



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

OFFICE OF
PREVENTION, PESTICIDES AND
TOXIC SUBSTANCES

Jeffery H. Birk, Ph.D.
BASF
26 Davis Drive
Research Triangle Park, NC 27709

JUN 13 2008

Subject: Label Notification(s) for Pesticide Registration Notice 2007-4

Dear Dr. Birk:

The Agency is in receipt of your Application(s) for Pesticide Notification under Pesticide Registration Notice (PRN) 2007-4 dated April 22, 2008 for:

EPA Registration 241-341

Pendulum 3.3 EC Herbicide

The Registration Division (RD) has conducted a review of this request for applicability under PRN 2007-4 and finds that the label change(s) requested falls within the scope of PRN-2007-4. The label has been date-stamped "Notification" and will be placed in our records.

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

If you have any questions, please contact me directly at 703-305-6249 or Joyce Edwards of my staff at 703-308-85479.

Sincerely,


A handwritten signature in black ink, appearing to read "Linda".

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

EL submitted

Electronic Labeling Record

LABEL INFORMATION

Record Id#: ELL002432
Attachment Name: 000241-00341.20080422.NVA
 2008-04-123-0122.pdf
Product Status: Active
Registration #: 000241-00341
Product: PENDULUM 3.3 EC HERBICIDE
PC Code: 108501
RM Team: RM 25
Submission Date: 04/22/2008
Version: Initial
Receipt Date:
CD Enclosed?: Yes
Comments: NVA 2008-04-123-0122
Application Correspondence:
Attachment:  000241-00341.20080422.NVA 2008-04-123-0122.pdf

SUBMISSION INFORMATION

Status: Pending
Submission on BC: 828429
Action Code: 332
OPPIN Receipt Date: 04/23/2008
Action Comments: Notif Re: PR Notice 2007-4 and 98-10 for update of container disposal language for Pendulum 3.3 EC Herbicide
Reviewer Comments:
User Reviews & Response Letters



The Chemical Company

3/19
April 22, 2008

U.S. Environmental Protection Agency
Office of Pesticide Programs (7505P)
Document Processing Desk 7504P (NOTIF)
Room S-4900
One Potomac Yard
2777 S. Crystal Drive
Arlington, VA 22202
Attention: Mr. James Tompkins, (PM 25)

RE: Notification:
Container Disposal Language Pendulum® 3.3 EC herbicide
EPA Reg. No. 241-341

Dear Mr. Tompkins:

BASF is hereby submitting a notification updating the container disposal language for Pendulum 3.3 EC herbicide (EPA Reg. No. 241-341) to comply with PRN 2007-04.

Enclosed please find:

- Application form 8570-1
- CD containing electronic copy of the label
- Certification with Respect to Label Integrity
- Pendulum 3.3 EC herbicide label.
- Current Pendulum 3.3 EC herbicide label

No PRIA fee is required for this notification.

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

Regards,

Jeffrey H. Birk, Ph.D.
Regulatory Manager
Phone 919-547-2622
Fax: 919-547-2850
Email: jeffrey.birk@basf.com

® Registered Trademark of BASF

4/19

Please read instructions on reverse before completing form.

Form Approved. OMB No. 2070-0060. Approval expires 2-28-95



United States
Environmental Protection Agency
Washington, DC 20460

☐ Registration
☐ Amendment
☒ Other

OPP Identifier Number

Application for Pesticide - Section I

1. Company/Product Number 241-341	2. EPA Product Manager James Tompkins	3. Proposed Classification <input type="checkbox"/> None <input type="checkbox"/> Restricted
4. Company/Product (Name) Pendulum 3.3 EC herbicide	PM# 25	
5. Name and Address of Applicant (Include ZIP Code) BASF 26 Davis Drive Research Triangle Park, NC 27709 <input type="checkbox"/> Check if this is a new address	6. Expedited Review. In accordance with FIFRA Section 3(c)(3) (b)(i), my product is similar or identical in composition and labeling to: EPA Reg. No. _____ Product Name _____	

Section - II

<input type="checkbox"/> Amendment - Explain below.	<input checked="" type="checkbox"/> Final printed labels in response to Agency letter dated	NOTIFICATION JUN 13 2008
<input type="checkbox"/> Resubmission in response to Agency letter dated _____	<input type="checkbox"/> "Me Too" Application.	
<input checked="" type="checkbox"/> Notification - Explain below.	<input type="checkbox"/> Other - Explain below.	

Explanation: Use additional page(s) if necessary. (For section I and Section II.)

Notification- final print label and updated container disposal statements as per PRN 2007-04 for Pendulum 3.3EC herbicide (241-341). This notification is consistent with the guidance in PR Notice 2007-4 and the requirements of EPA's regulations at 40 CFR 156.10, 156.140, 156.144, 156.146, and 156.156. No other changes have been made to the labeling or the confidential statement of formula of this product. I understand that it is a violation of 18 U.S.C. Sec. 1001 to willfully make any false statement to EPA. I further understand that if the amended label is not consistent with the requirements of 40 CFR 156.10, 156.140, 156.144, 156.146, and 156.156, this product may be in violation of FIFRA and I may be subject to enforcement action and penalties under sections 12 and 14 of FIFRA. This notification is not subject to a fee under PRIA. Contact Jeff Birk at 919-547-2622 (phone), 919-547-2850 (fax) or by Email at birkj@basf.com

Section - III

1. Material This Product Will Be Packaged In:					
Child-Resistant Packaging <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Unit Packaging <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Water Soluble Packaging <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	2. Type of Container <input type="checkbox"/> Metal <input checked="" type="checkbox"/> Plastic <input type="checkbox"/> Glass <input type="checkbox"/> Paper <input type="checkbox"/> Other (Specify) _____		
* Certification must be submitted		If "Yes" Unit Packaging wgt.	No. per container	If "Yes" Package wgt.	No. per container
3. Location of Net Contents Information <input checked="" type="checkbox"/> Label <input type="checkbox"/> Container		4. Size(s) Retail Container 2.5 gallons		5. Location of Label Directions <input checked="" type="checkbox"/> On label attached to container	
6. Manner in Which Label is Affixed to Product <input checked="" type="checkbox"/> Lithograph Paper glued Stenciled <input type="checkbox"/> Other _____					

Section - IV

1. Contact Point (Complete items directly below for identification of individual to be contacted, if necessary, to process this application.)			
Name Jeffrey H. Birk		Title Regulatory Manager	
		Telephone No. (Include Area Code) 919-547-2622	
Certification I certify that the statements I have made on this form and all attachments thereto are true, accurate and complete. I acknowledge that any knowingly false or misleading statement may be punishable by fine or imprisonment or both under applicable law.			6. Date Application Received (Stamped)
2. Signature 		3. Title Regulatory Manager	
4. Typed Name Jeffrey H. Birk		5. Date April 22, 2008	

NOTIFICATION

JUN 13 2008

Certification with Respect to Label Integrity

version: 9/11/02

I certify that the information (including, but not limited to, text, tables, and graphics) contained in the electronic file identified below by file name and submitted with this certification is the same information as that on the paper copies of these documents included with this submission.

