

PENDULUM 2G granule 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
INERT INGREDIENTS
TOTAL

(50 lbs. contains 1 lb. of pendimethalin) (11.5 lbs. contains 0.23 lb. of pendimethalin) (3 lbs. contains 0.06 lb. of pendimethalin)

EPA Reg. No. 241-

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 this label, find someone to explain it to you in detail.)

STATEMENT OF PRACTICAL TREATMENT

If in eyes: If on skin: Flush eyes with plenty of water. Call a physician if irritation persists. Wash with plenty of soap and water. Get medical attention if irritation persists.

CCEPTED NEC - 5 1995

Under the Federal Insecticide. Fungicide. and Rodonticide Act. as amonded. for the pesticide registered under TR Flog. No. 241-375

Net Contents:

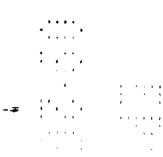
In case of emergency endangering life or property involving this product, call collect, day or night, Area Code 201-835-3100.

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

> AMERICAN CYANAMID COMPANY AGRICULTURAL PRODUCTS DIVISION SPECIALTY PRODUCTS DEPARTMENT WAYNE, NJ 07470 ©1995

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PENDULUM 2G herbicide

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PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS CAUTION

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

Personal Protective Equipment (PPE): Applicators and other handlers must wear:

- · Long-sleeved shirt and long pants
- · Waterproof 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:

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- * 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.

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.

DO NOT use in manufacturing products for weed control.

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.

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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 12 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

Waterproof gloves

 \cdot 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 treated areas without protective clothing until granules are no longer visible on treated surfaces.

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

STORAGE AND DISPOSAL

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

DO NOT contaminate water, food, or feed by storage or disposal. ~ 4

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PESTICIDE

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

CONTAINER

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DISPOSAL: Completely empty bag into application equipment. Dispose of empty bag in a sanitary landfill or by incineration, or if allowed by state and local authorities, by burning. If burned, stay out of smoke.

Observe all cautions and limitations on this label and the labels of products used in combination with PENDULUM 2G herbicide. The use of PENDULUM 2G herbicide not consistent with this label can result in injury to crops, animals, or persons. Keep containers closed to avoid spills and contamination.

DISCLAIMER

The label instructions for use of this product reflect the opinion of experts based on field use and tests. The directions are believed to be reliable and should be followed carefully. However, it is impossible to eliminate all risks inherently associated with use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as weather conditions, presence of other materials, or the use or application of the product contrary to label instructions, all of which are beyond the control of American Cyanamid Company. All such risks shall be assumed by the user.

American Cyanamid Company warrants only that the material contained herein conforms to the chemical description on the label and is reasonably fit for the use therein described when used in accordance with the directions for use, subject to the risk referred to above.

Any damages arising from a breach of this warranty shall be limited to direct damages and shall not include consequential commercial damages such as loss of profits or values or any other special or indirect damages.

American Cyanamid Company makes no other express or implied warranty, including other express or implied warranty of FITNESS or of MERCHANTABILITY.

GENERAL INFORMATION

PENDULUM 2G herbicide 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, pienic grounds, ... fields, houses of worship, cemeteries; golf courses; prairiegrass areas; and sod farms.

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PENDULUM 2G herbicide 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 herbicide 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 2G herbicide 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; established wildflower plantings, and other similar areas where weed control is desired.

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PENDULUM 2G herbicide 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 herbicide 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 herbicide will improve if the application is followed by onehalf 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 herbicide will not cause injury to desirable plants. Over-application can result in stand loss, plant injury, or soil residues. Uneven application can decrease weed control or cause plant injury.

Seedling diseases, cold v eather, 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 2G herbicide.

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.

TURFGRASSES

APPLICATION RATES FOR TURF WEED CONTROL

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Turfgrass Species	Weeds	Rates of PENDULUM 2G herbicide	Comments
COOL SEASON GRASSES Bluegrass, Kentucky Fescue, fine Fescue, tall Ryegrass, perennial	crabgrass foxtail <i>Poa annua</i> barnyardgrass fall panicum oxalis prostrate spurge purslane knotweed evening primrose hop clover	75-100 lbs./acre as the initial application prior to weed germination in the spring.	Apply a repeat application of 51-75 lbs./acre after 6-8 weeks for extended control or where heavy weed infestations are expected.
	goosegrass	75-150 lbs./acre in the spring prior to weed germination.	Apply a repeat application of 75 lbs./acre if the lower rate was used initially or for extended goosegrass control.
	cudweed <i>Poa annua</i> chickweed lawn burweed henbit corn speedwell	75-100 lbs./acre	Apply in late summer or early fall prior to weed germination.

