUS FERTILIZER is applied, area to be treated should be watered sufficiently to pack soil around roots.

PENDULUM 0.66% 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 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>1</sup> PENDULUM and Vantage are registered trademarks of BASF Corporation
- 2, 6 Acclaim Extra and Finale are registered trademarks of Aventis Environmental Sciences
- <sup>3</sup> Trimec is a trademark of PBI Gordon Corporation
- 4 Three-Way is a trademark of Lesco Inc.
- 5 Roundup PRO is a registered trademark of Monsanto Company

© 2002 BASF Corporation NVA 202-04-123-0207

BASF Corporation P.O. Box 13258 Research Triangle Park, NC 27709



**Specialty Products** 

# PENDULUM® 0.66% PLUS FERTILIZER Preemergent Weed Control

# 0.66% pendimethalin + 14-0-14 Fertilizer

# FOR USE ON TURFGRASSES AND ESTABLISHED ORNAMENTALS IN THE LANDSCAPE

# 

EPA Reg. No. 241-

EPA Est. No.

# **GUARANTEED ANALYSIS**

Total Nitrogen (N).	14.00%
14.00% Urea Nitrogen	
Potassium sulfate (K <sub>2</sub> SO <sub>4</sub> )	14.00%
Derived from: Urea and Sulfate of Potash.	

# 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.)

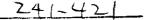
Have the product container or label with you when calling a poison control center or doctor, or for going for treatment.

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

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

ACCEPTED with COMMENTS in EPA Letter Dated

Under the Federal Insecticide, Fungicide, and Rodenticide Act as amended, for the pesticide registered under EPA Reg. No.



© 2002 BASF Corporation All rights reserved SEP 12 2003 NVA 2002-04-123-0207

**BASF Corporation** 26 Davis Drive Research Triangle Park, NC 27709



Net Contents:

691, 3

# TABLE OF CONTENTS

ç

FIRST AID AND PRECAUTIONARY STATEMENTS	. 4
ENVIRONMENTAL HAZARDS	. 4
DIRECTIONS FOR USE	. 4
STORAGE AND DISPOSAL	. 6
GENERAL INFORMATION	. 7
APPLICATION INSTRUCTIONS	.7
WEED SPECIES CONTROLLED	
GRASSES CONTROLLED BROADLEAF WEEDS CONTROLLED	
TURFGRASSES	
APPLICATION RATES FOR TURF WEED CONTROL COOL SEASON GRASSES	
WARM SEASON GRASSES	
TURFGRASS PRECAUTIONS	
INDUSTRIAL ( unimproved )TURF	
LANDSCAPE AND GROUNDS MAINTENANCE	. 13
ORNAMENTAL BULBS	
WILDFLOWERS	
ORNAMENTAL PRECAUTIONS	. 13
ORNAMENTALS	. 14
TREES	. 14
SHRUBS	
GROUND COVERS	
PERENNIALS	
ORNAMENTAL GRASSES	
BEDDING PLANTS	. 21

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
	container or label with you when calling a poison control center or doctor or it. You may also contact BASF Corporation for emergency medical treatment

information: 1-800-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 mist.

# **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 any waterproof material (such as nitrile, butyl, neoprene, and/or barrier laminate).
- 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.

# 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.

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 0.66% PLUS FERTILIZER 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.

# 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 any waterproof material (such as nitrile, butyl, neoprene, and/or barrier laminate).
- 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 POOR WEED CONTROL, CROP INJURY, OR RESIDUES.

# STORAGE AND DISPOSAL

**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.

# 73| ||33

#### CONTAINER

,

**DISPOSAL:** 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 PENDULUM 0.66% PLUS FERTILIZER. The use of PENDULUM 0.66% PLUS FERTILIZER 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 BASF Corporation (BASF). All such risks shall be assumed by the user.

BASF 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.

BASF makes no other express or implied warranty, including other express or implied warranty of FITNESS or of MERCHANTABILITY.

#### **GENERAL INFORMATION**

PENDULUM 0.66% 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 0.66% PLUS FERTILIZER can be used around established ornamentals in the landscape and in established wildflower plantings. PENDULUM 0.66% PLUS FERTILIZER may be used for hardwood and conifer regeneration on conservation reserve program land or similar areas.

PENDULUM 0.66% PLUS FERTILIZER is labeled for use on the following turfgrass species: Kentucky bluegrass, perennial ryegrass, fine fescue, tall fescue, bentgrass, <u>Poa annua</u> (except putting greens and tees), bermudagrass, St. Augustinegrass, bahiagrass, centipedegrass, zoysiagrass and blends of these grasses.



PENDULUM 0.66% 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 recommended rate using a properly calibrated spreader. The efficacy of PENDULUM 0.66% 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 0.66% 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 0.66% 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 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, PENDULUM 0.66% PLUS FERTILIZER. 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 PENDULUM 0.66% 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 recommended.

Avoid application when winds may cause drift.

