

AUG 30 1993

Dr. Zareen Ahmed
American Cyanamid Co.
P.O. Box 400
Princeton, NJ 08543

Dear Dr. Ahmed:

Subject: Minor Label Amendments
PENDULUM® WDG HERBICIDE
EPA Reg. No. 241-340
Your submission dated Aug. 3, 1993

The labeling referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, is acceptable. A stamped copy is enclosed for your records.

This acceptance of your label does not relieve you of any obligation to comply with the Worker Protection Standard (WPS). Under the WPS labeling regulations at 40 CFR part 158, subpart K, § 156.200(c)(3), you are prohibited from distributing or selling any product within the scope of the WPS requirements after April 21, 1994, without amended labeling accepted by the Agency.

Sincerely yours,

Robert J. Taylor
Product Manager 25
Fungicide-Herbicide Branch
Registration Division (H7505C)

Enclosure

RD:RTaylor:eja:8/30/93:3056800

PENDULUM[®] WDG
herbicide

water dispersible granule

FOR USE IN ORNAMENTALS

ACTIVE INGREDIENT:

pendimethalin, N-(1-ethylpropyl)-3,4-dimethyl-2,
6-dinitrobenzenamine..... 60.0%

INERT INGREDIENTS:..... 40.0%

TOTAL..... 100.0%

(10 lbs. contains 6 lbs. of pendimethalin)

EPA Reg. No. 241-340

EPA Est. No.

KEEP OUT OF REACH OF CHILDREN

CAUTION/PRECAUCION!

PRECAUCION AL USUARIO: Si usted no lee ingles, no use este producto hasta que la etiqueta le haya sido explicada ampliamente.

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.

ACCEPTED
with **COMMENTS**
in EPA Letter Dated:

AUG 30 1993

AMERICAN CYANAMID COMPANY
AGRICULTURAL PRODUCTS DIVISION
VEGETATION AND PEST CONTROL
WAYNE, NJ 07470 ©1993

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

241-340

Net Contents: 10 Pounds

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[®]Registered Trademark of American Cyanamid Company

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PRECAUTIONARY STATEMENTS
HAZARDS TO HUMANS
CAUTION

Causes moderate eye irritation. Harmful if absorbed through skin. Avoid contact with eyes, skin, or clothing. Wash thoroughly with soap and water after handling.

STATEMENT OF PRACTICAL TREATMENT

If in eyes: Flush eyes with plenty of water. Call a physician if irritation persists.

If on skin: Wash with plenty of soap and water. Get medical attention if irritation persists.

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.

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.

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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 apply this product through any type of irrigation system.

STORAGE AND DISPOSAL

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

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

PESTICIDE

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

CONTAINER

DISPOSAL: Completely empty bag into spray tank equipment. Then dispose of empty bag in a sanitary landfill, 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 WDG herbicide. The use of PENDULUM WDG herbicide not consistent with this label can result in injury to crops, animals, or persons. Keep bags closed to avoid spills and contamination.

GENERAL INFORMATION

PENDULUM WDG herbicide provides preemergence control of most annual grasses and certain broadleaf weeds as they germinate in and around listed established landscape, field, and container grown ornamentals.

PENDULUM WDG 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 WDG herbicide may be used in conjunction with herbicides registered for postemergence use (i.e. ROUNDUP®). 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.

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

Seedling diseases, cold weather, excessive moisture, deep planting, high soil pH, high soil salt concentration, or drought can weaken seedlings and plants, and increase the possibility of plant damage from PENDULUM WDG herbicide.

MIXING DIRECTIONS

Ground Driven Sprayer: Begin with a clean spray tank. Fill the spray tank 1/2 full with clean water and while agitating, add the required amount of PENDULUM WDG herbicide slowly to the spray tank. Continue agitation and finish filling the tank. Maintain agitation during application.

Backpack Sprayer: Begin with a clean spray tank. Fill the spray tank 1/2 full with clean water and add the required amount of PENDULUM WDG herbicide to the sprayer. Cap sprayer and agitate to ensure mixing. Uncap sprayer and finish filling tank to desired level. Cap sprayer and agitate once again. During application it is desirable to agitate the mixture on occasion to ensure mixing.

Tank Mixing: Fill spray tank 1/2 full with water, add the required amount of PENDULUM WDG herbicide to the spray tank and agitate until completely dispersed. Premix (1 part product + 2 parts water) tank mix product, add to spray tank, agitate, then fill spray tank to the desired level. If any settling is noted, agitate until the mixture is well dispersed. If the spray mixture is allowed to settle for any period of time, thorough agitation is essential to resuspend the mixture before spraying is resumed.