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Bentgrass [*] or established <i>Poa annua</i> * (1/2 inch height or taller)	crabgrass foxtail <i>Poa annua</i> barnyardgrass fall panicum oxalis prostrate spurge purslane knotweed evening primrose hop clover	75 lbs./acre in the spring prior to weed germination.	Apply a repeat application of 51- 75 lbs./acre after 6-8 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 6-8 weeks.	
	cudweed <i>Poa annua</i> chickweed lawn burweed	75-100 lbs./acre	Apply in late summer or early fall prior to weed germination.
	henbit com speedwell		
-	corn speedwell		
tees WARM SEASON GRASSES Bahiagrass Bermudagrass Buffalograss Centipedegrass Fescue, tall St. Augustinegrass	corn speedwell or crabgrass foxtail <i>Poa annua</i> barnyardgrass fall panicum oxalis	75-150 lbs./acre prior to weed germination in the spring.	Apply a repeat application of 51-75 lbs./acre after 6-8 weeks if necessary.
tees WARM SEASON GRASSES Bahiagrass Bermudagrass Buffalograss Centipedegrass Fescue, tall St. Augustinegrass	corn speedwell or crabgrass foxtail <i>Poa annua</i> barnyardgrass fall panicum	prior to weed germination in the	application of 51-75 lbs./acre after 6-8 weeks
GRASSES Bahiagrass Bermudagrass Buffalograss Centipedegrass Fescue, tall	corn speedwell or crabgrass foxtail <i>Poa annua</i> barnyardgrass fall panicum oxalis prostrate spurge purslane knotweed evening primrose	prior to weed germination in the	application of 51-75 lbs./acre after 6-8 weeks if necessary.

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		germination in the spring. Apply a repeat application of 75-100 lbs./acre after 6-8 weeks.	75 lbs./acre may be applied for extended goosegrass control 8 weeks after the second application.
	cudweed Poa annua chickweed lawn burweed henbit corn speedwell	75-100 lbs./acre	Apply in late summer or early fall prior to weed germination.
Bermudagrass greens	crabgrass	75 lbs./acre	Apply a repeat
	foxtail <i>Poa annua</i> barnyardgrass fall panicum oxalis prostrate spurge purslane knotweed evening primrose hop clover	prior to weed germination.	application of 75 lbs./acre after 6-8 weeks if necessary.
	goosegrass	75-100 lbs./acre prior to weed germination. Apply a repeat application of 75 lbs./acre after 6-8 weeks.	
	cudweed Poa annua chickweed lawn burweed henbit corn speedwell	75-100 lbs./acre	Apply in late summer or early fall prior to weed germination.

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The efficacy of PENDULUM 2G herbicide will be improved if the application is followed by one-half inch of rainfall or its equivalent in sprinkler irrigation. If PENDULUM 2G herbicide is not activated by rainfall or irrigation within 30 days, erratic weed control may result.

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PENDULUM 2G herbicide can be applied before or after postemergence herbicides used to control emerged weeds in turfgrasses. For annual grass control, applications can be made with Acclaim Extra¹ or MSMA to control emerged weeds. Broadleaf weeds can be controlled using Trimec², Three-Way³, 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 turfgrasses may cause thinning or injury of the overseeded species.

Do not use on bentgrass or Poa annua greens and tees or injury may occur.

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Delay reseeding or winter overseeding of treated turfgrass for at least three months following the last PENDULUM application. Delay sprigging turfgrass for five 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 herbicide 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, constuction sites, parks, substations, lots, or similar areas:

Crowfootgrass, Itchgrass, Johnsongrass (from seed), Junglerice, Lovegrass (from seed), Browntop Panicum, Texas Panicum, Field Sandbur, Signalgrass, Mexican Sprangletop, Red Sprangletop, Witchgrass, Woolly Cupgrass, Carpetweed, Fiddleneck, Filaree, Kochia, Lambsquarters, Pigweed, Puncturevine, Florida Pusley, London Rocket, Shepherdspurse, Pennsylvania Smartweed, Annual Spurge, and Velvetleaf.