PROPOSED LABEL		
EPA Registration #	Date Submitted to EPA	Electronic file name
241-341	4-22-08	000241-00341.20080422.NVA 2008-04-123-0122

I certify that the statements that I have made on this form are true, accurate, and complete. I acknowledge that any knowingly false or misleading statements may be punishable by fine or imprisonment or both under applicable law.

Signature

04/22/2008

Date _____

Jeffrey H. Birk

Name (typed)

Regulatory Manager

Title

6/19
NOTIFICATION

JUN 13 2008

PENDULUM®

3.3 EC herbicide

FOR USE IN TURFGRASSES, ORNAMENTALS, LANDSCAPE OR
GROUNDS MAINTENANCE, AND NONCROPLAND AREAS

Active Ingredient:

pendimethalin; N-(1-ethylpropyl)-3,4-dimethyl-2, 6-dinitrobenzenamine 37.4%

Other Ingredients*:

62.6%

Total:

100.0%

(1 gallon contains 3.3 lbs of pendimethalin)

* Contains petroleum distillates

EPA Reg. No. 241-341

EPA Est. No.

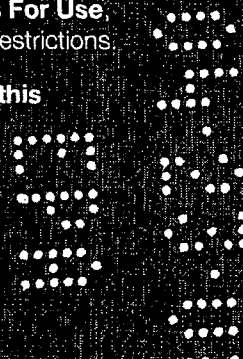
**KEEP OUT OF REACH OF CHILDREN
CAUTION/PRECAUCION**

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

See inside for additional **First Aid, Precautionary Statements, Directions For Use, Conditions of Sale and Warranty**, and state-specific crop and/or use site restrictions.

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

Net Contents:



BASF Corporation
26 Davis Drive
Research Triangle Park, NC 27709

 **BASF**
The Chemical Company

FIRST AID	
If in eyes	<ul style="list-style-type: none"> • Hold eyes open and rinse slowly and gently with water for 15-20 minutes. • Remove contact lenses, if present, after first 5 minutes, then continue rinsing eyes. • Call a poison control center or doctor for treatment advice.
If swallowed	<ul style="list-style-type: none"> • Immediately call a poison control center or doctor. • DO NOT induce vomiting unless told to do so by a poison control center or doctor. • DO NOT GIVE ANY LIQUID TO THE PERSON. • DO NOT give anything by mouth to an unconscious person.
If on skin or clothing	<ul style="list-style-type: none"> • Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15-20 minutes. • Call a poison control center or doctor for treatment advice.
If inhaled	<ul style="list-style-type: none"> • Move person to fresh air. • If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth, if possible. • Call a poison control center or doctor for further treatment advice.
HOT LINE NUMBER	
In case of emergency endangering life or property involving this product, call day or night 1-800-832-HELP (4357).	
NOTE TO PHYSICIAN	
This product may pose an aspiration pneumonia hazard. Contains petroleum distillates.	

Precautionary Statements

HAZARDS TO HUMANS (AND DOMESTIC ANIMALS)

CAUTION

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

Personal Protective Equipment (PPE)

NON-WPS USES:

Applicators and other handlers (except mixers/loaders) who handle this pesticide for any use NOT covered by the Worker Protection Standard (40 CFR Part 170) - in general, only agricultural-plant uses are covered by the WPS - must wear:

- Long-sleeved shirt and long pants
- Chemical-resistant gloves, such as nitrile rubber (≥ 14 mils)
- Shoes plus socks

Mixers and loaders must wear:

- Long-sleeved shirt and long pants, or coveralls
- Chemical-resistant gloves, such as barrier laminate, butyl rubber ≥ 14 mils, nitrile rubber ≥ 14 mils, neoprene rubber ≥ 14 mils, or viton ≥ 14 mils
- Shoes plus socks
- Discard clothing or other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. **DO NOT** reuse them.

WPS USES:

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

Applicators and other handlers who handle this pesticide for any use covered by the Worker Protection Standard (40 CFR part 170) - in general, agricultural-plant uses are covered - must wear:

- Long-sleeved shirt and long pants
- Chemical-resistant gloves, such as barrier laminate, butyl rubber ≥ 14 mils, nitrile rubber ≥ 14 mils, neoprene rubber ≥ 14 mils, or viton ≥ 14 mils
- Shoes plus socks

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.

Engineering Controls

When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides (40 CFR 170.240)(d)(4-6), the handler PPE requirements may be reduced or modified as specified in the WPS.

User Safety Recommendations

Users should:

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

Environmental Hazards

This product is toxic to fish. **DO NOT** apply directly to water, to areas where surface water is present, or to intertidal areas below the mean high water mark. Drift and runoff from treated areas may be hazardous to aquatic organisms in adjacent aquatic sites. **DO NOT** contaminate water when disposing of equipment washwaters or rinsate.

ENDANGERED SPECIES PROTECTION

If endangered plant species occur in proximity to the application site, the following mitigation measures are required:

If applied by ground, leave an untreated buffer zone of 200 feet. The product must be applied using a low boom (20 inches above the ground) and ASAE fine to medium/coarse nozzles.

To determine if your county has an endangered plant species, consult the website <http://www.epa.gov/espp/usa-map.htm>.

Endangered Species Bulletins may also be obtained from extension offices or state pesticide agencies. If the bulletin is not available for your specific area, check with the appropriate local state agency to determine if known populations of endangered plant species occur in the area to be treated.

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 herbicide application.

DO NOT apply this product through any type of irrigation system.

DO NOT apply by aerial methods.

DO NOT apply **Pendulum® 3.3 EC herbicide** in greenhouses, shadehouses or other enclosed structures. 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 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, such as barrier laminate, butyl rubber ≥ 14 mils, nitrile rubber ≥ 14 mils, neoprene rubber ≥ 14 mils, or viton ≥ 14 mils.
- Shoes plus socks

Non-Agricultural Use Requirements

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

DO NOT enter or allow others to enter the treated area until sprays have dried.

FAILURE TO FOLLOW THE DIRECTIONS FOR USE AND PRECAUTIONS ON THIS LABEL MAY RESULT IN POOR WEED CONTROL OR CROP INJURY.

Storage and Disposal

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

PESTICIDE STORAGE: DO NOT STORE BELOW 40° F. Extended storage at temperatures below 40° F can result in the formation of crystals on the bottom of the container. If crystallization does occur, store the container on its side at room temperature (70° F) and rock occasionally until crystals redissolve.

PESTICIDE DISPOSAL: Pesticide wastes are toxic. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of federal law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

CONTAINER DISPOSAL:

Nonrefillable Container. DO NOT reuse or refill this container. Triple rinse or pressure rinse container (or equivalent) promptly after emptying; then offer for recycling, if available, or reconditioning, if appropriate, or puncture and dispose of in a sanitary landfill, or by incineration, or by other procedures approved by state and local authorities.

Triple rinse containers small enough to shake (capacity ≤ 5 gallons) as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank, or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times.

Triple rinse containers too large to shake (capacity > 5 gallons) as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank, or store rinsate for later use or disposal. Repeat this procedure two more times.

Pressure rinse as follows: Empty the remaining contents into application equipment or mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank, or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container and rinse at about 40 PSI for at least 30 seconds. Drain for 10 seconds after the flow begins to drip.

Observe all cautions and limitations on this label and the labels of products used in combination with **Pendulum® 3.3 EC herbicide**. The use of **Pendulum 3.3 EC** not consistent with this label can result in injury to crops, animals, or persons. Keep containers closed to avoid spills and contamination.

