

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

OFFICE OF PREVENTION, PESTICIDES AND TOXIC SUBSTANCES

MAY 1 2009

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

RE: Notification of Alternate Brand Name: Pendulum Granule Herbicide 2G

EPA Registration Number: 241-375 Date of Submission: March 23, 2009

Dear Dr. Birk:

The Agency is in receipt of your Application for Pesticide Notification under Pesticide Registration Notice (PRN) 98-10 dated March 23, 2009, for the product Pendulum 2G Granule Herbicide. The Registration Division (RD) has conducted a review of this request for its applicability under PRN 98-10 and finds that the actions requested fall within the scope of PRN 98-10. The label submitted with the application has been stamped "Notification" and will be placed in our records.

If you have any questions, please call me directly at 703-305-6249 or Joyce Edwards of my staff at 703-308-5479.

Sincerely,

Linda Arrington

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

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Please read instructions on reverse before completing form. Form Approved, OMB No. 2070-0060, Approval ext **OPP Identifier Number** Registration **United States Environmental Protection Agency Amendment** Washington, DC 20460 Other Application for Pesticide - Section I 1. Company/Product Number 2. EPA Product Manager 3. Proposed Classification 241-375 James Tompkins Restricted 4. Company/Product (Name) PM# Pendulum 2G granule herbicide 25 5. Name and Address of Applicant (Include ZIP Code) 6. Expedited Reveiw. In accordance with FIFRA Section 3(c)(3) (b)(i), my product is similar or identical in composition and labeling RASE 26 Davis Drive EPA Reg. No. NOTIFICATION Research Triangle Park, NC 27709 MAY 0 1 2009 Check if this is a new address Product Name Section - II Amendment - Explain below. Final printed labels in repsonse to Agency letter dated "Me Too" Application. Resubmission in response to Agency letter dated \_\_\_\_ Notification - Explain below. Other - Explain below. Explanation: Use additional page(s) if necessary. (For section I and Section II.) Notification to establish Pendulum granule herbicide 2G as an alternate brand name for Pendulum 2G granule herbicide (241-375). This notification is consistent with the provisions of PR Notice 98-10 and EPA regulations at 40 CFR 152.46, and 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 this notification is not consistent with the terms of PR Notice 98-10 and 40 CFR 152.46, 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 jeffrey.birk@basf.com Section - III 1. Material This Product Will Be Packaged In: Unit Packaging Child-Resistant Packaging Water Soluble Packaging 2. Type of Container Metal Yes Yes Yes Plastic No Nο No Glass If "Yes" Unit Packaging wgt. Paper No. per If "Yes" No. per \* Certification must container Package wgt container Other (Specify) be submitted 3. Location of Net Contents Information 4. Size(s) Retail Container 5. Location of Label Directions On labeling, attached to bag Container Lithograph Paper glued Stenciled 6. Manner in Which Lebel is Affixed to Product Other Section - IV 1. Contact Point (Complete items directly below for identification of individual to be contacted, if necessary, to process this application.) Telephone No. (Include Area Code) Name 919-547-2622 Regulatory Manager Jeffrev H. Birk 6. Date Application Certification Received I certify that the statements I have made on this form and all attachments thereto are true, accurate and complete. I acknowledge that any knowlingly false or misleading statement may be punishable by fine or imprisonment or ر (Stamped)هدده both under applicable law. o 3. Title 2. Signature .... 11 Bds ... Regulatory Manager Typed Name 5. Date March 23, 2009 Jeffrey H. Birk



March 23, 2009

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:

Alternate Brand Name for Pendulum® 2G granule herbicide

EPA Reg. No. 241-375

Dear Mr. Tompkins:

BASF is hereby submitting a notification for the creation of an alternate brand name for Pendulum 2G granule herbicide (EPA Reg. No. 241-375).

The alternate brand name is: Pendulum® granule herbicide 2G.

#### Enclosed please find:

Application form 8570-1.

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



# FOR USE IN

Turfgrass, Ornamentals, Landscape or Grounds Maintenance, and Noncropland Areas



Active ingredient		
pendimethalin: N-(1-ethylpropyl)-3. 4-dimethyl-2. 6-	-dinitrobenzenamine	2.0%
Other Ingredients:		_98.0%
Totak		100.0%
(40 lbs contains 0.8 lb of pendimethalm)		
EPA Reg. No. 241-375	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 complete 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 1-200-202-HELP (4257).

Net Contents:

MAY 01 2009





	FIRST AID	
If in eyes	<ul> <li>Hold eyes open and rinse slowly and gently with water for 15 to 20 minutes.</li> <li>Remove contact lenses, if present, after first 5 minutes; then continue rinsing eyes.</li> <li>Call a poison control center or doctor for treatment advice.</li> </ul>	
If on skin or clothing	<ul> <li>Take off contaminated clothing.</li> <li>Rinse skin immediately with plenty of water for 15 to 20 minutes.</li> <li>Call a poison control center or doctor for treatment advice.</li> </ul>	
If swallowed	<ul> <li>Call a poison control center or doctor immediately for treatment advice.</li> <li>Have 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>	
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: 1-800-832-HELP (4357).

#### PRECAUTIONARY STATEMENTS

# HAZARDS TO HUMANS CAUTION

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

#### 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
- 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.

#### **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® granule herbicide 2G** in greenhouses, shadehouses or other enclosed structures.

**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
- Shoes plus socks

#### **NONAGRICULTURAL USE REQUIREMENTS**

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

**DO NOT** enter or allow others to enter the treated area until dusts have settled.

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

#### STORAGE AND DISPOSAL

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

**PESTICIDE STORAGE. DO NOT** store above 120°F. Store in original containers and keep closed. Store in a cool, dry place.

**PESTICIDE DISPOSAL.** Wastes resulting from the use of this product may be disposed of on-site or at an approved waste disposal facility.

#### **CONTAINER DISPOSAL**

(for paper or plastic bags)

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

Observe all cautions and limitations on this label and the labels of products used in combination with **Pendulum® granule herbicide 2G**. The use of **Pendulum 2G** 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 2G** 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 2G** can be used in and around field-, liner-, and container-grown ornamental nurseries; established landscape ornamentals and ornamental gardens; listed groundcovers and bulbs; nonbearing fruit and nut trees; conifer and hardwood seedling nurseries; and for tree plantation site preparation and maintenance.

In addition, **Pendulum 2G** 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.

Use **Pendulum 2G** 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; established wildflower plantings, and other similar areas where weed control is desired.

**Pendulum 2G** 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 2G** 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 2G** will improve if the application is followed by 1/2 inch of rainfall or its equivalent in sprinkler irrigation. If **Pendulum 2G** 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 2G** will not cause injury to desirable plants. Overapplication can result in stand loss, plant injury, or soil residues. Uneven application can decrease weed control or cause plant injury.