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

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APPLICATION INSTRUCTIONS FOR PENDULUM 2G HERBICIDE

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

Avoid application when winds may cause drift.

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

SUGGESTED STREADER 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.

	Ground			amended Rate 1 of Product Per	0
Spreader	or PTO Speed	Width of Coverage	75	100	150
Lesco Rotary			C	D	F
Scott Rotaries R-					
7, R-7X	3 mph	8 feet	B1/2	D	E ¹ /2
R-8, R-8A. SR-1					
(cone 9)	3 mph	9 feet	$H^{1/2}$	I	J1/2
Lely Models					
(see below)	4.5 mph	18 feet	31/4 III	3%III	4% III
Vicon (Model 02)	4.5 mph	18 feet	12	16	20
(Model 03)	4.5 mph	10 feet	9	10	13

Lely models WTR, WFR, HR and 1250. PTO at 450 rpm.

ORNAMENTALS

GENERAL HOMEOWNER INFORMATION

What PENDULUM 2G does: Prevents weeds all season long around bedding plants, flowers, perennials, groundcovers, shrubs, trees, and other landscape areas.

How to use PENDULUM 2G: Apply using the easy-to-apply shaker container, with a back and forth motion while walking at a slow/moderate speed. PENDULUM 2G can be applied directly over top and around listed ornamentals. Best results are obtained by lightly watering into soil after application.

When to use PENDULUM 2G: Use in the spring of the year prior to weeds germinating. If weeds are present, hand remove or cultivate to get rid of established weeds. PENDULUM 2G will not control established weeds. If using around newly planted ornamentals such as bedding plants or flowers, water those plants to pack soil around the root system before applying PENDULUM 2G.

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Where to use PENDULUM 2G: This product can be used around all listed ornamentals and on areas such as gravel driveways and walks, mulched areas, under decks, and other sites listed on this label where weed control is desired.

Weeds controlled by PENDULUM 2G: Crabgrass, foxtail, goosegrass, field sandbur, sprangletop, witchgrass, carpetweed, chickweed, filaree, henbit, knotweed, lambsquarters, pigweed, purslane, pusley, shepherdspurse, smartweed, speedwell, spurge, and woodsorrel.

How much PENDULUM 2G to use: The contents of this container will control weeds in a 1000 square foot area. This is equivalent to a 10 foot x 100 foot area [length (ft) X width (ft) = square feet]. Prior to application obtain an estimate of the square footage to be treated to insure the proper application rate.

What precautions to take with PENDULUM 2G: Do not apply PENDULUM 2G to vegetable gardens. Homeowners should apply only to ornamentals listed on this label or injury may result. Read this label completely and follow all precautions listed elsewhere on this label.

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RECOMMENDED SPECIES

PENDULUM 2G herbicide is safe around and over the top of the established plants listed below.

Refer to APPLICATION RATE TABLE for rates.

<u>Common Name</u>

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TREES

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Alder, European Black Apple Arborvitae, American Arbutus Ash. Red Ash, White Aspen, Bigtooth Aspen, Quaking Basswood Birch, European Weeping Birch, River Buckeye, Red Cedar, White Chamaecyparis, Boulevard Cherry, Black Cherry, Choke Cherry, Kwanzan Cherry, Nanking Cottonwood Crabapple Crepe Myrtle Cryptomeria, Japanese Cedar Cypress, Bald Cypress, Leyland Dogwood, Flowering Dogwood, Korean Dogwood, Silky Dogwood, Shrub Elm Fir, Balsam Fir, Douglas Fir, Fraser Fir, White Franklinia Ginkgo Gum, Black

Scientific Name

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Alnus glutinosa Malus spp. Thuja occidentalis Arbutus spp. Fraxinus pennsylvanica Fraxinus americana Populus grandidentata Populus tremuloides Tilia spp. Betula pendula Betula nigra Aesculus pavia Thuja occidentalis Chamaecyparis pisifera Prunus serotina Prunus virginiana Prunus serrulata Prunus tomentosa Populus deltoides Malus spp. Lagerstroemia indica Cryptomeria japonica Taxodium distichum Cupressocyparis leylandii Cornus florida Cornus kousa Cornus amomum Cornus spp. Ulmus japonica Abies balsamae Pseudotsuga menziesi: Abies fraseri Abies concolor Franklinia spp. Ginkgo biloba Nyssa sylvatica