General Information

Pendulum 3.3 EC provides preemergence control of most annual grasses and certain broadleaf weeds as they germinate in any turfgrass site (lawns, sod, turf areas). Examples of such sites include but are not limited to: grounds or lawns around residential and commercial establishments, multifamily dwellings, military and other institutions, parks, airports, roadsides, schools, picnic grounds, athletic fields, houses of worship, cemeteries, golf courses, prairiegrass areas, and sod farms.

Pendulum 3.3 EC can also be used in and around field-, liner-, and container-grown ornamental nurseries; established landscape ornamentals and ornamental gardens; listed groundcovers; nonbearing fruit and nut trees; conifer

and hardwood seedling nurseries; and for tree plantation site preparation and maintenance.

In addition, **Pendulum 3.3 EC** can be applied for general grounds maintenance around areas such as parking lots, driveways and roadsides, alleyways, bike and jogging paths, vacant lots, buildings, stone gardens and gravel yards, markers and fence lines, mulch beds and other similar areas. It may be used under asphalt or concrete treatments as part of a site preparation program.

Pendulum 3.3 EC is recommended for preemergence control of most annual grasses and certain broadleaf weeds as they germinate in any noncropland area such as railroad, utility, highway, and pipeline rights-of-way; highway guardrails, delineators, and sign posts; bridge abutments and approaches; utility substations; petroleum tank farms; pumping installations; storage areas; fence rows; windbreaks and shelterbelts; paved or gravel surfaces; and other similar areas where weed control is desired.

Pendulum 3.3 EC controls weeds as they germinate but will not control established weeds. Therefore, areas to be treated should be free of established weeds. For the control of established weeds, **Pendulum 3.3 EC** may be used in conjunction with herbicides registered for postemergence use. Consult the labels of those herbicides for use rates, timings, and precautions or restrictions.

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.

The efficacy of **Pendulum 3.3 EC** will improve if the application is followed by one-half inch of rainfall or its equivalent in sprinkler irrigation. If **Pendulum 3.3 EC** is not activated by rainfall or irrigation within 30 days, erratic weed control may result.

Applied according to label directions and under normal growing conditions, **Pendulum 3.3 EC** or **Pendulum 3.3 EC** tank mix combinations will not cause crop injury. Over-application can result in crop stand loss, crop injury, or soil residues. Uneven application can decrease weed control or cause crop 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 3.3 EC**.

Pendulum 3.3 EC may cause temporary discoloration of sprayed surfaces. Rinse immediately to avoid staining. Spray colorants or dyes can be added to alter the color of the spray solution to match the treated surfaces.

MIXING INSTRUCTIONS FOR PENDULUM 3.3 EC

Respective sections of this leaflet define recommended **Pendulum 3.3 EC** or **Pendulum 3.3 EC**-registered tank mix treatments.

Ground Driven Sprayer:

1. Fill tank one-half to three-quarters full with clean water.

2. Add **Pendulum® 3.3 EC herbicide** to the partially filled tank while agitating and then fill the remainder of the tank with water.
3. **MAINTAIN CONTINUOUS AGITATION WHILE ADDING PENDULUM 3.3 EC AND UNTIL SPRAYING IS COMPLETED.** If the spray mixture is allowed to settle for any period of time, thorough agitation is essential before spraying is resumed. Continue agitation while spraying.
4. If **Pendulum 3.3 EC** is to be used in tank mixtures with other registered herbicides, follow directions on the labels of those products which recommend tank mixing.

Backpack Sprayer: Begin with a clean spray tank. Fill the spray tank one-half full with clean water and add the required amount of **Pendulum 3.3 EC** to the sprayer. Cap sprayer and agitate to ensure mixing. Uncap sprayer and finish filling tank to desired level. Cap sprayer and agitate once again. During application it is desirable to agitate the mixture on occasion to ensure mixing. If the spray mixture is allowed to settle for any period of time, thorough agitation is essential before spraying is resumed.

Liquid Fertilizers: Prior to mixing, small quantities should always be tested using a simple jar test. Add the required amount of **Pendulum 3.3 EC** to half-filled spray tank while agitating then add the fertilizer product. Complete filling spray tank to desired level.

Dry Bulk Fertilizers: **Pendulum 3.3 EC** may be impregnated on dry bulk fertilizers. When applied as directed, **Pendulum 3.3 EC**/dry bulk fertilizer mixtures provide weed control equal to that provided by the same rates of **Pendulum 3.3 EC** applied in water.

MANAGING OFF-TARGET MOVEMENT

The following information is provided as general guidance for managing off-target movement. Specific use recommendations for **Pendulum 3.3 EC** may differ depending on the application technique used and the vegetation management objective.

Spray Drift: Avoiding spray drift at the application site is the responsibility of the applicator. The interaction of many equipment- and weather-related factors determine the potential for spray drift. The applicator and the grower are responsible for considering all these factors when making decisions.

It is the responsibility of the applicator to avoid spray drift onto nontarget areas.

Spray drift from applying this product may result in damage to sensitive plants adjacent to the treatment area. Only apply this product when the potential for drift to these and other adjacent sensitive areas (e.g. residential areas, bodies of water, known habitat for threatened or endangered species, or nontarget crops) is minimal. **DO NOT** apply when the following conditions exist that increase the likelihood of spray drift from intended targets: high or gusty winds, high temperatures, low humidity, temperature inversions.

To minimize spray drift, the applicator should be familiar with and take into account the following drift reduction advisory information. Additional information may be available from state enforcement agencies or the Cooperative Extension on the application of this product.

The best drift management strategy and most effective way to reduce drift potential are to apply large droplets that provide sufficient coverage and control. Applying larger droplets reduces drift potential, but will not prevent drift if applications are made improperly, or under unfavorable environmental conditions (see **Wind, Temperature and Humidity** and **Temperature Inversions**).

Controlling Droplet Size:

- **Volume** - Use high flow rate nozzles to apply the highest practical spray volume. Nozzles with higher rated flows produce larger droplets.
- **Pressure** - **DO NOT** exceed the nozzle manufacturer's recommended pressures. For many nozzle types, lower pressure produces larger droplets. When higher flow rates are needed, use higher flow rate nozzles instead of increasing pressure.
- **Number of Nozzles** - Use the minimum number of nozzles that provide uniform coverage.
- **Nozzle Orientation** - Orienting nozzles so that the spray is released parallel to the airstream produces larger droplets than other orientations and is recommended practice. Significant deflection from the horizontal will reduce droplet size and increase drift potential.
- **Nozzle Type** - Use a nozzle type that is designed for the intended application. With most nozzle types, narrower spray angles produce larger droplets. Consider using low-drift nozzles. Solid-stream nozzles oriented straight back produce the largest droplets and the lowest drift. **DO NOT** use nozzles producing a mist droplet spray.

Application Height: Making applications at the lowest possible height (aircraft, ground-driven spray boom) that is safe and practical reduces exposure of droplets to evaporation and wind.

Swath Adjustment: When applications are made with a crosswind, the swath will be displaced downwind. Therefore, on the up and downwind edges of the field, the applicator must compensate for this displacement by adjusting the path of the application equipment (e.g. aircraft, ground) upwind. Swath adjustment distance should increase with increasing drift potential (higher wind, smaller droplets, etc.).