Seedling diseases, cold weather, excessive moisture, high soil pH, high soil salt concentration, or drought can weaken seedlings and plants and increase the possibility of plant damage from **Pendulum® granule herbicide 2G**.

**Pendulum 2G** may cause temporary discoloration of treated surfaces. Sweep surface clean immediately to avoid staining.

**Dry Fertilizers. Pendulum 2G** may be mixed with dry fertilizers. When applied as directed, **Pendulum 2G**/dry fertilizer mixtures provide weed control equal to that provided by the same rates of **Pendulum 2G** applied alone.

#### **TURFGRASS**

	APPLICAT	ION RATES FOR TURF WEED C	ONTROL <sup>1</sup>
Turfgrass Species	Weeds	Pendulum 2G Rate	Comments
COOL SEASON GRASS			
Bluegrass, Kentucky Fescue, fine Fescue, tall Ryegrass, perennial	Barnyardgrass Crabgrass Evening primrose Fall panicum Foxtail Hop clover Knotweed Oxalis Poa annua Prostrate spurge Purslane	75 to 100 lbs/acre as the initial application prior to weed germination in the spring.	Apply a repeat application of 51 to 75 lbs/acre after 5 to 8 weeks for extended control or where heavy weed infestations are expected.
	Goosegrass	Residential <sup>2</sup> Turf Uses Only: 75 to 100 lbs/acre in the spring prior to weed germination.	Apply a repeat application of 75 lbs/acre after 5 to 8 weeks if the lower rate was used initially or for extended goosegrass control.
		Industrial and Commercial Turf Uses: 75 to 150 lbs/acre in the spring prior to weed germination.	
	Chickweed Corn speedwell Cudweed Henbit Lawn burweed Poa annua	75 to 100 lbs/acre	Apply in late summer or early fall prior to weed germination.
Bentgrass or established Poa annua³ (1/2-inch height or taller)	Barnyardgrass Crabgrass Evening primrose Fall panicum Foxtail Hop clover Knotweed Oxalis Poa annua Prostrate spurge Purslane	75 lbs/acre in the spring prior to weed germination.	Apply a repeat application of 51 to 75 lbs/acre after 5 to 8 weeks where heavy weed infestations are expected.
	Goosegrass	75 lbs/acre in the spring prior to weed germination. Apply a repeat application of 75 lbs/acre after 5 to 8 weeks.	
	Chickweed Corn speedwell Cudweed Henbit Lawn burweed Poa annua	75 to 100 lbs/acre	Apply in late summer or early fall prior to weed germination.

#### **TURFGRASS**

APPLICATION RATES FOR TURF WEED CONTROL <sup>1</sup> (continued)				
Turfgrass Species Weeds Pendulum® granule Comments herbicide 2G Rate				
WARM SEASON GRASS	-			
Bahiagrass Bermudagrass Buffalograss	Barnyardgrass Crabgrass Evening primrose	Residential <sup>2</sup> Turf Uses Only: 75 to 100 lbs/acre in the spring prior to weed germination.	Apply a repeat application of 51 to 75 lbs/acre after 5 to 8 weeks if necessary.	
Centipedegrass Fescue, tall Paspalum, seashore St. Augustinegrass Zoysiagrass	Fall panicum Foxtail Hop clover Knotweed Oxalis Poa annua Prostrate spurge Purslane	Industrial and Commercial Turf Uses: 75 to 150 lbs/acre in the spring prior to weed germination.		
	Goosegrass	75 lbs/acre prior to weed germination in the spring. Apply a repeat application of 75 to 100 lbs/acre after 5 to 8 weeks.	An additional application of 75 lbs/acre may be applied for extended goosegrass control 8 weeks after the second application.	
	Chickweed Corn speedwell Cudweed Henbit Lawn burweed Poa annua	75 to 100 lbs/acre	Apply in late summer or early fall prior to weed germination.	

DO NOT exceed a maximum rate of 100 pounds per acre per application for use on residential turfgrass.

The efficacy of **Pendulum 2G** will be improved if the application is followed by 1/2 inch of rainfall or its equivalent in sprinkler irrigation. If **Pendulum 2G** is not activated by rainfall or irrigation within 30 days, erratic weed control may result.

**Pendulum 2G** can be applied before or after postemergence herbicides used to control emerged weeds in turfgrass. 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.

#### **TURFGRASS PRECAUTIONS**

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

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

**DO NOT** use on bentgrass or *Poa annua* greens and tees or injury may occur.

Delay reseeding or winter overseeding of treated turfgrass for at least 3 months following the last **Pendulum 2G** application. Delay sprigging turfgrass for 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 2G** will control annual grasses and broadleaf weeds mentioned in that section

of this label as well as the following weeds that might germinate in established grass in rights-of-way, roadsides, construction sites, parks, substations, lots, or similar areas:

crowfootgrass, itchgrass, johnsongrass (from seed), junglerice, lovegrass (from seed), browntop panicum, Texas panicum, field sandbur, signalgrass, Mexican sprangletop, red sprangletop, witchgrass, woolly cupgrass, carpetweed, fiddleneck, filaree, kochia, lambsquarters, pigweed, puncturevine, Florida pusley, London rocket, shepherdspurse, Pennsylvania smartweed, annual spurge, and velvetleaf.

**Apply before weeds germinate.** Use postemergence herbicide such as 2,4-D, MSMA, or similar product to control established weeds.

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

<sup>&</sup>lt;sup>3</sup> Not for use on bentgrass or *Poa annua* greens or tees.



#### APPLICATION INSTRUCTIONS FOR PENDULUM® GRANULE HERBICIDE 2G

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

Avoid application when winds may cause drift.

Avoid unintentional contact of granules with driveways, stone, wood or other porous surfaces. Sweep immediately to avoid staining. If granules are crushed into surface, rinse thoroughly.

#### SUGGESTED SPREADER SETTINGS FOR TURF

To provide proper distribution, calibrate your spreader before application. 25 lbs treats 11,000 sq ft (1/4 acre) at the 100 lbs product per acre rate.

Spreader		Ground or PTO Speed	Width of Coverage (ft)	Rate Range (lbs of product per acre)		
		(mph)		75	100	150
Lesco Rotary				С	D	F
Scott Rotaries	R-7, R-7X	3	8	B 1/2	D	E 1/2
	R-8, R-8A, SR-1 (cone 9)	3	9	H 1/2	I	J 1/2
Lely Models	(see below)	4.5	18	3 1/4 III	3 1/2 111	4 1/2
Vicon	(Model 02)	4.5	18	12	16	20
	(Model 03)	4.5	10	9	10	13

## **ORNAMENTALS**

**Pendulum® granule herbicide 2G** is safe around and over the top of the established plants listed below. Refer to **APPLICATION RATE TABLE** for rates.