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Gum, Sour Haw, Black Hawthorn Hemlock, Canada Hemlock, Eastern Holly, American Honeylocust Lilac, Common Lilac, Japanese Tree Linden Magnolia, Saucer Magnolia, Southern Magnolia, Star Maidenhair Tree Maple, Norway Maple, Japanese Maple, Red Maple, Sugar Nannyberry, Rusty Oak, Chinquapin Oak, Live Oak, Pin Oak, Red Oak, Swamp Chestnut Oak, Water Oak, White Oak, Willow Olive Palm, Date Palm, Fan Palm, Pindo Palm, Washington Peach Pear, Bradford Pecan Pine, Austrian Pine, Italian Stone Pine, Loblolly Pine, Monterey Pine, Red Pine, Scotch Pine, Virginia Pine, White Plum, Purple Leaf Poplar, Black Redcedar, Eastern

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Nyssa sylvatica Viburnum prunifolium Crataegus spp. Tsuga canadensis Tsuga canadensis Ilex opaca Gleditsia triacanthos Syringa vulgaris Syringa reticulata Tilia spp. Magnolia soulangiana Magnolia grandiflora Magnolia stellata Ginkgo biloba Acer platanoides Acer palmatum Acer rubrum Acer saccharum Viburnum rufidulum Quercus muehlenbergii Quercus virginiana Quercus palustris Quercus rubra Quercus michauxii Quercus nigra Quercus alba Quercus phellos Olea europaea Phoenix spp. Washingtonia spp. Butia spp. Washingtonia spp. Prunus persica Pyrus calleryana 'Bradford' Carya illinoensis Pinus nigra Pinus pinea Pinus taeda Pinus radiata Pinus resinosa Pinus sylvestris Pinus virginiana Pinus strobus Prunus cerasifera Populus nigra Juniperus virginiana

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Redcedar, Western Red Ironbark Redwood, Dawn Sequoia, Giant Serviceberry Sourwood Spruce, Colorado Blue Spruce, Dwarf Alberta Spruce, Norway Spruce, White Sweetgum Sycamore Trachycarpus Tulip tree Walnut, Black Willow, Weeping Yellowwood

SHRUBS

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Common Name

Abelia, Glossy Aucuba, Gold Azalea Bamboo, Heavenly Barberry Barberry, Japanese Blue Indigo Bush Bottlebrush, Lemon Boxwood, Common Boxwood, Japanese Brittlebush Buttonbush Camellia **Cape Jasmine** Cassia, Feathery Cordyline Correa Cotoneaster Cotoneaster, Bearberry Cotoneaster, Rock Cypress, Italian Cypress, Leyland Deutzia, Slender Dogwood, Red Twig

Thuja plicata Eucalyptus sideroxylon 'Rosea' Metasequoia glyptostroboides Sequoiadendron giganteum Amelanchier laevis Oxydendrum arboreum Picea pungens Picea glauca 'albertiana' Picea abies Picea glauca Liquidambar styraciflua Platanus occidentalis Trachycarpus spp. Liriod "dron tulipifera Juglans nigra Salix babylonica Cladrastis lutea

Scientific Name

Abelia grandiflora Aucuba japonica Rhododendron sp. Nandina domestica Berberis gladwynensis Berberis thunbergii Dalea gregii Callistemon citrinus Buxus sempervirens Buxus microphylla Encelia farinosa Cephalanthus occidentalis Camellia japonica Gardenia jasminoides Cassia artemisioides Cordyline spp. Correa spp. Cotoneaster apiculatus Cotoneaster dammeri Cotoneaster horizontalis Cupressus sempervirens Cupressocyparis leylandii Deutzia gracilis Cornus sericea

Elaeagnus Escallonia Euonymus Euonymus, Golden Euonymus, Winged Firethorn Forsythia, Border Fragrant Olive Fuschia, California Gardenia Hawthorne, Indian Hibiscus Holly, Chinese Holly, Japanese Holly, Fosters Holly, Savannah Holly, Yaupon Honeysuckle, Bush Hopseed Bush Hopbush Hydrangea Juniper Juniper, Chinese Juniper, Shore Juniper, Trailing Laurel, Cherry Laurel, Mountain Laurel, Otto Luyken Laurel, Schipka Laurustinus Lavender, English Leucothoe Leucothoe, Coast Lilac. Cut-leaf Lily-of-the-Nile Mahonia Mock Orange Myrtle, Compact Myrtle, Wax Nandina Oleande Oregon Grape Osmanthus Palm, European Fan Palm, Mediterranean Fan Phlox, Prickly