Wind: Drift potential is lowest between wind speeds of 3 to 10 mph. However, many factors, including droplet size and equipment type, determine drift potential at any given speed. Application should be avoided below 3 mph due to variable wind direction and high inversion potential.

NOTE: Local terrain can influence wind patterns. Every applicator should be familiar with local wind patterns and how they affect spray drift.

Temperature and Humidity: When making applications in low relative humidity, set up equipment to produce larger

droplets to compensate for evaporation. Droplet evaporation is most severe when conditions are both hot and dry.

Temperature Inversions: Drift potential is high during a temperature inversion. Temperature inversions restrict vertical air mixing, which causes small suspended droplets to remain in a concentrated cloud, which can move in unpredictable directions due to the light variable winds common during inversions. Temperature inversions are characterized by increasing temperatures with altitude and are common on nights with limited cloud cover and light to no wind. They begin to form as the sun sets and often continue into the morning. Their presence can be indicated by ground fog; however, if fog is not present, inversions can also be identified by the movement of smoke from a ground source or an aircraft smoke generator. Smoke that layers and moves laterally in a concentrated cloud (under low wind conditions) indicates an inversion, while smoke that moves upward and rapidly dissipates indicates good vertical air mixing.

Wind Erosion: Avoid treating powdery, dry or light sandy soils when conditions are favorable for wind erosion. Under these conditions, the soil surface should first be settled by rainfall or irrigation.

SPRAYING INSTRUCTIONS FOR PENDULUM® 3.3 EC HERBICIDE

Apply with properly calibrated ground equipment in sufficient water per acre to provide uniform spray distribution (at least 40 gallons of water per acre). Low-pressure (e.g. 20 to 40 psi) sprayers are recommended. Maintain continuous agitation during spraying with good mechanical or bypass agitation. Check sprayer routinely to determine proper calibration. Avoid overlaps that will increase rates above those recommended. Avoid application when winds may cause drift.

Avoid unintentional contact of spray solution with driveways, stone, wood or other porous surfaces. Rinse immediately to avoid staining.

The efficacy of **Pendulum 3.3 EC** will be improved if the application is followed by one-half inch of rainfall or its equivalent in sprinkler irrigation. If **Pendulum 3.3 EC** is not activated by rainfall or irrigation within 30 days, erratic weed control may result.

To prevent establishment of weeds along the edges of lawns, it may be necessary to overlap the spray three to six inches onto sidewalks or driveways, etc., to ensure effective application rates in these especially vulnerable sites. Where temporary discoloration of pavement is to be avoided, rinse immediately to avoid staining.

TURFGRASS TANK MIXES

Pendulum 3.3 EC can be mixed with postemergence herbicides to control emerged weeds in turfgrasses. For annual grass control, applications can be made with **Acclaim® Extra** or MSMA to control emerged weeds. Broadleaf weeds can be controlled using **Trimec®**, **Three-Way™**, 2,4-D, and other similar products.

Before tank mixing, a simple jar test is recommended to insure compatibility of herbicides.

Refer to manufacturers' labels for specific use directions, precautions, and limitations before tank mixing with **Pendulum 3.3 EC** and follow those that are most restrictive.

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 greens or injury may occur.

Delay reseeding or winter overseeding of treated turfgrass for at least three (3) months following the last **Pendulum 3.3 EC** 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 3.3 EC** 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, 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, Shepherdspurge, Pennsylvania smartweed, Annual spurge, and Velvetleaf.

Apply before weeds germinate. A postemergence herbicide, such as 2,4-D, MSMA, or similar products, may be tank mixed to control established weeds. Apply according to label instructions for the respective products and follow the most restrictive wording.

TURFGRASSES			
APPLICATION RATES FOR WEED CONTROL ¹			
Turfgrass Species	Weeds Controlled	Rates of Pendulum® 3.3 EC herbicide	Comments
COOL SEASON GRASSES			
Bluegrass, Kentucky Fescue, fine Fescue, tall Ryegrass, perennial	Barnyardgrass Crabgrass Evening primrose Fall panicum Foxtail Hop clover Knotweed Oxalis <i>Poa annua</i> Prostrate spurge Purslane	3.6 to 4.8 pts/acre or 1.3 to 1.8 oz/1000 sq ft. Initial application prior to weed germination in spring.	Apply a repeat application of 2.5 to 3.6 pts/acre (1 to 1.3 oz/1000 sq ft) after 5 to 8 weeks for extended control or where heavy weed infestations are expected.
	Goosegrass	Residential² Turf Uses Only: 3.6 to 4.8 pts/acre or 1.3 to 1.8 oz/1000 sq ft. Initial application prior to weed germination in spring. Commercial or Other Non-Residential Turf Uses: 3.6 to 7.2 pts/acre or 1.3 to 2.6 oz/1000 sq ft. Initial application prior to weed germination in spring.	Apply a repeat application of 3.6 pts/acre (1.3 oz/1000 sq ft) if the lower rate was used initially for extended goosegrass control.
	Chickweed Corn speedwell Cudweed Henbit Lawn burweed <i>Poa annua</i>	3.6 to 4.8 pts/acre or 1.3 to 1.8 oz/1000 sq ft.	Apply in late summer or early fall prior to weed germination.
WARM SEASON GRASSES			
Bahagrass Bermudagrass Buffalograss Centipedegrass Fescue, tall <i>Paspalum</i> , seashore St. Augustinegrass Zoysiagrass	Barnyardgrass Crabgrass Evening primrose Fall panicum Foxtail Hop clover Knotweed Oxalis <i>Poa annua</i> Prostrate spurge Purslane	Residential² Turf Uses Only: 3.6 to 4.8 pts/acre or 1.3 to 1.8 oz/1000 sq ft. Initial application prior to weed germination in spring. Commercial or Other Non-Residential Turf Uses: 3.6 to 7.2 pts/acre or 1.3 to 2.6 oz/1000 sq ft. Initial application prior to weed germination in spring.	Apply a repeat application of 2.5 to 3.6 pts/acre (1 to 1.3 oz/1000 sq ft) after 5 to 8 weeks if necessary.
	Goosegrass	3.6 pts/acre or 1.3 oz/1000 sq ft. Apply prior to weed germination in spring. Make a second application 6 to 8 weeks later.	An additional application of 3.6 pts/acre (1.3 oz/1000 sq ft) may be made for extended goosegrass control 8 weeks after the second application.
	Chickweed Corn speedwell Cudweed Henbit Lawn burweed <i>Poa annua</i>	3.6 to 4.8 pts/acre or 1.3 to 1.8 oz/1000 sq ft.	Apply in late summer or early fall prior to weed germination.
¹ DO NOT exceed a maximum of 4.8 pts/acre per application for use on residential turfgrass. DO NOT exceed a maximum of 7.2 pts/acre per application for use on commercial or non-residential turfgrass. ² Residential is defined as turf in any residential situation, as well as schools, parks and playgrounds. The efficacy of Pendulum 3.3 EC will be improved if the application is followed by one-half inch of rainfall or its equivalent in sprinkler irrigation. If Pendulum 3.3 EC is not activated by rainfall or irrigation within 30 days, erratic weed control may result. To prevent establishment of weeds along the edges of lawns, it may be necessary to overlap the spray three to six inches onto sidewalks or driveways, etc., to ensure effective application rates in these especially vulnerable sites. Where temporary discoloration of pavement is to be avoided, rinse immediately to avoid staining.			