TREES		
Common Name	Scientific Name	
Alder, European black	Alnus glutinosa	
Apple	Maius spp.	
Arborvitae, American	Thuja occidentalis	
Arbutus	Arbutus spp.	
Ash, red	Fraxinus pennsylvanica	
Ash, white	Fraxinus americana	
Aspen, bigtooth	Populus grandidentata	
Aspen, quaking	Populus tremuloides	
Basswood	Tilia spp.	
Birch, European weeping	Betula pendula	
Birch, river	Betula nigra	
Buckeye, red	Aesculus pavia	
Cedar, white	Thuja occidentalis	
Chamaecyparis, boulevard	Chamaecyparis pisifera	
Cherry, black	Prunus serotina	
Cherry, choke	Prunus virginiana	
Cherry, Kwanzan	Prunus serrulata	
Cherry, Nanking	Prunus tomentosa	
Cottonwood	Populus deltoides	
Crabapple	Malus spp.	
Crepe myrtle	Lagerstroemia indica	
Cryptomeria, Japanese cedar	Cryptomeria japonica	
Cypress, bald	Taxodium distichum	
Cypress, Leyland	Cupressocyparis leylandii	
Dogwood, flowering	Cornus florida	
Dogwood, Korean	Cornus kousa	
Dogwood, shrub	Cornus spp.	
Dogwood, silky	Cornus amomum	
Elm	Ulmus japonica	
Fir, balsam	Abies balsamae	
Fir, Douglas	Pseudotsuga menziesii	
Fir, Fraser	Abies fraseri	
Fir, white	Abies concolor	
Franklinia	Franklinia spp.	
Ginkgo	Ginkgo biloba	
Gum, black	Nyssa sylvatica	
Gum, sour	Nyssa sylvatica	
Haw, black	Viburnum prunifolium	
Hawthorn	Crataegus spp.	
Hemlock, Canada	Tsuga canadensis	
Hemlock, Eastern	Tsuga canadensis	
Holly, American	Ilex opaca	
Honeylocust	Gleditsia triacanthos	
Lilac, common	Syringa vulgaris	
Lilac, Japanese tree	Syringa reticulata	
Linden	Tilia spp.	
Magnolia, saucer	Magnolia soulangiana	
Magnolia, Southern	Magnolia grandiflora	
Magnolia, star	Magnolia stellata	
Maidenhair tree	Ginkgo biloba	
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TREES (continued)		
Common Name	Scientific Name	
Maple, Japanese	Acer palmatum	
Maple, Norway	Acer platanoides	
Maple, paper-bark	Acer griseum	
Maple, red	Acer rubrum	
Maple, sugar	Acer saccharum	
Nannyberry, rusty	Viburnum rufidulum	
Oak, chinquapin	Quercus muehlenbergii	
Oak, live	Quercus virginiana	
Oak, pin	Quercus palustris	
Oak, red	Quercus rubra	
Oak, swamp chestnut	Quercus michauxii	
Oak, water	Quercus nigra	
Oak, white	Quercus alba	
Oak, willow	Quercus phellos	
Olive	Olea europaea	
Palm, date	Phoenix spp.	
Palm, fan	Washingtonia spp.	
Palm, pindo	Butia spp.	
Palm, Washington	Washingtonia spp.	
Peach	Prunus persica	
Pear, Bradford	Pyrus calleryana 'Bradford'	
Pecan	Carya illinoensis	
Pine, Austrian	Pinus nigra	
Pine, Italian stone	Pinus pinea	
Pine, loblolly	Pinus taeda	
Pine, Monterey	Pinus radiata	
Pine, red	Pinus resinosa	
Pine, Scotch	Pinus sylvestris	
Pine, Virginia	Pinus virginiana	
Pine, white	Pinus strobus	
Plum, purple leaf	Prunus cerasifera	
Poplar, black	Populus nigra	
Redcedar, Eastern	Juniperus virginiana	
Redcedar, Western	Thuja plicata	
Red ironbark	Eucalyptus sideroxylon 'Rosea'	
Redwood, dawn	Metasequoia glyptostroboides	
Seguoia, giant	Sequoiadendron giganteum	
Serviceberry	Amelanchier laevis	
Sourwood	Oxydendrum arboreum	
Spruce, Colorado blue	Picea pungens	
Spruce, dwarf Alberta	Picea glauca 'Albertiana'	
Spruce, Norway	Picea abies	
Spruce, white	Picea glauca	
Sweetgum	Liquidambar styraciflua	
	Platanus occidentalis	
Sycamore		
Trachycarpus Tulio trop	Trachycarpus spp.	
Tulip tree	Liriodendron tulipifera	
Walnut, black	Juglans nigra	
Willow, weeping	Salix babylonica	
Yellowwood	Cladrastis lutea	

**Pendulum® granule herbicide 2G** is safe around and over the top of the established plants listed below. Refer to **APPLICATION RATE TABLE** for rates.

SHRUBS		
Common Name	Scientific Name	
Abelia, glossy	Abelia grandiflora	
Althaea	Hibiscus syriacus	
Aucuba, gold	Aucuba japonica	
Azalea	Rhododendron spp.	
Bamboo, heavenly	Nandina domestica	
Barberry	Berberis gladwynensis	
Barberry, Japanese	Berberis thunbergii	
Blue indígo bush	Dalea gregii	
Bottlebrush, lemon	Callistemon citrinus	
Boxwood, common	Buxus sempervirens	
Boxwood, Japanese	Buxus microphylla	
Brittlebush	Encelia farinosa	
Buttonbush	Cephalanthus occidentalis	
Butterfly bush	Buddleia davidii	
Camellia	Camellia japonica	
Cape jasmine	Gardenia jasminoides	
Cassia, feathery	Cassia artemisioides	
Cordyline	Cordyline spp.	
Correa	Correa spp.	
Cotoneaster	Cotoneaster apiculatus	
Cotoneaster, bearberry	Cotoneaster dammeri	
Cotoneaster, rock	Cotoneaster horizontalis	
Cypress, Italian	Cupressus sempervirens	
Cypress, Leyland	Cupressocyparis leylandii	
Deutzia, slender	Deutzia gracilis	
Dogwood, red twig	Cornus sericea	
Elaeagnus	Elaeagnus ebbingei	
Escallonia	Escallonia fradesii	
Euonymus	Euonymus fortunei	
Euonymus, golden	Euonymus japonica	
Euonymus, winged	Euonymus alata	
Firethorn	Pyracantha coccinea	
Forsythia, border	Forsythia intermedia	
Fragrant olive	Osmanthus fragrans	
Fuschia, California	Zauschineria californica	
Gardenia	Gardenia jasminoides	
Hawthorne, Indian	Raphiolepis indica	
Hibiscus	Hibiscus syriacus	
Holly, Chinese	llex cornuta	
Holly, Foster's	llex attenuata 'Fosteri'	
Holly, Japanese	llex crenata	
Holly, Savannah	llex attenuata	
Holly, yaupon	llex vomitoria	
Honeysuckle, bush	Diervilla Ionicera	
Hopbush	Dodonaea viscosa	
Hopseed bush	Dodonaea viscosa	
Hydrangea	Hydrangea macrophylla	
Juniper	Juniperus spp.	
Juniper, Chinese	Juniperus spp.  Juniperus chinensis v. pfitzer	
Juniper, shore	Juniperus conferta	
	<del></del>	
Juniper, trailing	Juniperus horizontalis	
Laurel, cherry	Prunus laurocerasus	
Laurel, mountain	Kalmia latifolia	
Laurel, Otto Luyken	Prunus laurocerasus	

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

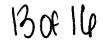


**Pendulum® granule herbicide 2G** is safe around and over the top of the established plants listed below. Refer to **APPLICATION RATE TABLE** for rates.