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Elaeagnus ebbingei Escallonia fradesii Euonymus fortunei Euonymus japonica Euonymus alata Pyracantha coccinea Forsythia intermedia Osmanthus fragrans Zauschineria californica Gardenia jasminoides Raphiolepis indica Hibiscus syriacus Ilex cornuia Ilex crenota Ilex attenua a 'Losteri' Ilex attenuata Ilex vomitoria Diervilla lonicera Dodonaea viscosa Dodonaea viscosa Hydrangea macrophylla Juniperus sp. Juniperus chinensis v. pfitzer Juniperus conferta Juniperus horizontalis Prunus laurocerasus Kalmia latifolia Prunus laurocerasus Prunus schipkanensis Viburnum tinus Lavandula angustifolia Leucothoe fontanesiana Leucothoe axillaris Syringa laciniata Agapanthus africanus Mahonia aquifolium Pittosporum tobira Myrtus communis Myrica cerifera Nandina domestica Nerium oleander Mahonia aquifolium Osmanthus fragrans Chamaerops humilis Chamaerops spp. Leptodactylon californicim

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Photinia, Fraser Pieris, Japanese Pine, Mugo Plum, Natal Privet, California Privet, Glossy Privet, Variegated Privet, Waxleaf Pyracantha Quince, Flowering Ranger, Texas Redroot Rhododendron Robira Rose Spice Plant Spiraea Spiraea, Anthony Waterer Spiraea, Japanese Sweet Bay **Trumpet Bush** Verbena, Lemon Vibu:num Vitex Weigela Wild Lilac Xylosma Yellowbells Yew Yew, Japanese Yew, Southern Yucca, Adam's Needle Yucca, Weeping

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GROUND COVERS

Common Name Scientific Name Ajuga Ajuga reptans Baby Sun Rose Aptenia cordifolia **Beach Strawberry** Fragaria chiloensis Capeweed Arctotheca calendula Cinquefoil, Spring Potentilla verna Coyotebrush, Dwarf Baccharis pitularis Daisy, Trailing African Osteospermum fruticosum 17 8/15/95

Pinus mugo Carissa grandiflora Ligustrum ovalifolium Ligustrum lucidum Ligustrum sinensis Ligustrum japonicum Pyracantha coccinea Chaenomeles japonica Leucophyllum frutescens Ceanothus spp. Rhododendron spp. Pittosporum tobira Rosa spp. Illicium parviflorum Spiraea vanhouttei Spiraea X bumalda Spiraea japonica Laurus nobilis Tecoma stans Aloysia triphylla Viburnum suspensum Vitex spp. Weigela florida Ceanothus spp. Xylosma congestum Tecoma stans Taxus media Taxus cuspidata Podocarpus macrophyllus Yucca filamentosa Yucca pendula

Photinia X Fraseri

Pieris japonica

Maple

Dymondia Gazania Iceplant, Large Leaf Ivy, English Ivy, Geranium Jasmine, Asiatic Jasmine, Primrose Jessamine, Carolina Manzanita, Bearberry Miscanthus Mondograss Morninglory Myoporum Pachysandra Potentilla **Red Apple** Rosemary Rose-Of-Sha on Sand Strawb rry Sedum St. Johnswort, Creeping Stonecrop Verbena, Peruvian Vervain Vetch, Crown Vinca Wintercreeper

PERENNIALS

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<u>Common Name</u>

Acacia Asparagus Aster, New York Aster, Stokes Babys Breath Beard-Tongue Bellflower Bird of Paradise Black-eyed Susan Blanket Flower Bleeding Heart Butterfly Weed California Poppy

Dymondia margaretae Gazania splendens *Carpobrotus edulis* Hedera helix Pelargonium peltatum Trachelospermum asiaticum Jasminum mesnyi Gelsemium sempervirens Arctostaphylos uva-ursi Miscanthus spp. Ophiopogon japonica Convolvulus spp. Myoporum parviflolium Pachysandra terminalis Potentilla fruticosa Aptenia cordifolia Rosemarinus officinalis Hypericum calycinum Fragaria chiloensis Sedum spurium *Hypericum* calycinum Sedum spurium Verbena peruviana Verbena peruviana Vicia sativa Vinca minor Euonymous fortunei