ORNAMENTALS

RECOMMENDED SPECIES

Pendulum® 3.3 EC herbicide sprays are safe around and over the top of the established plants listed below. However, not all varieties or strains of the plants listed have been tested. Unintentional consequences, such as crop injury, may result because of certain environmental or growing conditions, manner of use or application. Therefore, before treating a large number of plants, spray a few plants and observe for plant damage prior to full scale application.

DO NOT apply **Pendulum 3.3 EC** in greenhouses, shade-houses or other enclosed structures.

Refer to **APPLICATION RATE TABLE** for rates.

GROUND COVERS	
Common Name	Scientific Name
Ajuga	<i>Ajuga reptans</i>
Capeweed	<i>Arctotheca calendula</i>
Cinquefoil, spring	<i>Potentilla verna</i>
Daisy, trailing African	<i>Osteospermum fruticosum</i>
Gazania	<i>Gazania splendens</i>
Iceplant, large leaf	<i>Carpobrotus edulis</i>
Ivy, English	<i>Hedera helix</i>
Ivy, Geranium	<i>Pelargonium peltatum</i>
Jasmine, Asiatic	<i>Trachelospermum asiaticum</i>
Jasmine, primrose	<i>Jasminum mesnyi</i>
Mondograss	<i>Ophiopogon japonica</i>
Myoporum	<i>Myoporum parvifolium</i>
Pachysandra	<i>Pachysandra terminalis</i>
Potentilla	<i>Potentilla fruticosa</i>
Rose-Of-Sharon	<i>Hypericum calycinum</i>
Wintercreeper	<i>Euonymus fortunei</i>

PERENNIALS

Common Name	Scientific Name
Bleeding heart	<i>Dicentra spectabilis</i>
Calla lily	<i>Zantedeschia aethiopica</i>
Canna, common garden	<i>Canna generalis</i> 'Lucifer'
Chincherinchee	<i>Ornithogalum thyrsoides</i>
Crinum lily	<i>Crinum</i> spp.
Fern, asparagus	<i>Asparagus officinalis</i>
Fern, leatherleaf	<i>Rumohra adiantiformis</i>
Freesia	<i>Freesia x hybrida</i>
Heather, dwarf	<i>Calluna vulgaris</i>
Hosta	<i>Hosta</i> spp.
Lily	<i>Lilium</i> spp.
Liriope, creeping	<i>Liriope spicata</i>
Liriope, variegated	<i>Liriope muscari</i>
Montbretia	<i>Crocasmia crocosmiiflora</i>
Orchid, peacock	<i>Acidanthera bicolor</i>
Peony, Chinese	<i>Paeonia lactiflora</i>
Wisteria	<i>Wisteria</i> spp.
Zephyr lily	<i>Zephyranthes</i> spp.

ORNAMENTAL GRASSES

Common Name	Scientific Name
Beach brass	<i>Ammophila breviligulata</i>
Fescue, blue	<i>Festuca ovina</i>
Fescue, sheep	<i>Festuca ovina</i>
Fountain grass	<i>Pennisetum setaceum</i>
Pampas grass	<i>Cortaderia selloana</i>
Reed canary grass	<i>Phalaris arundinacea</i>
Reed, giant	<i>Arundo</i> spp.
Ribbon grass	<i>Phalaris arundinacea</i>
Tufted hair grass	<i>Deschampsia caespitosa</i>

TREES	
Common Name	Scientific Name
Alder, European black	<i>Alnus glutinosa</i>
Apple	<i>Malus</i> spp.
Arborvitae, American	<i>Thuja occidentalis</i>
Arbutus	<i>Arbutus</i> spp.
Ash, red	<i>Fraxinus pennsylvanica</i>
Ash, white	<i>Fraxinus americana</i>
Aspen, bigtooth	<i>Populus grandidentata</i>
Aspen, quaking	<i>Populus tremuloides</i>
Basswood	<i>Tilia</i> spp.
Birch, European weeping	<i>Betula pendula</i>
Birch, river	<i>Betula nigra</i>
Buckeye, red	<i>Aesculus pavia</i>
Cedar, white	<i>Thuja occidentalis</i>
Chamaecyparis, boulevard	<i>Chamaecyparis pisifera</i>
Cherry, black	<i>Prunus serotina</i>
Cherry, choke	<i>Prunus virginiana</i>
Cherry, Kwanzan	<i>Prunus serrulata</i>
Cherry, Nanking	<i>Prunus tomentosa</i>
Cottonwood	<i>Populus deltoides</i>
Crabapple	<i>Malus</i> spp.
Crepe Myrtle	<i>Lagerstroemia indica</i>
Cryptomeria, Japanese cedar	<i>Cryptomeria japonica</i>
Cypress, bald	<i>Taxodium distichum</i>
Cypress, leyland	<i>Cupressocyparis leylandii</i>
Dogwood, flowering	<i>Cornus florida</i>
Dogwood, Korean	<i>Cornus kousa</i>
Dogwood, shrub	<i>Cornus</i> spp.
Dogwood, silky	<i>Cornus amomum</i>
Elm	<i>Ulmus japonica</i>
Fir, balsam	<i>Abies balsamiae</i>
Fir, Douglas	<i>Pseudotsuga menziesii</i>
Fir, Fraser	<i>Abies fraseri</i>
Fir, white	<i>Abies concolor</i>
Franklinia	<i>Franklinia</i> spp.
Ginkgo	<i>Ginkgo biloba</i>
Gum, black	<i>Nyssa sylvatica</i>
Gum, sour	<i>Nyssa sylvatica</i>
Haw, black	<i>Viburnum prunifolium</i>
Hawthorn	<i>Crataegus</i> spp.
Hemlock, Canada	<i>Tsuga canadensis</i>
Hemlock, Eastern	<i>Tsuga canadensis</i>
Holly, American	<i>Ilex opaca</i>
Honeylocust	<i>Gleditsia triacanthos</i>
Lilac, common	<i>Syringa vulgaris</i>
Lilac, Japanese tree	<i>Syringa reticulata</i>
Linden	<i>Tilia</i> spp.
Magnolia, saucer	<i>Magnolia soulangiana</i>
Magnolia, Southern	<i>Magnolia grandiflora</i>
Magnolia, star	<i>Magnolia stellata</i>
Maidenhair tree	<i>Ginkgo biloba</i>