Ajuga Ajuga reptans Baby sun rose Aptenia cordifolia Beach strawberry Fragaria chiloensis Capeweed Arctotheca calendula Cinquefoli, spring Potentilla verna Baccharis pitularis Daisy, trailing African Osteospermum fruticosum Dymondia Dymondia margaretae Gazania Gazania splendens Iceplant, large leaf Carpobrotus edulis Ivy, English Hedera helix Ivy, geranium Pelargonium peltatum Jasmine, Asiatic Trachelospermum asiaticum Jasmine, Carolina Gelsemium sempervirens Manzanita, bearberry Arctostaphylos uva-ursi Miscanthus Miscanthus spp. Mondograss Ophiopogon japonica Morningglory Convolvulus spp. Myoporum Myoporum parviflolium Pachysandra Pachysandra terminalis Potentilla Potentilla fruticosa Red apple Aptenia cordifolia Rosemary Rosemarinus officinalis Rose-of-Sharon Hibiscus syriacus L. St. Johnswort, creeping Hypericum calycinum Stonecrop Sedum spurium Verbena, Peruvian Verbena peruviana Verbena peruviana Verbena peruviana Verbena peruviana Vinca Winca minor	GROUND COVERS		
Baby sun rose Bach strawberry Fragaria chiloensis Capeweed Arctotheca calendula Cinquefoil, spring Potentilla verna Baccharis pitularis Daisy, trailing African Dymondia Dymondia margaretae Gazania Gazania Gazania splendens Iceplant, large leaf Ivy, English Ivy, geranium Jasmine, Asiatic Jasmine, Carolina Manzanita, bearberry Miscanthus Mondograss Morningglory Myoporum Pachysandra Petary Rosemary Rosemary Rosemary Rosemary Rosemary Rosemore Royena, Peruvian Verbena, Peruvian Verbena, Peruvian Petativa Rosemory R	Common Name	Scientific Name	
Beach strawberry Capeweed Arctotheca calendula Cinquefoil, spring Potentilla verna Baccharis pitularis Daisy, trailing African Dymondia Dymondia Margaretae Gazania Gazania Gelsenium Pelargonium peltatum Dyssamine, Asiatic Dessamine, Carolina Manzanita, bearberry Miscanthus Morningglory Myoporum Pachysandra Petentilla Petentilla Potentilla Potentilla Potentilla Potentilla Potensore St. Johnswort, creeping Pacyvaria Verbena, Peruvian Vinca Vinca Palasy, trailing African Dymondia Baccharis pitularis Baccharis pitularis Dascharis pitularis Baccharis Baccharis pitularis Baccharis Bacharis Baccharis Bacch	Ajuga	Ajuga reptans	
Capeweed Arctotheca calendula Cinquefoil, spring Potentilla verna Baccharis pitularis Daisy, trailing African Osteospermum fruticosum Dymondia Dymondia margaretae Gazania Gazania Gazania splendens Ideeplant, large leaf Carpobrotus edulis Ivy, English Hedera helix Ivy, geranium Pelargonium peltatum Jasmine, Asiatic Trachelospermum asiaticum Jasmine, Carolina Gelsemium sempervirens Manzanita, bearberry Arctostaphylos uva-ursi Miscanthus Miscanthus spp. Mondograss Ophiopogon japonica Morningglory Convolvulus spp. Myoporum Myoporum parviflolium Pachysandra Pachysandra terminalis Potentilla Potentilla fruticosa Red apple Aptenia cordifolia Rosemary Rosemarinus officinalis Rose-of-Sharon Hibiscus syriacus L. Hypericum calycinum Stonecrop Sedum spurium Verbena, Peruvian Verbena peruviana Vervain Verbena peruviana Vinca minor	Baby sun rose	Aptenia cordifolia	
Cinquefoil, spring Potentilla verna Baccharis pitularis Daisy, trailing African Dymondia Dymondia Dymondia margaretae Gazania Gazania Gazania splendens Ideeplant, large leaf Vary, English Wy, English Hedera helix Wy, geranium Jasmine, Asiatic Jasmine, primrose Jasmine, Carolina Manzanita, bearberry Miscanthus Miscanthus Miscanthus Morningglory Moyoporum Pachysandra Pederalia Rosemary Rosemary Rosemary Rosemary Rosemarinus Sedum Seruvian Verbena Vinca minor  Vicia sativa Vinca minor	Beach strawberry	Fragaria chiloensis	
Coyotebrush, dwarf Daisy, trailing African Dymondia Dymondia margaretae Gazania Gazania Gazania Gazania Gazania splendens Iceplant, large leaf Ivy, English Ivy, geranium Jasmine, Asiatic Jasmine, Carolina Manzanita, bearberry Miscanthus Mondograss Morningglory Myoporum Pachysandra Potentilla Red apple Rosemary Rose-of-Sharon Stonecrop Verbena, Peruvian Vinca Vinca Miscantiva  Baccharis pitularis Daschyandia margaretae  Gatania pymondia margaretae  Gazania splendens  Carpobrotus edulis  Hedera helix  Larchelospermum asiaticum  Jasmine, Carolina Redera helix  Irrachelospermum asiaticum  Jasminum mesnyi  Gelsemium sempervirens  Arctostaphylos uva-ursi  Miscanthus spp.  Miscanthus spp.  Miscanthus spp.  Myoporum parviflolium  Pachysandra terminalis  Potentilla fruticosa  Aptenia cordifolia  Rosemarinus officinalis  Hibiscus syriacus L.  Hypericum calycinum  Sedum spurium  Sedum spurium  Verbena peruviana  Verbena peruviana  Verbena peruviana  Vicia sativa  Vinca minor	Capeweed	Arctotheca calendula	
Daisy, trailing African Dymondia Dymondia Dymondia margaretae Gazania Gazania Gazania splendens Iceplant, large leaf Ivy, English Ivy, English Ivy, English Ivy, geranium Jasmine, Asiatic Jasmine, primrose Jasminum mesnyi Jessamine, Carolina Manzanita, bearberry Miscanthus Mondograss Morningglory Myoporum Pachysandra Pedaysandra terminalis Potentilla Rosemary Rosemary Rosemarinus Stonecrop Verbena, Peruvian Vinca Vinca Vinca minor  Varbena peruviana Verbena peruviana Verbena peruviana Verbena peruviana Vinca Vinca Wiiscamino  Carpobrotus edulis Algania splendens Gazania splendens Ga	Cinquefoil, spring	Potentilla verna	
Dymondia Dymondia margaretae Gazania Gazania Gazania splendens Ideeplant, large leaf Carpobrotus edulis Ivy, English Hedera helix Ivy, geranium Pelargonium peltatum Jasmine, Asiatic Trachelospermum asiaticum Jasmine, primrose Jasminum mesnyi Jessamine, Carolina Gelsemium sempervirens Manzanita, bearberry Arctostaphylos uva-ursi Miscanthus Miscanthus spp. Mondograss Ophiopogon japonica Morningglory Convolvulus spp. Myoporum Myoporum parviflolium Pachysandra Pachysandra terminalis Potentilla Potentilla fruticosa Red apple Aptenia cordifolia Rosemary Rosemarinus officinalis Rose-of-Sharon Hibiscus syriacus L. St. Johnswort, creeping Hypericum calycinum Stonecrop Sedum spurium Stonecrop Sedum spurium Verbena, Peruvian Verbena peruviana Vetch, crown Vicia sativa Vinca Vinca minor	Coyotebrush, dwarf	Baccharis pitularis	
Gazania Gazania splendens Iceplant, large leaf Carpobrotus edulis Ivy, English Hedera helix Ivy, geranium Pelargonium peltatum Jasmine, Asiatic Trachelospermum asiaticum Jasmine, primrose Jasminum mesnyi Jessamine, Carolina Gelsemium sempervirens Manzanita, bearberry Arctostaphylos uva-ursi Miscanthus Miscanthus spp. Mondograss Ophiopogon japonica Morningglory Convolvulus spp. Myoporum Myoporum parviflolium Pachysandra Pachysandra terminalis Potentilla Potentilla fruticosa Red apple Aptenia cordifolia Rosemary Rosemarinus officinalis Rose-of-Sharon Hibiscus syriacus L. St. Johnswort, creeping Hypericum calycinum Sedum Sedum spurium Stonecrop Sedum spurium Verbena, Peruvian Verbena peruviana Verbena peruviana Verbena peruviana Verca minor	Daisy, trailing African	Osteospermum fruticosum	
Iceplant, large leaf Ivy, English Ivy, English Ivy, geranium Pelargonium peltatum Jasmine, Asiatic Jasmine, primrose Jasmine, primrose Jasmine, Carolina Gelsemium sempervirens Manzanita, bearberry Miscanthus Mondograss Ophiopogon japonica Morningglory Convolvulus spp. Myoporum Pachysandra Pachysandra Pachysandra Petentilla Potentilla Rosemary Rosemary Rosemarinus officinalis Rose-of-Sharon Hibiscus syriacus L. St. Johnswort, creeping Sedum Sedum Sedum spurium Verbena, Peruvian Verbena peruviana Verbena peruviana Vinca Vinca minor	Dymondia	Dymondia margaretae	
lvy, English Ivy, geranium Pelargonium peltatum Jasmine, Asiatic Jasmine, primrose Jasmine, Carolina Manzanita, bearberry Miscanthus Mondograss Morningglory Myoporum Pachysandra Potentilla Potentilla Rosemary Rose-of-Sharon St. Johnswort, creeping Stonecrop Verbena, Peruvian Verbena, Peruvian Vinca Jasminum peltatum Pelargonium peltatum Jasminum penvirium Jasminum sempervirens Arctostaphylos uva-ursi Miscanthus spp. Miscanthus spp. Miscanthus spp. Myoporum parviflolium Pachysandra terminalis Potentilla fruticosa Red apple Aptenia cordifolia Rosemarinus officinalis Hibiscus syriacus L. Hypericum calycinum Sedum spurium Verbena peruviana Verbena peruviana Verbena peruviana Vinca minor	Gazania	Gazania splendens	