#### 227 lbs. treats 1 acre delivering 1.5 lb. ai/A and 0.73 lb. N/1,000 ft.<sup>2</sup>

#### **Recommended Rates:**

ſ

			lbs. per acre		
Spreader	Ground Speed	Spreading Width	<u>152</u>	227	<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	Ι	K
Scotts R-8,R-8a	3 mph	11 ft.	J	L 1/2	N
1 <sub>Lely</sub>	4.5 mph	30 ft.	4 1/4 III	5 1/2 Ш	6 1/2 III
2 <sub>Vicon</sub>	4.5 mph	30 ft.	21	25	29

<sup>1</sup>Models WTR, WRF, HR, and 1250 PTO-450 rpm <sup>2</sup>Vicon - All models PTO-540 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

PENDULUM 0.66% 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	Scientific Name	
Barnyardgrass	Echinochloa crus-galli	
Bluegrass, Annual	Poa annua	
Crabgrass	Digitaria spp.	
Crowfootgrass	Dactyloctenium aegyptium	
Foxtail, Giant	Setaria faberi	
Foxtail, Green	Setaria viridis	
Foxtail, Yellow	Setaria glauca	
Goosegrass	Eleusine indica	
Itchgrass	Rottboellia exaltata	
Johnsongrass (from seed)	Sorghum halepense	
Junglerice	Echinochloa colona	
Lovegrass (from seed)	Eragrostis spp.	
Panicum, Browntop	Panicum fasciculatum	
Panicum, Fall	Panicum dichotomiflorum	

Panicum, Texas Sandbur, Field Signalgrass Sprangletop, Mexican Sprangletop, Red Witchgrass Woolly Cupgrass

~

#### **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 Shepherdspurse Smartweed, Pennsylvania Speedwell, Corn Spurge, Annual Spurge, Prostrate Woodsorrel, Yellow Velvetleaf (Buttonweed)

Panicum texanum Cenchrus incertus Brachiaria platyphylla Leptochloa uninervia Leptochloa filiformis Panicum capillare Eriochloa villosa

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

### TURFGRASSES

···· ··· ··· ···

77/<sub>133</sub>

## APPLICATION RATES FOR TURF WEED CONTROL<sup>1</sup>

Turfgrass Species	Weeds	Rates of PENDULUM 0.66% PLUS FERTILIZER	Comments
COOL SEASON GRASSES			
Bluegrass, Kentucky Fescue, fine Fescue, tall Ryegrass, perennial	crabgrass foxtail <i>Poa annua</i> barnyardgrass fall panicum oxalis prostrate spurge purslane knotweed evening primrose hop clover	227-303 lbs./acre as the initial application prior to weed germination in the spring.	Apply a repeat application of 152-227 lbs./acre after 5 - 8 weeks for extended control or where heavy weed infestations are expected.
	goosegrass	Residential <sup>2</sup> Turf Uses Only : 152-227 lbs./acre in the spring prior to weed germination.	Apply a repeat application of 152 lbs./acre after 5 – 8 weeks if the lower rates was used initially or for extended goosegrass
		Golf Course and Commercial Turf Uses: 152-455 lbs./acre in the spring prior to weed germination.	control.
	cudweed <i>Poa annua</i> chickweed lawn burweed henbit corn speedwell	227-303 lbs./acre	Apply in late summer or early fall prior to weed germination.

78| |133

Bentgrass or established <i>Poa annua</i> <sup>3</sup> (1/2 inch height or taller)	crabgrass foxtail <i>Poa annua</i> barnyardgrass fall panicum oxalis prostrate spurge purslane knotweed evening primrose hop clover	227 lbs./acre in the spring prior to weed germination.	Apply a repeat application of 152- 227 lbs./acre after 5 - 8 weeks where heavy weed infestations are expected.
	goosegrass	227 lbs./acre in the spring prior to weed germination. Apply a repeat application of 227 lbs./acre after5 6- 8 weeks.	
	cudweed Poa annua chickweed lawn burweed henbit corn speedwell	227-303 lbs./acre	Apply in late summer or early fall prior to weed germination.
WARM SEASON GRASSES			
Bahiagrass Bermudagrass Buffalograss Centipedegrass Fescue, tall St. Augustinegrass	Crabgrass foxtail, <i>Poa annua</i> Barnyardgrass fall panicum oxalis	Residential <sup>2</sup> Turf Uses Only: 227-303 lbs./acre in the spring prior to weed germination.	Apply a repeat application of 152- 227 lb./acre after 5-8 weeks if necessary.
Zoysiagrass	prostrate spurge purslane knotweed evening primrose hop clover	Golf Course and Commerical Turf Uses: 227-455 lbs./acre in the spring prior to weed germination.	
	goosegrass	227 lbs./acre prior to weed germination in the spring. Apply a repeat application of 227-303 lbs./acre	An additional application of 227 lbs./acre may be applied for extended goosegrass control 8 weeks after the second

ĉ



after 5 – 8 weeks.

application.

cudweed 227-303 lbs./acre *Poa annua* chickweed lawn burweed henbit corn speedwell Apply in late summer or early fall prior to weed germination.

<sup>1</sup> **DO NOT** exceed a maximum rate of 303 pounds <u>per acre per application</u> for use on residential turfgrass.

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

<sup>3</sup> DO NOT exceed a maximum rate of 303 pounds <u>per acre per application</u> for use on sod farms.

<sup>4</sup> 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 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 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 0.66% 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 grasses 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.

# 80| |133

#### LANDSCAPE AND GROUNDS MAINTENANCE

PENDULUM 0.66% 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 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 <u>shallow</u> 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 0.66% PLUS FERTILIZER. PENDULUM 0.66% PLUS FERTILIZER 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 PENDULUM 0.66% PLUS FERTILIZER treatment may be followed by any registered herbicide to control weeds not listed on the PENDULUM 0.66% PLUS FERTILIZER label.

#### **ORNAMENTAL BULBS**

PENDULUM 0.66% 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 0.66% 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 0.66% PLUS FERTILIZER 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.). PENDULUM 0.66% PLUS FERTILIZER may be applied to established perennial wildflowers before emergence of weeds or wildflowers. For wildflowers being established from seed, apply PENDULUM 0.66% 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 0.66% PLUS FERTILIZER may vary greatly. Careful testing on desirable species is recommended to determine if area-wide applications can be made.