TREES	
Common Name	Scientific Name
Maple, Japanese	<i>Acer palmatum</i>
Maple, Norway	<i>Acer platanoides</i>
Maple, red	<i>Acer rubrum</i>
Maple, sugar	<i>Acer saccharum</i>
Nannyberry, rusty	<i>Viburnum rufidulum</i>
Oak, Chinquapin	<i>Quercus muehlenbergii</i>
Oak, live	<i>Quercus virginiana</i>
Oak, pin	<i>Quercus palustris</i>
Oak, red	<i>Quercus rubra</i>
Oak, swamp chestnut	<i>Quercus michauxii</i>
Oak, water	<i>Quercus nigra</i>
Oak, white	<i>Quercus alba</i>
Oak, willow	<i>Quercus phellos</i>
Olive	<i>Olea europaea</i>
Palm, date	<i>Phoenix</i> spp.
Palm, fan	<i>Washingtonia</i> spp.
Palm, pindo	<i>Butia</i> spp.
Palm, Washington	<i>Washingtonia</i> spp.
Peach	<i>Prunus persica</i>
Pear, Bradford	<i>Pyrus calleryana</i> 'Bradford'
Pecan	<i>Carya illinoensis</i>
Pine, Austrian	<i>Pinus nigra</i>
Pine, Italian stone	<i>Pinus pinea</i>
Pine, loblolly	<i>Pinus taeda</i>
Pine, Monterey	<i>Pinus radiata</i>
Pine, red	<i>Pinus resinosa</i>
Pine, scotch	<i>Pinus sylvestris</i>
Pine, slash	<i>Pinus elliottii</i>
Pine, Virginia	<i>Pinus virginiana</i>
Pine, white	<i>Pinus strobus</i>
Plum, purple leaf	<i>Prunus cerasifera</i>
Poplar, black	<i>Populus nigra</i>
Redcedar, Eastern	<i>Juniperus virginiana</i>
Redcedar, Western	<i>Thuja plicata</i>
Red ironbark	<i>Eucalyptus sideroxylon</i> 'Rosea'
Redwood, dawn	<i>Metasequoia glyptostroboides</i>
Sequoia, giant	<i>Sequoiadendron giganteum</i>
Serviceberry	<i>Amelanchier laevis</i>
Sourwood	<i>Oxydendrum arboreum</i>
Spruce, Colorado blue	<i>Picea pungens</i>
Spruce, dwarf Alberta	<i>Picea glauca</i> 'albertiana'
Spruce, Norway	<i>Picea abies</i>
Spruce, white	<i>Picea glauca</i>
Sweetgum	<i>Liquidambar styraciflua</i>
Sycamore	<i>Platanus occidentalis</i>
Trachycarpus	<i>Trachycarpus</i> spp.
Tulip Tree	<i>Liriodendron tulipifera</i>
Walnut, black	<i>Juglans nigra</i>
Willow, weeping	<i>Salix babylonica</i>
Yellowwood	<i>Cladrastis lutea</i>

SHRUBS	
Common Name	Scientific Name
Abelia, glossy	<i>Abelia grandiflora</i>
Aucuba, gold	<i>Aucuba japonica</i>
Azalea	<i>Rhododendron</i> spp.
Bamboo, heavenly	<i>Nandina domestica</i>
Barberry	<i>Berberis gladwynensis</i>
Barberry, Japanese	<i>Berberis thunbergii</i>
Blue Indigo bush	<i>Dalea gregii</i>
Bottlebrush, lemon	<i>Callistemon citrinus</i>
Boxwood, common	<i>Buxus sempervirens</i>
Boxwood, Japanese	<i>Buxus microphylla</i>
Camellia	<i>Camellia japonica</i>
Cape Jasmine	<i>Gardenia jasminoides</i>
Cordylone	<i>Cordylone</i> spp.
Correa	<i>Correa</i> spp.
Cotoneaster	<i>Cotoneaster apiculatus</i>
Cotoneaster, bearberry	<i>Cotoneaster dammeri</i>
Cotoneaster, rock	<i>Cotoneaster horizontalis</i>
Cypress, Italian	<i>Cupressus sempervirens</i>
Cypress, leyland	<i>Cupressocyparis leylandii</i>
Deutzia, slender	<i>Deutzia gracilis</i>
Dogwood, red twig	<i>Cornus sericea</i>
Elaeagnus	<i>Elaeagnus ebbingei</i>
Escallonia	<i>Escallonia fradesii</i>
Euonymus	<i>Euonymus fortunei</i>
Euonymus, golden	<i>Euonymus japonica</i>
Euonymus, winged	<i>Euonymus alata</i>
Firethorn	<i>Pyracantha coccinea</i>
Forsythia, border	<i>Forsythia intermedia</i>
Fragrant olive	<i>Osmanthus fragrans</i>
Fuschia, California	<i>Zauschneria californica</i>
Gardenia	<i>Gardenia jasminoides</i>
Hawthorne, Indian	<i>Raphiolepis indica</i>
Hibiscus	<i>Hibiscus syriacus</i>
Holly, Chinese	<i>Ilex cornuta</i>
Holly, Fosters	<i>Ilex attenuata 'Fosteri'</i>
Holly, Japanese	<i>Ilex crenata</i>
Holly, Savannah	<i>Ilex attenuata</i>
Holly, Yaupon	<i>Ilex vomitoria</i>
Honeysuckle, bush	<i>Diervilla lonicera</i>
Juniper	<i>Juniperus</i> spp.
Juniper, Chinese	<i>Juniperus chinensis</i> v. <i>pfitzer</i>
Juniper, shore	<i>Juniperus conferta</i>
Juniper, trailing	<i>Juniperus horizontalis</i>
Laurel, Cherry	<i>Prunus laurocerasus</i>
Laurel, mountain	<i>Kalmia latifolia</i>
Laurel, Otto Luyken	<i>Prunus laurocerasus</i>
Laurel, Schipka	<i>Prunus schipkanensis</i>
Laurustinus	<i>Viburnum tinus</i>
Lavender, English	<i>Lavandula angustifolia</i>
Leucothoe	<i>Leucothoe fontanesiana</i>

SHRUBS	
Common Name	Scientific Name
Leucothoe, coast	<i>Leucothoe axillaris</i>
Lilac, cut-leaf	<i>Syringa laciniata</i>
Lily-of-the-Nile	<i>Agapanthus africanus</i>
Mahonia	<i>Mahonia aquifolium</i>
Mock orange	<i>Pittosporum tobira</i>
Myrtle, compact	<i>Myrtus communis</i>
Myrtle, wax	<i>Myrica cerifera</i>
Nandina	<i>Nandina domestica</i>
Oleander	<i>Nerium oleander</i>
Oregon grape	<i>Mahonia aquifolium</i>
Osmanthus	<i>Osmanthus fragrans</i>
Palm, European fan	<i>Chamaerops humilis</i>
Palm, Mediterranean fan	<i>Chamaerops</i> spp.
Phlox, prickly	<i>Leptodactylon californicum</i>
Photinia, Fraser	<i>Photinia X Fraseri</i>
Pieris, Japanese	<i>Pieris japonica</i>
Pine, Mugo	<i>Pinus mugo</i>
Plum, Natal	<i>Carissa grandiflora</i>
Privet, California	<i>Ligustrum ovalifolium</i>
Privet, glossy	<i>Ligustrum lucidum</i>
Privet, variegated	<i>Ligustrum sinensis</i>
Privet, waxleaf	<i>Ligustrum japonicum</i>
Pyracantha	<i>Pyracantha coccinea</i>
Quince, flowering	<i>Chaenomeles japonica</i>
Ranger, Texas	<i>Leucophyllum frutescens</i>
Redroot	<i>Ceanothus</i> spp.
Rhododendron	<i>Rhododendron</i> spp.
Robira	<i>Pittosporum tobira</i>
Spice plant	<i>Illicium parviflorum</i>
Spiraea	<i>Spiraea vanhouttei</i>
Spiraea, Anthony Waterer	<i>Spiraea X bumalda</i>
Spiraea, Japanese	<i>Spiraea japonica</i>
Sweet bay	<i>Laurus nobilis</i>
Trumpet bush	<i>Tecoma stans</i>
Verbena, lemon	<i>Aloysia triphylla</i>
Viburnum	<i>Viburnum suspensum</i>
Vitex	<i>Vitex</i> spp.
Weigela	<i>Weigela florida</i>
Wild lilac	<i>Ceanothus</i> spp.
Xylosma	<i>Xylosma congestum</i>
Yellowbells	<i>Tecoma stans</i>
Yew*	<i>Taxus media</i>
Yew, Japanese*	<i>Taxus cuspidata</i>
Yew, Southern	<i>Podocarpus macrophyllus</i>
Yucca, Adam's	<i>Yucca filamentosa</i>
Yucca, weeping	<i>Yucca pendula</i>

* Applications should not be made during spring growth or injury to terminals may occur.