Ny, geranium  Pelargonium peltatum  Jasmine, Asiatic  Trachelospermum asiaticum  Jasmine, primrose  Jasminum mesnyi  Jessamine, Carolina  Manzanita, bearberry  Miscanthus  Miscanthus  Mondograss  Morningglory  Myoporum  Pachysandra  Pachysandra  Potentilla  Potentilla  Rosemary  Rosemarinus officinalis  Rose-of-Sharon  St. Johnswort, creeping  Sedum Sedum spurium  Verbena, Peruvian  Verbena peruviana  Vinca  Vinca minor	Iceplant, large leaf	Carpobrotus edulis	
Jasmine, Asiatic  Jasmine, primrose  Jasmine, primrose  Jasmine, Carolina  Manzanita, bearberry  Miscanthus  Mondograss  Morningglory  Myoporum  Pachysandra  Pedentilla  Rosemary  Rosemary  Rosemary  Rosemary  Rosemary  Rosemary  Stonecrop  Verbena, Peruvian  Verbena, Peruviana  Vervain  Manzanita, bearberry  Arctostaphylos uva-ursi  Arctostaphylos uva-ursi  Miscanthus spp.  Aptenstaphylos uva-ursi  Miscanthus spp.  Aptenstaphylos uva-ursi  Arctostaphylos uva-ursi  Miscanthus spp.  Ophiopogon japonica  Convolvulus spp.  Myoporum parviflolium  Pachysandra terminalis  Potentilla fruticosa  Aptenia cordifolia  Rosemary  Rosemarinus officinalis  Hibiscus syriacus L.  Hypericum calycinum  Fragaria chiloensis  Sedum spurium  Verbena peruviana  Verbena peruviana  Verbena peruviana  Vicia sativa  Vinca minor	Ivy, English	Hedera helix	
Jasmine, primrose Jasmine, Carolina Gelsemium sempervirens Manzanita, bearberry Arctostaphylos uva-ursi Miscanthus Miscanthus Miscanthus spp. Mondograss Ophiopogon japonica Convolvulus spp. Myoporum parviflolium Pachysandra Pachysandra terminalis Potentilla Potentilla fruticosa Red apple Aptenia cordifolia Rosemary Rosemarinus officinalis Rose-of-Sharon Hibiscus syriacus L. St. Johnswort, creeping Hypericum calycinum Stonecrop Sedum Sedum spurium Verbena, Peruvian Verbena peruviana Vetch, crown Vinca Vinca minor	Ivy, geranium	Pelargonium peltatum	
Jessamine, Carolina  Manzanita, bearberry  Arctostaphylos uva-ursi  Miscanthus  Miscanthus spp.  Mondograss  Ophiopogon japonica  Morningglory  Convolvulus spp.  Myoporum parviflolium  Pachysandra Pachysandra terminalis  Potentilla Potentilla fruticosa  Red apple  Aptenia cordifolia  Rosemary  Rosemarinus officinalis  Rose-of-Sharon  Hibiscus syriacus L.  St. Johnswort, creeping  Hypericum calycinum  Sand strawberry  Fragaria chiloensis  Sedum Spurium  Stonecrop  Verbena, Peruvian  Verbena peruviana  Verch, crown  Vinca  Vinca minor	Jasmine, Asiatic	Trachelospermum asiaticum	
Manzanita, bearberry  Miscanthus  Miscanthus spp.  Mondograss  Ophiopogon japonica  Morningglory  Convolvulus spp.  Myoporum parviflolium  Pachysandra terminalis  Potentilla Potentilla fruticosa  Red apple  Rosemary  Rosemarinus officinalis  Rose-of-Sharon  Hibiscus syriacus L.  St. Johnswort, creeping  Hypericum calycinum  Sand strawberry  Fragaria chiloensis  Sedum Sedum spurium  Stonecrop  Sedum spurium  Verbena, Peruvian  Verbena peruviana  Vetch, crown  Vinca  Vinca minor	Jasmine, primrose	Jasminum mesnyi	
Miscanthus  Miscanthus spp.  Mondograss  Ophiopogon japonica  Morningglory  Convolvulus spp.  Myoporum  Pachysandra  Pachysandra terminalis  Potentilla  Potentilla fruticosa  Red apple  Aptenia cordifolia  Rosemary  Rose-of-Sharon  Hibiscus syriacus L.  St. Johnswort, creeping  Hypericum calycinum  Sand strawberry  Fragaria chiloensis  Sedum spurium  Stonecrop  Verbena, Peruvian  Verbena peruviana  Verbana peruviana  Vetch, crown  Vinca  Vinca minor	Jessamine, Carolina	Gelsemium sempervirens	
Mondograss  Ophiopogon japonica  Morningglory  Convolvulus spp.  Myoporum  Pachysandra  Pachysandra terminalis  Potentilla  Potentilla fruticosa  Red apple  Aptenia cordifolia  Rosemary  Rosemarinus officinalis  Rose-of-Sharon  Hibiscus syriacus L.  St. Johnswort, creeping  Hypericum calycinum  Sand strawberry  Fragaria chiloensis  Sedum spurium  Stonecrop  Sedum spurium  Verbena, Peruvian  Verbena peruviana  Verbena peruviana  Vetch, crown  Vinca  Vinca minor	Manzanita, bearberry	Arctostaphylos uva-ursi	
Morningglory  Myoporum  Myoporum parviflolium  Pachysandra  Potentilla  Potentilla  Rosemary  Rosemarinus officinalis  Rose-of-Sharon  St. Johnswort, creeping  Hypericum calycinum  Sand strawberry  Fragaria chiloensis  Sedum Sedum spurium  Stonecrop  Verbena, Peruvian  Verbena peruviana  Verch, crown  Vinca  Myoporum parviflolium  Rosendiralis  Rose-of-fila  Rosemarinus officinalis  Rose-of-Sharon  Hibiscus syriacus L.  Hypericum calycinum  Fragaria chiloensis  Sedum spurium  Verbena peruviana  Verbena peruviana  Verbena peruviana	Miscanthus	Miscanthus spp.	
Myoporum Myoporum parviflolium Pachysandra Pachysandra terminalis Potentilla Potentilla fruticosa Red apple Aptenia cordifolia Rosemary Rosemarinus officinalis Rose-of-Sharon Hibiscus syriacus L. St. Johnswort, creeping Hypericum calycinum Sand strawberry Fragaria chiloensis Sedum Sedum spurium Stonecrop Sedum spurium Verbena, Peruvian Verbena peruviana Vervain Vicia sativa Vinca Vinca minor	Mondograss	Ophiopogon japonica	
Pachysandra Pachysandra terminalis Potentilla Potentilla fruticosa Red apple Aptenia cordifolia Rosemary Rosemarinus officinalis Rose-of-Sharon Hibiscus syriacus L. St. Johnswort, creeping Hypericum calycinum Sand strawberry Fragaria chiloensis Sedum Sedum spurium Stonecrop Sedum spurium Verbena, Peruvian Verbena peruviana Vervain Verbena peruviana Vetch, crown Vicia sativa Vinca Vinca minor	Morningglory	Convolvulus spp.	
Potentilla Potentilla fruticosa Red apple Aptenia cordifolia Rosemary Rosemarinus officinalis Rose-of-Sharon Hibiscus syriacus L. St. Johnswort, creeping Hypericum calycinum Sand strawberry Fragaria chiloensis Sedum Sedum spurium Stonecrop Sedum spurium Verbena, Peruvian Verbena peruviana Vervain Verbena peruviana Vetch, crown Vicia sativa Vinca Vinca minor	Myoporum	Myoporum parviflolium	
Red apple  Rosemary  Rosemarinus officinalis  Rose-of-Sharon  Hibiscus syriacus L.  St. Johnswort, creeping  Hypericum calycinum  Sand strawberry  Fragaria chiloensis  Sedum  Sedum spurium  Stonecrop  Sedum spurium  Verbena, Peruvian  Verbena peruviana	Pachysandra	Pachysandra terminalis	
Rosemary Rosemary Rosemarinus officinalis Rose-of-Sharon Hibiscus syriacus L. St. Johnswort, creeping Hypericum calycinum Sand strawberry Fragaria chiloensis Sedum Sedum spurium Stonecrop Sedum spurium Verbena, Peruvian Verbena peruviana Vervain Verbena peruviana Vetch, crown Vicia sativa Vinca Vinca minor	Potentilla	Potentilla fruticosa	
Rose-of-Sharon  Hibiscus syriacus L.  St. Johnswort, creeping  Hypericum calycinum  Sand strawberry  Fragaria chiloensis  Sedum Spurium  Stonecrop  Sedum spurium  Verbena, Peruvian  Verbena peruviana  Verbena peruviana  Verben, crown  Vicia sativa  Vinca minor	Red apple	Aptenia cordifolia	
St. Johnswort, creeping Hypericum calycinum Sand strawberry Fragaria chiloensis Sedum Sedum spurium Stonecrop Sedum spurium Verbena, Peruvian Verbena peruviana Vervain Verbena peruviana Vetch, crown Vicia sativa Vinca Vinca minor	Rosemary	Rosemarinus officinalis	
Sand strawberry  Fragaria chiloensis  Sedum  Sedum spurium  Stonecrop  Sedum spurium  Verbena, Peruvian  Verbena peruviana  Vervain  Verbena peruviana  Verbena peruviana  Vicia sativa  Vinca  Vinca minor	Rose-of-Sharon	Hibiscus syriacus L.	
Sedum Sedum spurium Stonecrop Sedum spurium Verbena, Peruvian Verbena peruviana Vervain Verbena peruviana Vetch, crown Vicia sativa Vinca Vinca minor	St. Johnswort, creeping	Hypericum calycinum	
Stonecrop  Sedum spurium  Verbena, Peruvian  Vervain  Verbena peruviana  Verbena peruviana  Vetch, crown  Vicia sativa  Vinca  Vinca minor	Sand strawberry	Fragaria chiloensis	
Verbena, Peruvian     Verbena peruviana       Vervain     Verbena peruviana       Vetch, crown     Vicia sativa       Vinca     Vinca minor	Sedum	Sedum spurium	
Vervain     Verbena peruviana       Vetch, crown     Vicia sativa       Vinca     Vinca minor	Stonecrop	Sedum spurium	
Vetch, crown Vicia sativa Vinca Vinca minor	Verbena, Peruvian	Verbena peruviana	
Vinca Vinca minor	Vervain	Verbena peruviana	
	Vetch, crown	Vicia sativa	
Wintercreeper Euonymous fortunei	Vinca	Vinca minor	
	Wintercreeper	Euonymous fortunei	