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Scientific Name

Acacia redolens Asparagus spp. Aster novi-belgii Stokesia laevis Gypsophila elegans Penstemon spp. Campanula spp. Caesalpinia pulcherrima Rudbeckia hirta Gaillardia x grandiflerà' Dicentra spectabilis Asclepias tuberosa Eschscholzia california

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Calla Lily Canna, Common Garden Carex Chincherinchee Clover, Crimson Columbine Coreopsis Crinum Lilv Crocus Daffodil Daylily **Fiary Duster** Fern, Asparagus Fern. Boston Fern, Leatherleaf Fortnight Lily Foxglove Freesia Gaillardia Geum Gladiolus Heather, Dwarf Hosta Indian Blanket Lantana, Weeping Leopards Bane Lily Liriope, Big Blue Liriope, Creeping Liriope, Variegated Moonbeam Montbretia Nightshade Orchid, Peacock Oxeye Daisy Peony, Chinese Purple Coneflower Purple Loosestrife Rosemary Sedge Shasta Daisy Sweet Flag Tickseed **Texas** Bluebonnet Tulip Wisteria

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Zantedeschia aethiopica Canna generalis 'Lucifer' Carex spp. **Ornithogalum** thyrsoides Trifolium incarnatum Aquilegia 'McKana Giant' Coreopsis lanceolata Crinum spp. Crocus spp. Narcissus spp. Hemerocallis spp. Calliandra eriophylla Asparagus officinalis Nephrolepis exaltata Rumohra adiantiformis Moraea spp. Digitalis purpurea Freesia x hybrida Gaillardia pulchella Geum spp. Gladiolus spp. Calluna vulgaris Hosta spp. Gaillardia pulchella Lantana montevidensis Doronicum cordatum Lillium spp. Liriope muscari Liriope spicata Liriope muscari Coreopsis verticillata Crocosmia crocosmiiflora Solanum spp. Acidanthera bicolor Chrysanthemum leucanthemum Paeonia lactiflora Echinacea purpurea Lythrum virgatum Rosmarinus officinalis Carex spp. Chrysanthemum x supertrum Acorus calamus Coreopsis lanceolata Lupinus texenis Tulipa spp. Wisteria spp.

Wonder Flower Yarrow Zephyr Lily

ORNAMENTAL GRASSES

<u>Common Name</u>

Beach Grass Fescue, Blue Fescue, Sheep Fountain Grass Pampas Grass Reed Canary Grass Reed, Giant Ribbon Grass Tufted Hair Grass

BEDDING PLANTS*

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<u>Common Name</u>

Ageratum Alyssum Anemone, Poppy-flowered Artemesia Balloonflower Begonia Cabbage, Ornamental Caladium **Cast-Iron Plant** China Aster Crocosmia, Montebretia Dahlia Dianthus **Dusty Miller** Gayfeather Gazania, Treasure Flower Gazania, Trailing Geranium Gloxinia Impatiens

Ornithogalum thyrsoides Achillea millefolium Zephyranthes spp. DADO

Scientific Name

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

Scientific Name

Ageratum houstonianum Alyssum saxatile Anemone coronaria Artemesia spp. Platycodon grandiflorum Begonia spp. Brassica olereacea Caladium spp. Aspidistra elatior *Callistephus chinensis* Crocosmia x crocosmiiflora Dahlia spp. Dianthus barbatus Senecio cineraria Liatris spp. Gazania rigens Gazania rigens lettcolaena. Geranium sp. Gloxinia simningia Impatiens sp.

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Supla

Kale, Ornamental Marigold, African Moss Rose Mum, Garden Pansy Periwinkle Periwinkle, Rose Petunia Plumosa Cockscomb Portulaça Salvia Snapdragon Statice Sweet William Vinca Zinnia

Brassica napus Tagetes erecta Portulaca grandiflora Chrysanthemum spp. Viola tricolor Vinca major Catharanthus roseus Petunia spp. Celosia cristata Portulaca grandiflora Salvia splendens Antirrhinum majus Limonium spp. Dianthus barbatus Vinca maior Zinnia sp.

*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 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 1-2 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.

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 plaitings of wildflowers listed on the label (Black-eyed 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.