ORNAMENTAL INSTRUCTIONS AND RESTRICTIONS ¹	
Site	Application Instructions and Restrictions
Newly transplanted field-grown nursery stock	<ul style="list-style-type: none"> • DO NOT make over-the-top applications at time of field transplanting. Use shielded sprayer until plantings have been established for one (1) year or more in the field. • DO NOT APPLY until transplants have been watered and soil has been thoroughly packed and settled around transplants. Care must be taken to ensure there are no cracks in the soil where Pendulum® 3.3 EC herbicide could come into contact with the roots. • DO NOT APPLY during bud swell, bud break or at time of first flush of new growth. • Direct sprays away from grafted or budded tissue on transplants at all times.
Newly transplanted container-grown nursery stock	<ul style="list-style-type: none"> • DO NOT APPLY until transplants have been watered and soil has been thoroughly packed and settled around transplants. Care must be taken to ensure there are no cracks in the soil where Pendulum 3.3 EC could come into contact with the roots. • For container-grown ornamentals, delay first application of the product to bare-root liners for two (2) to four (4) weeks after transplanting. • DO NOT APPLY during bud swell, bud break or at time of first flush of new growth. • Direct sprays away from grafted or budded tissue on transplants at all times.
Established container, field-grown nursery stock	<ul style="list-style-type: none"> • DO NOT APPLY during bud swell, bud break or at time of first flush of new growth. • Apply as a directed or over-the-top spray. • If newly budded or grafted rootstock, make an application using a shielded sprayer. • Care must be taken to ensure there are no cracks in the soil where Pendulum 3.3 EC could come into contact with the roots.
Landscape plantings	<ul style="list-style-type: none"> • DO NOT APPLY to newly transplanted ornamentals until plants have been watered and soil has been thoroughly packed and settled around roots. • Apply as a directed or over-the-top spray. • It is recommended to use the lowest labeled rate when making applications to annuals. Repeat applications can be made for extended landscape weed control.
Bare ground for container placement	<ul style="list-style-type: none"> • Apply to soil and water in (including mulch, gravel, wood chips, or other permeable base); replace containerized ornamentals onto pad.
Greenhouses, shadehouses or other enclosed structures.	DO NOT APPLY in greenhouses, shadehouses or other enclosed structures.
¹ Plant only those desirable plant species listed on this label into soil treated the previous season with Pendulum 3.3 EC or injury may occur.	

Pendulum® 3.3 EC herbicide 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 to 2 months following treatment for possible injury. To the extent allowed by law, **THE USER ASSUMES RESPONSIBILITY FOR ANY CROP DAMAGE OR OTHER LIABILITY. DO NOT treat plants grown for food or feed. DO NOT use treated plants for food or feed.**

It is recommended that treated plants be evaluated for 1 to 2 months prior to making application to a large number of plants. To the extent allowed by law, **THE USER ASSUMES RESPONSIBILITY FOR ANY CROP DAMAGE OR OTHER LIABILITY.**

ORNAMENTAL TANK MIXES

Emerged weeds in ornamentals can be controlled using tank mixes containing **Roundup Pro®**, **Finale™**, **Ornamec®**, **Gallery™**, **Princep®**, and other similar products. **DO NOT** apply sprays containing **Roundup Pro** or **Finale** over the top of ornamental plants. Before tank mixing, a simple jar test is recommended to insure compatibility of herbicides.

Refer to manufacturer's labels for specific use directions, precautions, and limitations before tank mixing with **Pendulum 3.3 EC**, and follow those that are most restrictive.

LANDSCAPE AND GROUND MAINTENANCE

Pendulum 3.3 EC 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, such as mulch beds, parking areas and roadsides, fencelines and borders, around statuary or monuments, and similar areas, should be free of emerged weeds before application. To remove emerged weeds, either cultivate or tank mix **Pendulum 3.3 EC** with a postemergence product labeled for such use.

Refer to **APPLICATION RATE TABLE** for rates. Avoid unintentional contact of spray solution on stone, wood, or other porous surfaces as staining may occur. Rinse immediately to avoid staining.

NONBEARING FRUIT AND NUT CROPS AND VINEYARDS

Pendulum 3.3 EC may be applied for preemergence control of most annual grasses and certain broadleaf weeds on the following nonbearing crops:

Almond	Citrus	Olive	Pistachio
Apple	Fig	Peach	Plum
Apricot	Grape	Pear	Prune
Cherry	Nectarine	Pecan	Walnut, English

Refer to **APPLICATION RATE TABLE** for rates.

Apply the spray directly to the ground below the trees or vines. 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 3.3 EC** and roots. Directed sprays where soil and media surfaces are uniformly covered will result in best weed control and plant tolerance. For newly transplanted and one-year-old grapevines, apply only when they are dormant.

DO NOT apply if buds have started to swell. **Pendulum 3.3 EC** may be used where the roots of a fruit, vine, nut, or ornamental plant encroach into a treatable area.

NONCROPLAND AREAS INCLUDING TREE PLANTATIONS

Pendulum 3.3 EC is recommended for grounds maintenance in noncropland areas; preemergence control of the weed species listed in and around established tree plantations (including Christmas trees); pulpwood and fiber farms; in and around established ornamentals planted in noncropland areas, such as highway rights-of-way, and utility substations. **Pendulum 3.3 EC** may be used for hardwood and conifer regeneration on conservation reserve program land or similar areas.

Refer to **APPLICATION RATE TABLE** for rates.

Pendulum 3.3 EC may be applied at planting or to established trees. When making an application at planting, it is important that slit closure be achieved to prevent

Pendulum 3.3 EC from directly contacting the tree roots, or being washed into the root zone via the open slit, or root stunting may occur.

For postemergence control of weeds, tank mix combinations of **Pendulum 3.3 EC** plus **Roundup Pro**, **Finale**, or other labeled herbicides are recommended. Refer to approved labeling for species recommendations. Recommended rates for the tank mix compounds should be determined from the product labels of both **Pendulum 3.3 EC** and partner herbicides prior to use. Precaution must be exercised to prevent combination sprays from direct contact with desirable foliage or injury may result. **Pendulum 3.3 EC** plus diuron or simazine combinations will broaden weed control spectrum; however, use of combinations may restrict **Pendulum 3.3 EC** usage in sensitive areas. Refer to manufacturers' labels for specific use directions, precautions, and limitations before use, and follow those that are most restrictive.