F	PERENNIALS		
Common Name Scientific Name			
Acacia	Acacia redolens		
Alumroot <sup>1</sup>	Heuchera sanguinea		
Asparagus	Asparagus spp.		
Aster, New York	Aster novi-belgii		
Aster, Stokes	Stokesia laevis		
Astilibe (False spirea)	Astilibe spp.		
Baby's breath	Gypsophila elegans		
Beard tongue	Penstemon digitalis, P. x mexicali		
Bee balm¹	Monarda didyma		
Beliflower	Campanula spp.		
Bergenia, heart-leaved1	Bergenia cordifolia		
Bird of paradise	Caesalpinia pulcherrima		
Black-eyed Susan	Rudbeckia hirta		
Blanket flower	Gaillardia x grandiflora		

PERENNIALS (continued)		
Common Name	Scientific Name	
Bleeding heart	Dicentra spectabilis	
Bluestar¹	Amsonia hubrichtii	
Blue false indigo	Baptisia australis	
Butterfly weed	Asclepias tuberosa	
California poppy	Eschscholzia california	
Calla lily	Zantedeschia aethiopica	
Canna, common garden	Canna-generalis 'Lucifer'	
Canadian ginger <sup>1</sup>	Asarum canadese	
Carex	Carex spp.	
Cast iron plant	Aspidistra elatior	
Chincherinchee	Ornithogalum thyrsoides	
Clover, crimson	Trifolium incamatum	
Columbine	Aquilegia 'McKana Giant'	
Coral bells <sup>1</sup>	Heuchera sanguinea	
	Coreopsis lanceolata	
Coreopsis		
Crinum lily	Crinum spp.	
Crocus	Crocus spp.	
Daffodil	Narcissus spp.	
Daytily	Hemerocallis spp.	
False dragonhead	Physostegia virginiana	
Fairy duster	Calliandra eriophylla	
Fern, asparagus	Asparagus officinalis	
Fern, Boston	Nephrolepis exaltata	
Fern, leatherleaf*	Rumohra adiantiformis	
Fern, tree	Asparagus virgatus	
Flax, blue	Linum perenne	
Foamflower, heartleaf	Tirella cordifolia	
Fortnight lily	Moraea spp.	
Foxglove, common	Digitalis purpurea	
Freesia	Freesia x hybrida	
Fuschia, Arizona	Zauschneria Californica	
Gaillardia	Gaillardia pulchella	
Gaura <sup>1</sup>	Gaura lindheimeri	
Geum	Geum spp.	
Gladiolus	Gladiolus spp.	
Globe amaranth <sup>1</sup>	Gomphrena globosa	
Golden rockets <sup>1</sup>	Ligularia stenocephala	
Goldenrod, seaside <sup>1</sup>	S. sempervirens	
Goldenrod, showy <sup>1</sup>	S. specia	
Goldenrod, wrinkleleaf	Solidago rugosa	
Heather, dwarf	Calluna vulgaris	
Hen and chicks	Sempervivum arachnoideum, S. tectorum	
Hopflower oregano	Origanum libanoticum	
Hosta	Hosta spp.	
Hyssop, Coronado <sup>1</sup>	Agastache aurantiaca	
Hyssop, sunset	Agastache rupestris	
ice plant, hardy or yellow	Delosperma nubigenum	
Indian blanket	Gaillardia pulchella	
Ironweed, New York <sup>1</sup>	Vernonia noveboracensis	
Jacob's ladder <sup>1</sup>	Polemonium boreale	
	1	