# 8|| ||33

#### **ORNAMENTAL PRECAUTIONS**

Apply PENDULUM 0.66% 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 0.66% 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 0.66% PLUS FERTILIZER 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 Cottonwood Crabapple Crepe Myrtle Cryptomeria, Japanese Cedar Cypress, Bald Cypress, Leyland Dogwood, Flowering Dogwood, Korean Dogwood, Silky Dogwood, Shrub Elm Fir. Balsam

#### 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 serrulata Prunus tomentosa Populus deltoides Malus spp. Lagerstroemia indica Cryptomeria japonica Taxodium distichum Cupressocyparis leylandii Cornus florida Cornus kousa Cornus amomum Cornus spp. Ulmus japonica Abies balsamae

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, 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

7

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 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



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 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

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

#### 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, 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 Mahonia Mock Orange Myrtle, Compact Myrtle, Wax Nandina Oleander **Oregon Grape** Osmanthus Palm, European Fan Palm, Mediterranean Fan Phlox, Prickly Photinia, Fraser

r

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 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, 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 Xylosma 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 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

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 Vervain Vetch, Crown Vinca or Greater Periwinkle Wintercreeper

#### 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

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 Verbena peruviana Vicia sativa Vinca major Euonymous fortunei

#### 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

Clover, Crimson Columbine Coreopsis Crinum Lily Crocus Daffodil Daylily False dragonhead **Fiary 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 **Texas Bluebonnet** Tulip

ç

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 Lupinus texenis Tulipa spp.

Twinspur Wonder Flower Yarrow Zephyr Lily Diasciascia barbaerae Ornithogalum thyrsoides Achillea millefolium Zephyranthes spp.

 \* Applications of PENDULUM 0.66% PLUS FERTILIZER 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

ł

#### 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. 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.

Pansy, Garden Periwinkle, Rose

 $\hat{\mathbf{C}}$ 

Petunia Plumosa Cockscomb Portulaca Salvia Snapdragon Statice Sweet William Vinca or Periwinkle Zinnia

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.

\*After planting bedding plants and before PENDULUM 0.66% PLUS FERTILIZER is applied, area to be treated should be watered sufficiently to pack soil around roots.

PENDULUM 0.66% 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 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>1</sup> PENDULUM and Vantage are registered trademarks of BASF Corporation

2, 6 Acclaim Extra and Finale are registered trademarks of Aventis Environmental Sciences <sup>3</sup> Trimec is a trademark of PBI Gordon Corporation

4 Three-Way is a trademark of Lesco Inc.

5 Roundup PRO is a registered trademark of Monsanto Company

© 2002 BASF Corporation NVA 2002-04-123-0207

**BASF** Corporation P.O. Box 13258 Research Triangle Park, NC 27709



**Specialty Products** 

# 90/33

#### PENDULUM® 0.66% PLUS FERTILIZER Preemergent Weed Control

#### 0.66% pendimethalin + 14-0-14 SCU Fertilizer

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

ACTIVE INGREDIENT: pendimethalin, N-(1-ethylpropyl)-3,4-dimethyl-2, 6-dinitrobenzena	amine 0.66%
INERT INGREDIENTS.	<u>99.34%</u>
TOTAL	100.00%
EPA Reg. No. 241-	EPA Est. No.

#### **GUARANTEED ANALYSIS**

Total Nitrogen (N).	14.00%
14.00 % Urea Nitrogen*	
Potassium sulfate (K <sub>2</sub> SO <sub>4</sub> )	14.00%
Derived from: Sulfur Coated Urea, Urea, and Sulfate of Potash.	
*3.5% Slowly available Nitrogen from Sulfur 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 for going for treatment.

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

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

ACCEPTED with COMMENTS in EPA Letter Dated

Under the Federal Insecticide, Fungicide, and Rodenticide Act as amended, for the pesticide registered under EPA Reg. No.

42

SEP 1 2 2003

© 2002 BASF Corporation All rights reserved NVA 2002-04-123-0207

BASF Corporation 26 Davis Drive Research Triangle Park, NC 27709



**Net Contents:** 

#### TABLE OF CONTENTS

r

FIRST AID AND PRECAUTIONARY STATEMENTS.	4
ENVIRONMENTAL HAZARDS	4
DIRECTIONS FOR USE	4
STORAGE AND DISPOSAL	6
GENERAL INFORMATION	7
APPLICATION INSTRUCTIONS	7
WEED SPECIES CONTROLLED	
GRASSES CONTROLLED BROADLEAF WEEDS CONTROLLED	
TURFGRASSES	10
APPLICATION RATES FOR TURF WEED CONTROL	
COOL SEASON GRASSES	
WARM SEASON GRASSES	
TURFGRASS PRECAUTIONS	
INDUSTRIAL ( unimproved )TURF	
LANDSCAPE AND GROUNDS MAINTENANCE	
ORNAMENTAL BULBS	
WILDFLOWERS	13
ORNAMENTAL PRECAUTIONS	

ORNAMENTALS	
TREES	
SHRUBS	
GROUND COVERS	
PERENNIALS	
ORNAMENTAL GRASSES	
BEDDING PLANTS	

	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
	container or label with you when calling a poison control center or doctor or at. You may also contact BASF Corporation for emergency medical treatment D-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 mist.

#### **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 any waterproof material (such as nitrile, butyl, neoprene, and/or barrier laminate).
- 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.

93,

#### 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.

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 0.66% PLUS FERTILIZER 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.

#### 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 any waterproof material (such as nitrile, butyl, neoprene, and/or barrier laminate).
- 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 POOR WEED CONTROL, CROP INJURY, OR RESIDUES.

#### STORAGE AND DISPOSAL

**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.

# 95| |133

#### CONTAINER

**DISPOSAL:** 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 PENDULUM 0.66% PLUS FERTILIZER. The use of PENDULUM 0.66% PLUS FERTILIZER 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 BASF Corporation (BASF). All such risks shall be assumed by the user.