TOTAL VEGETATIVE CONTROL

Pendulum 3.3 EC may be tank mixed with **Arsenal®**, **Plateau®**, **Roundup Pro**, **Karmex®**, **Finale**, **Oust®**, diuron, or other products to provide bare ground or total vegetation control. **Pendulum 3.3 EC** can be used to provide greater plant selectivity in areas where such action may be desired. Such sites might have roots of landscape vegetation, ornamentals, or desirable trees encroaching into the treated zone. Refer to tank mix partner labels regarding effects on desirable plants. **DO NOT** tank mix with **Arsenal** in California.

Applications may be made to existing weeds controlled by the partner herbicide. Recommended rates should be determined from the product labels prior to use. Follow the most restrictive label instructions.

For Kochia: Combinations of **Pendulum® 3.3 EC herbicide** with **Arsenal® herbicide** or diuron are recommended if control has been a problem for other herbicides.

APPLICATION RATES

For preemergence control of the weed species listed using broadcast spray equipment, apply **Pendulum 3.3 EC** at the following rates:

Length of Control	Quarts required to treat 1 acre	Ounces required to treat 1000 sq ft
Short Term (2 to 4 months)	2.4	1.8
Long Term (6 to 8 months)	4.8	3.6

Hand-held Spray Equipment: Use the table above to determine the amount of **Pendulum 3.3 EC** to be applied per 1000 square feet. The amount of water used for the application is not critical but should be sufficient for thorough coverage without runoff. Calibration of backpack or other hand-held equipment will vary with each operator. Determine the amount of water needed to treat 1000 square feet before mixing the spray solution. Follow mixing instructions discussed elsewhere on this label.

The efficacy of **Pendulum 3.3 EC** will improve if the application is followed by one-half inch of rainfall or its equivalent in sprinkler irrigation. If **Pendulum 3.3 EC** is not activated by rainfall or irrigation within 30 days, erratic weed control may result.

Pendulum 3.3 EC will not control established weeds.

If weeds should develop prior to activation of herbicide, shallow cultivate to destroy existing weeds or, where practical, remove by hand. When cultivating for any reason, it should be shallow. **Pendulum 3.3 EC** may be used in conjunction with herbicides registered for postemergence use (i.e. **Roundup Pro®** or **Finale®**) for the control of established weeds. **DO NOT** apply sprays containing **Roundup Pro** or **Finale** over the top of desirable plants. A **Pendulum 3.3 EC** treatment may be followed by any registered herbicide to control weeds not listed on the **Pendulum 3.3 EC** label.

WEED SPECIES CONTROLLED

Pendulum 3.3 EC 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	<i>Echinochloa crus-galli</i>
Bluegrass, annual	<i>Poa annua</i>
Crabgrass	<i>Digitaria</i> spp.
Crowfootgrass	<i>Dactyloctenium aegyptium</i>
Foxtail, giant	<i>Setaria faberi</i>
Foxtail, green	<i>Setaria viridis</i>
Foxtail, yellow	<i>Setaria glauca</i>
Goosegrass	<i>Eleusine indica</i>
Itchgrass	<i>Rottboellia exaltata</i>
Johnsongrass (from seed)	<i>Sorghum halepense</i>
Junglerice	<i>Echinochloa colona</i>
Lovegrass (from seed)	<i>Eragrostis</i> spp.
Panicum, browntop	<i>Panicum fasciculatum</i>
Panicum, fall	<i>Panicum dichotomiflorum</i>
Panicum, Texas	<i>Panicum texanum</i>
Sandbur, field	<i>Cenchrus incertus</i>
Signalgrass	<i>Brachiaria platyphylla</i>
Sprangletop, Mexican	<i>Leptochloa uninervia</i>
Sprangletop, red	<i>Leptochloa filiformis</i>
Witchgrass	<i>Panicum capillare</i>
Woolly cupgrass	<i>Eriochloa villosa</i>

BROADLEAF WEEDS CONTROLLED

Common Name	Scientific Name
Burweed, lawn	<i>Soliva pterosperma</i>
Carpetweed	<i>Mollugo verticillata</i>
Chickweed, common	<i>Stellaria media</i>
Chickweed, mouseear	<i>Cerastium vulgatum</i>
Clover, hop	<i>Trifolium procumbens</i>
Cudweed	<i>Gnaphalium</i> spp.
Evening primrose	<i>Oenothera biennis</i>
Fiddleneck	<i>Amsinckia intermedia</i>
Filaree	<i>Erodium</i> spp.
Henbit	<i>Lamium amplexicaule</i>
Knotweed, prostrate	<i>Polygonum aviculare</i>
Kochia	<i>Kochia scoparia</i>
Lambsquarters	<i>Chenopodium album</i>
Pigweed	<i>Amaranthus</i> spp.
Puncturevine	<i>Tribulus terrestris</i>
Purslane	<i>Portulaca oleracea</i>
Pusley, Florida	<i>Richardia scabra</i>
Rocket, London	<i>Sisymbrium irio</i>
Shepherdspurse	<i>Capsella bursa-pastoris</i>
Smartweed, Pennsylvania	<i>Polygonum pennsylvanicum</i>
Speedwell, corn	<i>Veronica arvensis</i>
Spurge, annual	<i>Euphorbia</i> spp.
Spurge, prostrate	<i>Euphorbia humistrata</i>
Woodsorrel, yellow	<i>Oxalis stricta</i>
Velvetleaf (Buttonweed)	<i>Abutilon theophrasti</i>

Conditions of Sale and Warranty

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

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

TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, BASF MAKES NO OTHER EXPRESS OR IMPLIED WARRANTY OF FITNESS OR MERCHANTABILITY OR ANY OTHER EXPRESS OR IMPLIED WARRANTY. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, BUYER'S EXCLUSIVE REMEDY AND BASF'S EXCLUSIVE LIABILITY, WHETHER IN CONTRACT, TORT, NEGLIGENCE, STRICT LIABILITY, OR OTHERWISE, SHALL BE LIMITED TO REPAYMENT OF THE PURCHASE PRICE OF THE PRODUCT. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, BASF AND THE SELLER DISCLAIM ANY LIABILITY FOR CONSEQUENTIAL, SPECIAL OR INDIRECT DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT. BASF and the Seller offer this product, and the Buyer and User accept it, subject to the foregoing **Conditions of Sale and Warranty** which may be varied only by agreement in writing signed by a duly authorized representative of BASF.

1107

***Arsenal**, **Pendulum** and **Plateau** are registered trademarks of BASF.
Acclaim and **Finale** are registered trademarks of Bayer.
Gallery is a registered trademark of Dow AgroSciences LLC.
Karmex and **Oust** are registered trademarks of E.I. duPont de Nemours and Company.
Ornamec and **Trimec** are registered trademarks of PBI Gordon Corporation.
Princep is a registered trademark of a Syngenta Group Company.
Roundup Pro is a registered trademark of Monsanto Technology LLC.
Three-Way is a registered trademark of LESCO Technologies, Inc.*

© 2008 BASF Corporation
 All rights reserved.

000241-00341.20080403.**NVA 2008-04-123-0122**
 Supersedes: NVA 2007-04-123-0013

BASF Corporation
 26 Davis Drive
 Research Triangle Park, NC 27709

 **BASF**
 The Chemical Company