APPLICATION

Apply with properly calibrated equipment in sufficient water to provide uniform spray distribution. Low pressure sprayers delivering 20-50 psi are suggested. Use sprayer tips and screens no finer than 50 mesh (100 mesh is finer than 50 mesh). Maintain continuous agitation while spraying to ensure proper application rate of PENDULUM WDG herbicide. Check sprayer routinely to determine proper calibration. Avoid overlaps that will increase rates above those recommended. Avoid application when winds may cause drift. Avoid contact of spray solution with porous surfaces such as driveways, stone, or wood. Rinse immediately with water to avoid staining.

CULTURAL PRACTICES

The efficacy of PENDULUM WDG herbicide will be improved if the application is followed by one-half inch of rainfall or its equivalent in sprinkler irrigation. If weeds should develop prior to activation of herbicide, shallow cultivate to destroy existing weeds or remove by hand. If PENDULUM WDG herbicide is not activated by rainfall or irrigation within 14 days, erratic weed control may result.

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APPLICATION RATES

For preemergence control of the weed species listed, apply PENDULUM WDG herbicide at the following rates:

Ground Driven Sprayers

<u>Length of Control</u>	<u>Amount of PENDULUM WDG herbicide Product Required/Acre</u>
Short Term Control (2-4 months)	3.3 lbs.
Long Term Control (6-8 months)	6.6 lbs.

Backpack Sprayers

<u>Length of Control</u>	<u>Amount of PENDULUM WDG herbicide Product Required/1000 sq. ft.</u>
Short Term Control (2-4 months)	1.2 oz.
Long Term Control (6-8 months)	2.4 oz.

PENDULUM WDG herbicide will not control established weeds.

PRECAUTIONS

Apply PENDULUM WDG herbicide only to established plantings. DO NOT apply PENDULUM WDG 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 WDG herbicide with roots. Directed sprays 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 PENDULUM WDG herbicide or injury may occur.

For container grown ornamentals, delay first application of this product to bareroot liners 2-4 weeks.

Plant only those desirable plant species listed on this label into soil treated the previous season with PENDULUM WDG or injury may occur.

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RECOMMENDED SPECIES

PENDULUM WDG herbicide is recommended for use around and over the top of all established landscape, field grown, and container ornamentals listed below:

TREES

<u>Common Name</u>	<u>Scientific Name</u>
*Arborvitae, American	<u>Thuja occidentalis</u>
*Arbutus	<u>Arbutus</u> spp.
Ash, Red	<u>Fraxinus pennsylvanica</u>
*Basswood	<u>Tilia</u> spp.
Birch, European Weeping	<u>Betula pendula</u>
Birch, River	<u>Betula nigra</u>
Buckeye, Red	<u>Aesculus pavia</u>
Cedar, Northern White	<u>Thuja occidentalis</u>
Cedar, Red	<u>Juniperus virginiana</u>
Chamaecyparis, Boulevard	<u>Chamaecyparis pisifera</u>
Cherry, Kwanzan	<u>Prunus serrulata</u>
Crabapple	<u>Malus</u> spp.
Crapemyrtle, Common	<u>Lagerstroemia indica</u>
Cryptomeria, Japanese	<u>Cryptomeria japonica</u>
Cypress, Leyland	<u>Cupressocyparis leylandii</u>
Dogwood, Flowering	<u>Cornus florida</u>
Dogwood, Korean	<u>Cornus kousa</u>
Dogwood, Silky	<u>Cornus amomum</u>
Elm	<u>Ulmus japonica</u>
*Fir, Balsam	<u>Abies balsamae</u>
Fir, Douglas	<u>Pseudotsuga menziesii</u>
Fir, Fraser	<u>Abies fraseri</u>
Fir, White	<u>Abies concolor</u>
*Franklinia	<u>Franklinia</u> spp.
Hemlock, Eastern	<u>Tsuga canadensis</u>
Holly, American	<u>Ilex opaca</u>
Lilac, Common	<u>Syringa vulgaris</u>
Lilac, Japanese	<u>Syringa reticulata</u>
Locust, Honey	<u>Gleditsia triacanthos</u>
Magnolia, Saucer	<u>Magnolia soulangeana</u>
Magnolia, Southern	<u>Magnolia grandiflora</u>
Magnolia, Star	<u>Magnolia stellata</u>
Maidenhair Tree	<u>Ginkgo biloba</u>
Maple, Crimson King	<u>Acer platanoides</u>
Maple, Japanese	<u>Acer palmatum</u>
Maple, Red	<u>Acer rubrum</u>
Maple, Sugar	<u>Acer saccharum</u>
Oak, Live	<u>Quercus virginiana</u>
Oak, Pin	<u>Quercus palustris</u>
Oak, Water	<u>Quercus nigra</u>
Oak, Willow	<u>Quercus phellos</u>
*Palm, Date	<u>Phoenix</u> spp.
*Palm, Fan	<u>Washingtonia</u> spp.