BASF 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.

BASF makes no other express or implied warranty, including other express or implied warranty of FITNESS or of MERCHANTABILITY.

#### GENERAL INFORMATION

PENDULUM 0.66% 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 0.66% PLUS FERTILIZER can be used around established ornamentals in the landscape and in established wildflower plantings. PENDULUM 0.66% PLUS FERTILIZER may be used for hardwood and conifer regeneration on conservation reserve program land or similar areas.

PENDULUM 0.66% PLUS FERTILIZER is labeled for use on the following turfgrass species: Kentucky bluegrass, perennial ryegrass, fine fescue, tall fescue, bentgrass, <u>Poa annua</u> (except putting greens and tees), bermudagrass, St. Augustinegrass, bahiagrass, centipedegrass, zoysiagrass and blends of these grasses.

PENDULUM 0.66% 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 recommended rate using a properly calibrated spreader. The efficacy of PENDULUM 0.66% 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 0.66% 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 0.66% 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 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, PENDULUM 0.66% PLUS FERTILIZER. 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 PENDULUM 0.66% 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 recommended.

Avoid application when winds may cause drift.

#### 227 lbs. treats 1 acre delivering 1.5 lb. ai/A and 0.73 lb. N/1,000 ft.2

#### **Recommended Rates:**

r

			lbs. per acre		
Spreader Spreader	Ground Speed	Spreading Width	<u>152</u>	227	<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	Ν
<sup>1</sup> Lely	4.5 mph	30 ft.	4 1/4 III	5 1/2 III	6 1/2 III
2 <sub>Vicon</sub>	4.5 mph	<b>30</b> ft.	21	25	29

<sup>1</sup>Models WTR, WRF, HR, and 1250 PTO-450 rpm <sup>2</sup>Vicon - All models PTO-540 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

PENDULUM 0.66% 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**

<u>Common Name</u>	Scientific Name	
Barnyardgrass	Echinochloa crus-galli	
Bluegrass, Annual	Poa annua	
Crabgrass	Digitaria spp.	
Crowfootgrass	Dactyloctenium aegyptium	
Foxtail, Giant	Setaria faberi	
Foxtail, Green	Setaria viridis	
Foxtail, Yellow	Setaria glauca	
Goosegrass	Eleusine indica	
Itchgrass	Rottboellia exaltata	
Johnsongrass (from seed)	Sorghum halepense	
Junglerice	Echinochloa colona	
Lovegrass (from seed)	Eragrostis spp.	
Panicum, Browntop	Panicum fasciculatum	
Panicum, Fall	Panicum dichotomiflorum	

98/133

Panicum, Texas Sandbur, Field Signalgrass Sprangletop, Mexican Sprangletop, Red Witchgrass Woolly Cupgrass

r

#### **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 Shepherdspurse Smartweed, Pennsylvania Speedwell, Corn Spurge, Annual Spurge, Prostrate Woodsorrel, Yellow Velvetleaf (Buttonweed)

Panicum texanum Cenchrus incertus Brachiaria platyphylla Leptochloa uninervia Leptochloa filiformis Panicum capillare Eriochloa villosa

#### 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. Euphorbia numistrata Oxalis stricta Abutilon theophrasti

1

9**9**/ //33

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

Turfgrass Species	Weeds	Rates of PENDULUM 0.66% PLUS FERTILIZER	Comments
COOL SEASON GRASSES			
Bluegrass, Kentucky Fescue, fine Fescue, tall Ryegrass, perennial	crabgrass foxtail <i>Poa annua</i> barnyardgrass fall panicum oxalis prostrate spurge purslane knotweed evening primrose hop clover	227-303 lbs./acre as the initial application prior to weed germination in the spring.	Apply a repeat application of 152-227 lbs./acre after 5 - 8 weeks for extended control or where heavy weed infestations are expected.
	goosegrass	Residential <sup>2</sup> Turf Uses Only : 152-227 lbs./acre in the spring prior to weed germination.	Apply a repeat application of 152 lbs./acre after 5 – 8 weeks if the lower rates was used initially or for extended goosegrass
		Golf Course and Commercial Turf Uses: 152-455 lbs./acre in the spring prior to weed germination.	control.
	cudweed <i>Poa annua</i> chickweed lawn burweed henbit corn speedwell	227-303 lbs./acre	Apply in late summer or early fall prior to weed germination.

100/133

Bentgrass or established <i>Poa annua</i> <sup>3</sup> (1/2 inch height or taller)	crabgrass foxtail <i>Poa annua</i> barnyardgrass fall panicum oxalis prostrate spurge purslane knotweed evening primrose hop clover	227 lbs./acre in the spring prior to weed germination.	Apply a repeat application of 152- 227 lbs./acre after 5 8 weeks where heavy weed infestations are expected.
	goosegrass	227 lbs./acre in the spring prior to weed germination. Apply a repeat application of 227 lbs./acre after5 6- 8 weeks.	
	cudweed Poa annua chickweed lawn burweed henbit corn speedwell	227-303 lbs./acre	Apply in late summer or early fall prior to weed germination.
WARM SEASON GRASSES			
Bahiagrass Bermudagrass Buffalograss Centipedegrass Fescue, tall St. Augustinegrass Zoysiagrass	Crabgrass foxtail, <i>Poa annua</i> Barnyardgrass fall panicum oxalis prostrate spurge purslane knotweed evening primrose hop clover	Residential <sup>2</sup> Turf Uses Only: 227-303 lbs./acre in the spring prior to weed germination. Golf Course and Commerical Turf Uses: 227-455 lbs./acre in the spring prior to weed	Apply a repeat application of 152- 227 lb./acre after 5-8 weeks if necessary.
	goosegrass	prior to weed germination. 227 lbs./acre prior to weed germination in the spring. Apply a repeat	An additional application of 227 lbs./acre may be applied for extended goosegrass

------

Bhanan Angeler (1 10 2 10 10 10 10

*г* . 101/33

after 5 – 8 weeks.

application.

cudweed 227-303 lbs./acre Poa annua fall prior to chickweed lawn burweed henbit corn speedwell

Apply in late summer or early weed germination.