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Due to the diversity of species and varieties which exist in areas where wildflowers are grown, the response to PENDULUM 2G herbicide may vary greatly. Careful testing on desirable species is recommended to determine if area-wide applications can be made.

ORNAMENTAL PRECAUTIONS

Apply PENDULUM 2G herbicide to established plantings. DELAY applying PENDULUM 2G herbicide 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 herbicide 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 bareroot liners 2-4 weeks.

LANDSCAPE AND GROUNDS MAINTENANCE

PENDULUM 2G herbicide 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, then rinse thoroughly.

NON-BEARING FRUIT AND NUT CROPS AND VINEYARDS.

PENDULUM 2G herbicide may be applied for preemergence control of most annual grasses and certain broadleaf weeds on the following non-bearing crops:

Almond Apple Apricot Cherry Citrus

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Olive Peach Pear Pecan Pistachio 1 July

Fig Grape Nectarine

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Plum Prune Walnut, English

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 herbicide 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 herbicide 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 2G herbicide is recommended 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 herbicide 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 herbicide 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 VEGETATIVE CONTROL

PENDULUM 2G may be mixed with a granular formulation, or used in sequence with any formulation, of ARSENAL⁴, Roundup⁵, Karmex⁶, Finale¹, Oust⁶, 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. Recommended rates should be determined from the product labels prior to use. Follow the most restrictive label instructions.

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For Kochia: Applications of PENDULUM 2G following ARSENAL or diuron are recommended 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 herbicide at the following rates:

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

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

One bag (50 lbs.) will cover $\frac{1}{4}$ acre (11,000 ft²) at a rate of 4.6 lbs.

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

PENDULUM 2G herbicide 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 herbicide 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 herbicide treatment may be followed by any registered herbicide to control weeds not listed on the PENDULUM 2G herbicide label.

WEED SPECIES CONTROLLED

PENDULUM 2G herbicide 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.

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GRASSES CONTROLLED

<u>Common Name</u>

Barnyardgrass Bluegrass, Annual Crabgrass Crowfootgrass Foxtail, Giant Foxtail. Green Foxtail, Yellow Goosegrass Itchgrass Johnsongrass (from seed) Junglerice Lovegrass (from seed) Panicum, Browntop Panicum, Fall Panicum, Texas Sandbur, Field Signalgrass Sprangletop, Mexican Sprangletop, Red Witchgrass Woolly Cupgrass

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BROADLEAF WEEDS CONTROLLED

Common Name

Burweed, Lawn Carpetweed Chickweed, Common Chickweed, Mousecar Clover, Hop Cudweed Eveningprimrose Fiddlencck Filaree Henbit Knotweed, prostrate Kochia Lambsquarters Pigweed Puncturevine

Scientific Name

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Echinochloa crus-galli Poa annua Digitaria spp. Dactyloctenium aegyptium Setaria faberi Setaria viridis Setaria glauca Eleusine indica Rottboellia exaltata Sorghum halepense Echinochloa colona Eragrostis spp. Panicum fasciculatum Panicum dichotomiflorum Panicum texanum Cenchrus incertus Brachiaria platyphylla Leptochloa uninervia Leptochloa filiformis Panicum capillare Eriochloa villosa

Scientific Name

Soliva pterosperma Mollugo verticillata Stellaria media Cerastium vulgatum Trifolium procumbens Gnaphalium spp. Oenothera biennis Amsinckia intermedia Erodium spp. Lamium amplexicaule Polygonum aviculare Kochia scoparia Chenopodium album Amaranthus spp. Tribulus terrestris

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Purslane Pusley, Florida Rocket, London Shepherdspurse Smartweed, Pennsylvania Speedwell, Corn Spurge, Annual Spurge, Prostrate Woodsorrel, Yellow Velvetleaf (Buttonweed) Portulaca oleracea Richardia scabra Sisymbrium irio Capsella bursa-pastoris Polygonum pensylvanicum Veronica arvensis Euphorbia spp. Euphorbia numistrata Oxalis stricta Abutilon theophrasti

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1 Trademark of AgrEvo

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² Trademark of PBI Gordon Corp.

³ Trademark of Lesco Corp.

- ⁴ Trademark of American Cyanamid Company
- ⁵ Trademark of Monsanto Company
- ⁶ Trademark of E. I. DuPont de Nemours and Company