**Pendulum® granule herbicide 2G** is safe around and over the top of the established plants listed below.

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

PERENNIA	ALS (continued)
Common Name	Scientific Name
Joepye weed, sweetscented <sup>1</sup>	E. purpureum'
Lady's-mantle	Alchemilla mollis
Lantana, weeping	Lantana montevidensis
Lavender, English	Lavandula angustifolia
Leopard's bane	Doronicum cordatum
Lily	Lillium spp.
Lily, plantain	Hosta fortunei
Liriope, big blue	Liriope muscari
Liriope, creeping	Liriope spicata
Liriope, variegated	Liriope muscari
Loosestrife, garden	Lysimachia puntata
Montbretia	Crocosmia crocosmiiflora
Moonbeam	Coreopsis verticillata
Nightshade	Solanum spp.
Orchid, peacock	Acidanthera bicolor
Oxeye daisy .	Chrysanthemum leucanthemum
Oxeye, smooth <sup>1</sup>	Heliopsis helianthoides
Peony, Chinese	Paeonia lactiflora
Phlox, creeping	Phlox subulata
Purple coneflower	Echinacea purpurea
Purple loosestrife	Lythrum virgatum
Pussy-toes, small-leaf	A. parvifolia
Pussy-toes, stoloniferous <sup>1</sup>	Antennaria dioica
Red-hot-poker	Kniphofia uvaria
Rock cress	Aubrieta spp.
Rosemary	Rosmarinus officinalis
Ruscus, Israeli	Ruscus hypophyllum
Sage, Russian	Perovskia atriplicifolia
Sedge	Carex spp.
Shasta daisy	Chrysanthemum x superbum
Shrub verbena	L. montevidensis
Sneezeweed, common	Helenium autumnale
Spiderwort <sup>1</sup>	Tradescantia virginiana, T. x andersoniana
Sunflower <sup>1</sup>	Helianthus spp.
Sweet flag	Acorus calamus
Thrift, sea pink <sup>1</sup>	Armeria martima
Tickseed	Coreopsis lanceolata
Transvaal daisy¹	Gerbera jamesonii
Tulip	Tulipa spp.
Turtlehead, snakehead	Chelone spp.
Twinspur	Diasciascia barbaerae
Wonder flower	Ornithogalum thyrsoides
Vervain <sup>1</sup>	Verbena Canadensis
Yarrow	Achillea millefolium
Zephyr lily	Zephyranthes spp.

*Applications of <b>Pendulum 2G</b> to immature ferns (during periods of new	
growth of fronds) may result in some injury.	

¹Not for use in California.