<sup>1</sup>DO NOT exceed a maximum rate of 303 pounds <u>per acre per application</u> for use on residential turfgrass.

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

<sup>3</sup> DO NOT exceed a maximum rate of 303 pounds <u>per acre per application</u> for use on sod farms.

<sup>4</sup> 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 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 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 0.66% 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 grasses 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

1021

PENDULUM 0.66% 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 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 <u>shallow</u> 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 0.66% PLUS FERTILIZER. PENDULUM 0.66% PLUS FERTILIZER 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 PENDULUM 0.66% PLUS FERTILIZER treatment may be followed by any registered herbicide to control weeds not listed on the PENDULUM 0.66% PLUS FERTILIZER label.

#### **ORNAMENTAL BULBS**

PENDULUM 0.66% 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 0.66% 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 0.66% PLUS FERTILIZER 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.). PENDULUM 0.66% PLUS FERTILIZER may be applied to established perennial wildflowers before emergence of weeds or wildflowers. For wildflowers being established from seed, apply PENDULUM 0.66% 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 0.66% 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 0.66% 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 0.66% 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 0.66% PLUS FERTILIZER 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 Cottonwood Crabapple Crepe Myrtle Cryptomeria, Japanese Cedar Cypress, Bald Cypress, Leyland Dogwood, Flowering Dogwood, Korean Dogwood, Silky Dogwood, Shrub Elm Fir, Balsam

#### 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 serrulata Prunus tomentosa Populus deltoides Malus spp. Lagerstroemia indica Cryptomeria japonica Taxodium distichum Cupressocyparis leylandii Cornus florida Cornus kousa Cornus amomum Cornus spp. Ulmus japonica Abies balsamae

10L

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, 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

~

Pseudotsuga menziesii Abies fraseri Abies concolor Franklinia spp. Ginkgo biloba Nyssa sylvatica Nyssa sylvatica Viburnum prunifolium Crataegus spp. Tsuga canadensis Tsuga canadensis *llex 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 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

/'05|<sub>133</sub>

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 Trachycarpus Tulip tree Walnut, Black Willow, Weeping Yellowwood

#### SHRUBS

7

#### 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

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

#### 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

106,

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 Mahonia Mock Orange Myrtle, Compact Myrtle, Wax Nandina Oleander Oregon Grape Osmanthus Palm, European Fan Palm, Mediterranean Fan Phlox, Prickly Photinia, Fraser

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 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

/07/133

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

 $\boldsymbol{c}$ 

#### **GROUND COVERS**

#### <u>Common Name</u>

Ajuga Baby Sun Rose Beach Strawberry Capeweed Cinquefoil, Spring Coyotebrush, Dwarf Daisy, Trailing African Dymondia Gazania Iceplant, Large Leaf Ivy, English 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

108 / 133

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 Vervain Vetch, Crown Vinca or Greater Periwinkle Wintercreeper

#### 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

Pelargonium peltatum Trachelospermum asiaticum Jasminum mesnvi 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 Verbena peruviana Vicia sativa Vinca major Euonymous fortunei

#### 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

Clover, Crimson Columbine Coreopsis Crinum Lily Crocus Daffodil Daylily False dragonhead **Fiary 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 **Texas Bluebonnet** Tulip

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 Lupinus texenis Tulipa spp.

Twinspur Wonder Flower Yarrow Zephyr Lily

r

Diasciascia barbaerae Ornithogalum thyrsoides Achillea millefolium Zephyranthes spp.

\* Applications of PENDULUM 0.66% PLUS FERTILIZER 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

#### Scientific Name

Ammophila breviligulata Festuca ovina Festuca ovina Pennisetum setaceum Cortaderia selloana Phalaris arundinacea Arundo spp. Phalaris arundinacea Deschampsia caespitosa

#### Scientific Name

Ageratum houstonianum Alvssum 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.

Pansy, Garden Periwinkle, Rose

Petunia Plumosa Cockscomb Portulaca Salvia Snapdragon Statice Sweet William Vinca or Periwinkle Zinnia

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.

\*After planting bedding plants and before PENDULUM 0.66% PLUS FERTILIZER is applied, area to be treated should be watered sufficiently to pack soil around roots.

PENDULUM 0.66% 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 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>1</sup> PENDULUM and Vantage are registered trademarks of BASF Corporation
- 2, 6 Acclaim Extra and Finale are registered trademarks of Aventis Environmental Sciences <sup>3</sup> Trimec is a trademark of PBI Gordon Corporation
- 4 Three-Way is a trademark of Lesco Inc.
- 5 Roundup PRO is a registered trademark of Monsanto Company

© 2002 BASF Corporation NVA 2002-04-123-0207

**BASF** Corporation P.O. Box 13258 Research Triangle Park, NC 27709

**Specialty Products** 

# PENDULUM® 0.66% PLUS FERTILIZER **Preemergent Weed Control**

#### 0.66% pendimethalin + 0-0-13 Fertilizer

# FOR USE ON TURFGRASSES AND ESTABLISHED ORNAMENTALS IN THE LANDSCAPE

ACTIVE INGREDIENT: pendimethalin, N-(1-ethylpropyl)-3,4-dimethyl-2, 6-dinitrobenzenamine0.66%	
INERT INGREDIENTS	
TOTAL	
EPA Reg. No. 241- EPA Est. No.	

#### **GUARANTEED ANALYSIS**

Derived from: Sulfate of Potash.

#### **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 800-832-HELP (4357).

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

ACCEPTED with COMMENTS in EPA Letter Dated

Under the Federal Insecticide, Fungicide, and Rodenticide Act as amended, for the pesticide registered under EPA Reg. No.

© 2002 BASF Corporation All rights reserved

SEP 1 2 2003

NVA 2002-04-123-0207

**BASF** Corporation 26 Davis Drive Research Triangle Park, NC 27709



Net Contents:

113| |133

# TABLE OF CONTENTS

 $\Gamma$ 

FIRST AID AND PRECAUTIONARY STATEMENTS	4
ENVIRONMENTAL HAZARDS	4
DIRECTIONS FOR USE	4
STORAGE AND DISPOSAL	6
GENERAL INFORMATION	7
APPLICATION INSTRUCTIONS	7
WEED SPECIES CONTROLLED	
GRASSES CONTROLLED	
TURFGRASSES	10
APPLICATION RATES FOR TURF WEED CONTROL	
COOL SEASON GRASSES	
WARM SEASON GRASSES	
TURFGRASS PRECAUTIONS	
INDUSTRIAL ( unimproved )TURF	12
LANDSCAPE AND GROUNDS MAINTENANCE	
ORNAMENTAL BULBS	
WILDFLOWERS	
ORNAMENTAL PRECAUTIONS	13
ORNAMENTALS	14
TREES	
SHRUBS	
GROUND COVERS	
PERENNIALS	
ORNAMENTAL GRASSES	
BEDDING PLANTS	21

	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 BASF Corporation for emergency medical treatment information: 1-800-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 mist.

# **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 any waterproof material (such as nitrile, butyl, neoprene, and/or barrier laminate).
- 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.

#### 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.

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 0.66% PLUS FERTILIZER 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.

# AGRICULTURAL USE REQUIREMENTS

116

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 any waterproof material (such as nitrile, butyl, neoprene, and/or barrier laminate).
- 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 POOR WEED CONTROL, CROP INJURY, OR RESIDUES.

# STORAGE AND DISPOSAL

**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

۶

**DISPOSAL:** 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 PENDULUM 0.66% PLUS FERTILIZER. The use of PENDULUM 0.66% PLUS FERTILIZER 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 BASF Corporation (BASF). All such risks shall be assumed by the user.

BASF 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.

BASF makes no other express or implied warranty, including other express or implied warranty of FITNESS or of MERCHANTABILITY.

#### **GENERAL INFORMATION**

PENDULUM 0.66% 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 0.66% PLUS FERTILIZER can be used around established ornamentals in the landscape and in established wildflower plantings. PENDULUM 0.66% PLUS FERTILIZER may be used for hardwood and conifer regeneration on conservation reserve program land or similar areas.

PENDULUM 0.66% PLUS FERTILIZER is labeled for use on the following turfgrass species: Kentucky bluegrass, perennial ryegrass, fine fescue, tall fescue, bentgrass, <u>Poa annua</u> (except putting greens and tees), bermudagrass, St. Augustinegrass, bahiagrass, centipedegrass, zoysiagrass and blends of these grasses.

118

PENDULUM 0.66% 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 recommended rate using a properly calibrated spreader. The efficacy of PENDULUM 0.66% 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 0.66% 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 0.66% 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 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, PENDULUM 0.66% PLUS FERTILIZER. 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 PENDULUM 0.66% 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 recommended.

Avoid application when winds may cause drift.

227 lbs. treats 1 acre delivering 1.5 lb. ai/A and 0.7 lb K/1000 ft.<sup>2</sup>

••

# **Recommended Rates:**

			lb	s. per acre	
<u>Spreader</u>	Ground Speed	Spreading Width	<u>152</u>	<u>227</u>	<u>303</u>
LESCO Botom	2 mmh	9 ft.	C 1/2	D 1/2	E 1/2
LESCO Rotary	3 mph	9 n.	10"/32	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	Ν
<sup>1</sup> Lely	4.5 mph	30 ft.	4 1/4 III	5 1/2 III	6 1/2 III
$2_{Vicon}$	4.5 mph	30 ft.	21	25	29

<sup>1</sup>Models WTR, WRF, HR, and 1250 PTO-450 rpm <sup>2</sup>Vicon - All models PTO-540 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

PENDULUM 0.66% 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**

<u>Common Name</u>	Scientific Name
Barnyardgrass	Echinochloa crus-galli
Bluegrass, Annual	Poa annua
Crabgrass	Digitaria spp.
Crowfootgrass	Dactyloctenium aegyptium
Foxtail, Giant	Setaria faberi
Foxtail, Green	Setaria viridis
Foxtail, Yellow	Setaria glauca
Goosegrass	Eleusine indica
Itchgrass	Rottboellia exaltata
Johnsongrass (from seed)	Sorghum halepense
Junglerice	Echinochloa colona
Lovegrass (from seed)	Eragrostis spp.
Panicum, Browntop	Panicum fasciculatum
Panicum, Fall	Panicum dichotomiflorum

Panicum, Texas Sandbur, Field Signalgrass Sprangletop, Mexican Sprangletop, Red Witchgrass Woolly Cupgrass

ç

# **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 Shepherdspurse Smartweed, Pennsylvania Speedwell, Corn Spurge, Annual Spurge, Prostrate Woodsorrel, Yellow Velvetleaf (Buttonweed)

Panicum texanum Cenchrus incertus Brachiaria platyphylla Leptochloa uninervia Leptochloa filiformis Panicum capillare Eriochloa villosa