BEDDING PLANTS*		
Common Name	Scientific Name	
Ageratum	Ageratum houstonianum	
Alyssum	Alyssum saxatile	
Anemone, poppy-flowered	Anemone coronaria	
Artemesia	Artemesia spp.	
Balloonflower	Platycodon grandiflorum	
Begonia	Begonia spp.	
Cabbage, ornamental	Brassica olereacea	
Caladium	Caladium spp.	
China aster	Callistephus chinensis	
Crocosmia, Montebretia	Crocosmia x crocosmiiflora	
Dahlia	Dahlia spp.	
Dianthus	Dianthus barbatus	
Dusty miller	Senecio cineraria	
Gayfeather	Liatris spp.	
Gazania, trailing	Gazania rigens leucolaena	
Gazania, treasure flower	Gazania rigens	
Geranium	Geranium spp.	
Gloxinia	Gloxinia simningia	
Impatiens	Impatiens spp.	
Kale, ornamental	Brassica napus	
Marigold, African	Tagetes erecta	
Moss rose	Portulaca grandiflora	
Mum, garden	Chrysanthemum spp.	
Pansy	Viola tricolor	
Periwinkle	Vinca major	
Periwinkle, rose	Catharanthus roseus	
Petunia	Petunia spp.	
Plumosa cockscomb	Celosia cristata	
Portulaca	Portulaca grandiflora	
Salvia	Salvia splendens	
Snapdragon	Antirrhinum majus	
Statice	Limonium spp.	
Sweet William	Dianthus barbatus	
Vinca	Vinca major	
Zinnia	Zinnia spp.	

<sup>\*</sup>After planting bedding plants and before **Pendulum 2G** is applied, area to be treated should be watered sufficiently to pack soil around roots.

**Pendulum 2G** may be used on plant species not listed on this label. The suitability for such uses should be determined by treating a small number of such plants at the specified rate. Treated plants should be evaluated 1 to 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.

Pendulum® granule herbicide 2G is safe around and over the top of the established plants listed below. Refer to APPLICATION RATE TABLE for rates.

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

#### **ORNAMENTAL BULBS**

**Pendulum 2G** may be applied for control of susceptible annual weeds in ornamental bulbs listed on the label (crocus, daffodil [narcissus], gladiolus, tulip, etc.). Apply **Pendulum 2G** prior to, during, or after bulb emergence. If weeds have already germinated, use a labeled postemergence herbicide to control emerged weeds.

#### **WILDFLOWERS**

Pendulum 2G may be applied for control of susceptible annual weeds in plantings of wildflowers listed on the label (blackeyed susan, California poppy, coreopsis, oxeye daisy, etc.).

Pendulum 2G may be applied to established perennial wildflowers before emergence of weeds or wildflowers. For wildflowers being established from seed, apply Pendulum 2G 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 2G** may vary greatly. Careful testing on desirable species is recommended to determine if area-wide applications can be made.

#### **ORNAMENTAL PRECAUTIONS**

Apply **Pendulum 2G** to established plantings. **DELAY** applying **Pendulum 2G** to seedbeds, transplant beds, or liners until plants have become well rooted. 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 2G** 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.

For container-grown ornamentals, delay first application of this product to bare root liners 2 to 4 weeks after transplanting.

**DO NOT APPLY Pendulum 2G** in greenhouses, shadehouses or other enclosed structures.

#### LANDSCAPE AND GROUNDS MAINTENANCE

**Pendulum 2G** 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 apply a postemergence product labeled for such use.

Refer to **APPLICATION RATE TABLE** for rates. Avoid unintentional contact of granules with stone, wood, or other porous surfaces as staining may occur. Sweep immediately to avoid staining. If granules are crushed into surface, rinse thoroughly.

# NONBEARING FRUIT AND NUT CROPS AND VINEYARDS

**Pendulum 2G** may be applied for preemergence control of most annual grasses and certain broadleaf weeds on the following nonbearing crops:

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

Refer to APPLICATION RATE TABLE for rates.

Apply granules 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 2G** and roots. Applications 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 2G** may be used where the roots of a fruit, vine, nut, or ornamental plant encroach into a treatable area.

# NONCROPLAND AREAS INCLUDING TREE PLANTATIONS

Use **Pendulum 2G** for grounds maintenance in noncropland areas; preemergence control of the weed species listed in and around established tree plantations (including Christmas trees); in and around established ornamentals planted in noncropland areas such as highway rights-of-way and utility substations. **Pendulum 2G** may be used for hardwood and conifer regeneration on conservation reserve program land or similar areas.

Refer to APPLICATION RATE TABLE for rates.

**Pendulum 2G** 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 2G** from directly contacting the tree roots or being washed into the root zone via the open slit, or root stunting may occur.



#### **TOTAL VEGETATION CONTROL**

**Pendulum®** granule herbicide 2G may be mixed with a granular formulation or used in sequence with any formulation of **Arsenal®** herbicide, **Roundup Pro®**, **Karmex®**, **Finale®**, **Oust®**, diuron, or other products to provide bare ground or total vegetation control. **Pendulum 2G** 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.

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

**For Kochia:** Use applications of **Pendulum 2G** following **Arsenal** or diuron if control has been a problem for other herbicides.

#### **APPLICATION RATE TABLE**

For preemergence control of the weed species listed using broadcast spreader equipment, apply **Pendulum 2G** at the following rates:

Length of Control	Pounds required to treat 1 acre	Pounds required to treat 1000 sq ft
Short Term (2 to 4 months)	100	2.3
Long Term (6 to 8 months)	200	4.6

Rate settings for a specific type of spreader device must be determined by applicator. To deliver the proper rate (2.3 to 4.6 lbs/1000 sq ft), calibrate prior to application of product.

One bag (40 lbs) will cover 1/5 acre (8700 sq ft) at a rate of 4.6 lbs per 1000 sq ft.

The efficacy of **Pendulum 2G** will improve if the application is followed by 1/2 inch of rainfall or its equivalent in sprinkler irrigation. If **Pendulum 2G** is not activated by rainfall or irrigation within 30 days, erratic weed control may result.

Pendulum 2G 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 2G** may be used before or after applications of herbicides registered for postemergence use (i.e. **Roundup®** or **Finale**) for the control of established weeds. **DO NOT** apply sprays containing **Roundup** or **Finale** over the top of desirable plants. A **Pendulum 2G** treatment may be followed by any registered herbicide to control weeds not listed on the **Pendulum 2G** label.

#### WEED SPECIES CONTROLLED

Use **Pendulum 2G** 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	Panicum texanum	
Sandbur, field	Cenchrus incertus	
Signalgrass	Brachiaria platyphylla	
Sprangletop, Mexican	Leptochloa uninervia	
Sprangletop, red	Leptochloa filiformis	
Witchgrass	Panicum capillare	
Woolly cupgrass	Eriochloa villosa	

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

#### **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.

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