# **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. Euphorbia numistrata Oxalis stricta Abutilon theophrasti

# TURFGRASSES

1

121/133

# APPLICATION RATES FOR TURF WEED CONTROL<sup>1</sup>

Turfgrass Species	Weeds	Rates of PENDULUM 0.66% PLUS FERTILIZER	Comments
COOL SEASON GRASSES			
Bluegrass, Kentucky Fescue, fine Fescue, tall Ryegrass, perennial	crabgrass foxtail <i>Poa annua</i> barnyardgrass fall panicum oxalis prostrate spurge purslane knotweed evening primrose hop clover	227-303 lbs./acre as the initial application prior to weed germination in the spring.	Apply a repeat application of 152-227 lbs./acre after 5 - 8 weeks for extended control or where heavy weed infestations are expected.
	goosegrass	<b>Residential<sup>2</sup> Turf</b> <b>Uses Only : 152-227</b> lbs./acre in the spring prior to weed germination.	Apply a repeat application of 152 lbs./acre after 5 – 8 weeks if the lower rates was used initially or for extended goosegrass
	Golf Course and cont Commercial Turf Uses: 152-455 lbs./acre in the spring prior to weed germination.	control.	
	cudweed <i>Poa annua</i> chickweed lawn burweed henbit corn speedwell	227-303 lbs./acre	Apply in late summer or early fall prior to weed germination.

|22 | |/33

established Poa annua <sup>3</sup> (1/2 inch height or taller)       foxtail       spring prior to weed parnyardgrass       application of 227 lbs./acre 8 weeks when weed infestati expected.         fall panicum oxalis       prostrate spurge purslane knotweed       227 lbs./acre in the spring prior to weed germination.       8         goosegrass       227 lbs./acre in the spring prior to weed germination.       8       weeks when weed infestati expected.         goosegrass       227 lbs./acre after5 6-8 weeks.       227 lbs./acre after5 6-8 weeks.       Apply in late summer or earl fall prior to weed germination.         cudweed henbit corn speedwell       227-303 lbs./acre after5 6-8 weeks.       Apply in late summer or earl fall prior to weed germination of 227 lbs./acre after5 6-8 weeks.         WARM SEASON GRASSES       Crabgrass foxtail, corn speedwell       Residential <sup>4</sup> Turf Uses Only: 227 lbs./acre in the spring prior to weeks if necess         WARM SEASON GRASSES       Crabgrass foxtail, buffalograss Fescue, tall St. Augustinegrass       Crabgrass foxtail, fall panicum oxalis       Residential <sup>4</sup> Turf Uses Only: 227 lbs./acre in the spring prior to weeks if necess         St. Augustinegrass       Barnyardgrass prostrate spurge purslane hop clover       Golf Course and purslane prior to weed germination.         goosegrass       227 lbs./acre in the spring prior to weed germination.       An additional application of				
WARM SEASON       cudweed       227-303 lbs./acre       Apply in late         chickweed       fall prior to       weed germinath         henbit       corn speedwell       weed germinath         WARM SEASON       GRASSES       Apply a repeat         Bahlagrass       Crabgrass       Residential <sup>2</sup> Turf         Buffalograss       Poa annua       227-303 lbs./acre in       227 lb./acre aft         Buffalograss       Poa annua       227-303 lbs./acre in       227 lb./acre aft         St. Augustinegrass       proa annua       227-303 lbs./acre in       227 lb./acre aft         splication of       application.       oxalis       227 lbs./acre       227 lb./acre aft         Zoysiagrass       prostrate spurge       Golf Course and       227 lbs./acre       227 lbs./acre         purslane       Commerical Turf       knotweed       Uses: 227-455       100 lover         evening primrose       lbs.	established Poa annua <sup>3</sup>	foxtail Poa annua barnyardgrass fall panicum oxalis prostrate spurge purslane knotweed evening primrose	spring prior to weed	Apply a repeat application of 152- 227 lbs./acre after 5 - 8 weeks where heavy weed infestations are expected.
Poa annua chickweed lawn burweed henbit corn speedwellsummer or earl fall prior to weed germinatiWARM SEASON GRASSESCrabgrassResidentialTurf application of 1 227-303 lbs./acre in 227-303 lbs./acre in 227 lb./acre aft weeks if necessBahlagrass Bermudagrass Buffalograss Fescue, tall St. Augustinegrass ZoysiagrassCrabgrass foxtail, Banicum oxalis prostrate spurge purslane knotweed germination.Apply a repeat application of 1 227 lb./acre aft weeks if necessZoysiagrassprostrate spurge purslane knotweedGolf Course and Commerical Turf klocre in the spring prior to weed germination.goosegrass227 lbs./acre prior to weed germination.An additional application of		goosegrass	in the spring prior to weed germination. Apply a repeat application of 227 lbs./acre	
GRASSESBahiagrassCrabgrassResidential <sup>2</sup> TurfApply a repeatBermudagrassfoxtail,Uses Only:application of 1BuffalograssPoa annua227-303 lbs./acre in227 lb./acre aftCentipedegrassBarnyardgrassthe spring prior toweeks if necessFescue, tallfall panicumweed germination.St. AugustinegrassoxalisGolf Course andJurslaneCommerical TurfknotweedUses: 227-455evening primroselbs./acre in the springhop cloverprior to weedgoosegrass227 lbs./acreAn additional application of		Poa annua chickweed lawn burweed henbit	227-303 lbs./acre	summer or early
BahiagrassCrabgrassResidential2TurfApply a repeatBermudagrassfoxtail,Uses Only:application of 1BuffalograssPoa annua227-303 lbs./acre in227 lb./acre aftCentipedegrassBarnyardgrassthe spring prior toweeks if necessFescue, tallfall panicumweed germination.weeks if necessSt. Augustinegrassoxalisprostrate spurgeGolf Course andZoysiagrassprostrate spurgeGolf Course andpurslaneknotweedUses: 227-455evening primroselbs./acre in the springhop cloverprior to weedgermination.goosegrass227 lbs./acreAn additionalprior to weedprior to weedapplication of			to anot get , <del>the array of the to</del>	
Zoysiagrassprostrate spurge purslaneGolf Course and Commerical TurfknotweedUses: 227-455evening primrose hop cloverlbs./acre in the spring prior to weed germination.goosegrass227 lbs./acre prior to weed application of	Bahiagrass Bermudagrass Buffalograss Centipedegrass Fescue, tall	foxtail, <i>Poa annua</i> Barnyardgrass fall panicum	Uses Only: 227-303 lbs./acre in the spring prior to	Apply a repeat application of 152- 227 lb./acre after 5-8 weeks if necessary.
prior to weed application of		prostrate spurge purslane knotweed evening primrose	Commerical Turf Uses: 227-455 lbs./acre in the spring prior to weed	
application of control 8 week		goosegrass	prior to weed germination in the spring. Apply a repeat application of	application of 227 lbs./acre may

ſ.

after 5 – 8 weeks. aj

application.

cudweed227-303 lbs./acreApply in latePoa annuasummer or earlychickweedfall prior tolawn burweedweed germination.henbitcorn speedwell

<sup>1</sup> DO NOT exceed a maximum rate of 303 pounds <u>per acre per application</u> for use on residential turfgrass.

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

<sup>3</sup> DO NOT exceed a maximum rate of 303 pounds per acre per application for use on sod farms.

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

r

# 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 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 0.66% 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 grasses 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

1241 /133

PENDULUM 0.66% 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 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 0.66% PLUS FERTILIZER. PENDULUM 0.66% PLUS FERTILIZER 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 PENDULUM 0.66% PLUS FERTILIZER treatment may be followed by any registered herbicide to control weeds not listed on the PENDULUM 0.66% PLUS FERTILIZER label.

# **ORNAMENTAL BULBS**

PENDULUM 0.66% 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 0.66% 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 0.66% PLUS FERTILIZER 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.). PENDULUM 0.66% PLUS FERTILIZER may be applied to established perennial wildflowers before emergence of weeds or wildflowers. For wildflowers being established from seed, apply PENDULUM 0.66% 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 0.66% 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 0.66% 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 0.66% 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 0.66% PLUS FERTILIZER is safe around and over the top of the established plants listed below.

#### TREES

ſ

#### <u>Common Name</u>

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 Cottonwood Crabapple Crepe Myrtle Cryptomeria, Japanese Cedar Cypress, Bald Cypress, Leyland Dogwood, Flowering Dogwood, Korean Dogwood, Silky Dogwood, Shrub Elm Fir, Balsam

#### 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 serrulata Prunus tomentosa Populus deltoides Malus spp. Lagerstroemia indica Cryptomeria japonica Taxodium distichum Cupressocyparis leylandii Cornus florida Cornus kousa Cornus amomum Cornus spp. Ulmus japonica Abies balsamae

126 | ||33

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, 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

7

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 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

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 Trachycarpus Tulip tree Walnut, Black Willow, Weeping Yellowwood

#### SHRUBS

c.

#### 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

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

# 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, 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 Lilv-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

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 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, Japanese Pine, Mugo Plum, Natal Privet, California Privet, Glossy Privet, Variegated Privet, Waxleaf **Pvracantha** 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 **Xylosma** Yellowbells Yew Yew, Japanese Yew, Southern Yucca, Adam's Needle Yucca, Weeping

## **GROUND COVERS**

#### <u>Common Name</u>

Ajuga Baby Sun Rose Beach Strawberry Capeweed Cinquefoil, Spring Coyotebrush, Dwarf Daisy, Trailing African Dymondia Gazania Iceplant, Large Leaf Ivy, English

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

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 Vervain Vetch, Crown Vinca or Greater Periwinkle Wintercreeper

#### 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

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 Verbena peruviana Vicia sativa Vinca major Euonymous fortunei

## 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

Clover, Crimson Columbine Coreopsis Crinum Lily Crocus Daffodil Davlilv False dragonhead **Fiary 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 Texas Bluebonnet Tulip

*c* 

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 Lupinus texenis Tulipa spp.

Twinspur Wonder Flower Yarrow Zephyr Lily Diasciascia barbaerae Ornithogalum thyrsoides Achillea millefolium Zephyranthes spp.

\* Applications of PENDULUM 0.66% PLUS FERTILIZER 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

#### Scientific Name

Ammophila breviligulata Festuca ovina Festuca ovina Pennisetum setaceum Cortaderia selloana Phalaris arundinacea Arundo spp. Phalaris arundinacea Deschampsia caespitosa

#### Scientific Name

Ageratum houstonianum Alvssum 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.

<u>/</u>33/ |/*3*3

Pansy, Garden Periwinkle, Rose

Petunia Plumosa Cockscomb Portulaca Salvia Snapdragon Statice Sweet William Vinca or Periwinkle Zinnia 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.

\*After planting bedding plants and before PENDULUM 0.66% PLUS FERTILIZER is applied, area to be treated should be watered sufficiently to pack soil around roots.

PENDULUM 0.66% 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 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>1</sup> PENDULUM and Vantage are registered trademarks of BASF Corporation
- 2, 6 Acclaim Extra and Finale are registered trademarks of Aventis Environmental Sciences
- <sup>3</sup> Trimec is a trademark of PBI Gordon Corporation
- 4 Three-Way is a trademark of Lesco Inc.
- 5 Roundup PRO is a registered trademark of Monsanto Company

© 2002 BASF Corporation NVA 202-04-123-0207

BASF Corporation P.O. Box 13258 Research Triangle Park, NC 27709



**Specialty Products**