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<u>Common Name</u>	<u>Scientific Name</u>
*Palm, Pindo	<u>Butia</u> spp.
Peach	<u>Prunus persica</u>
*Pine, Austrian	<u>Pinus nigra</u>
Pine, Italian Stone	<u>Pinus pinea</u>
Pine, Loblolly	<u>Pinus taeda</u>
*Pine, Scotch	<u>Pinus sylvestris</u>
*Pine, Virginia	<u>Pinus virginiana</u>
Pine, White	<u>Pinus strobus</u>
Plum, Purple Leaf	<u>Prunus cerasifera</u>
Redwood, Dawn	<u>Metasequoia glyptostroboides</u>
Serviceberry	<u>Amelanchier laevis</u>
Sourwood	<u>Oxydendron arboreum</u>
Spruce, Colorado Blue	<u>Picea pungens</u>
*Spruce, Norway	<u>Picea abies</u>
*Spruce, White	<u>Picea glauca</u>
Sweet Gum	<u>Liquidambar styraciflua</u>
Sycamore	<u>Platanus occidentalis</u>
*Trachycarpus	<u>Trachycarpus</u> spp.
Walnut, Black	<u>Juglans nigra</u>
Willow, Weeping	<u>Salix babylonica</u>
Yellowwood	<u>Cladrastis lutea</u>

SHRUBS

<u>Common Name</u>	<u>Scientific Name</u>
Abelia, Glossy	<u>Abelia grandiflora</u>
Aucuba, Gold	<u>Aucuba japonica</u>
Azalea	<u>Rhododendron</u> sp.
Bamboo, Heavenly	<u>Nandina domestica</u>
Barberry	<u>Berberis gladwynensis</u>
Barberry, Japanese	<u>Berberis thunbergii</u>
Bottlebrush	<u>Callistemon citrinus</u>
Boxwood, Common	<u>Buxus sempervirens</u>
Boxwood, Japanese	<u>Buxus microphylla</u>
Camellia	<u>Camellia japonica</u>
Capejasmine	<u>Gardenia jasminoides</u>
*Cordyline	<u>Cordyline</u> spp.
*Correa	<u>Correa</u> spp.
Cotoneaster	<u>Cotoneaster apiculata</u>
Cotoneaster, Rock	<u>Cotoneaster horizontalis</u>
Deutzia, Slender	<u>Deutzia gracilis</u>
Eleagnus	<u>Eleagnus ebbingei</u>
Euonymus	<u>Euonymus fortunei</u>
*Euonymus, Golden	<u>Euonymus japonica</u>
Euonymus, Winged	<u>Euonymus alata</u>
Firethorn	<u>Pyracantha coccinea</u>
Forsythia, Border	<u>Forsythia intermedia</u>
Gardenia	<u>Gardenia jasminoides</u>
Hawthorne, Indian	<u>Raphiolepis indica</u>
Hibiscus	<u>Hibiscus syriacus</u>

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<u>Common Name</u>	<u>Scientific Name</u>
Holly, Chinese	<u>Ilex cornuta</u>
Holly, Japanese	<u>Ilex crenata</u>
Holly, Savannah	<u>Ilex attenuata</u>
Holly, Yaupon	<u>Ilex vomitoria</u>
Juniper	<u>Juniperus sp.</u>
Laurel, Mountain	<u>Kalmia latifolia</u>
*Laurel, Otto Luyken	<u>Prunus laurocerasus</u>
Laurel, Schipka	<u>Prunus schipkanensis</u>
Leucothoe	<u>Leucothoe fontanesiana</u>
Leucothoe, Coast	<u>Leucothoe axillaris</u>
Lilac, Cutleaf	<u>Syringa laciniata</u>
Lily-of-the-Nile	<u>Agapanthus africanus</u>
Mock Orange	<u>Pittosporum tobira</u>
Myrtle, Compact	<u>Myrtus communis</u>
Myrtle, Wax	<u>Myrica cerifera</u>
Nandina	<u>Nandina domestica</u>
Oleander	<u>Nerium oleander</u>
Osmanthus	<u>Osmanthus fragrans</u>
Palm, European Fan	<u>Chamaerops humilis</u>
*Palm, Mediterranean Fan	<u>Chamaerops spp.</u>
Photinia, Fraser	<u>Photinia X Fraseri</u>
Pieris, Japanese	<u>Pieris japonica</u>
Pine, Mugo	<u>Pinus mugo</u>
Plum, Natal	<u>Carissa grandiflora</u>
Privet, California	<u>Ligustrum ovalifolium</u>
Privet, Glossy	<u>Ligustrum lucidum</u>
Privet, Variegated	<u>Ligustrum sinensis</u>
Privet, Waxleaf	<u>Ligustrum japonicum</u>
Quince, Flowering	<u>Chaenomeles japonica</u>
*Rhododendron	<u>Rhododendron sp.</u>
Spice Plant	<u>Illicium parviflorum</u>
Spirea	<u>Spirea vanhouttei</u>
Spirea, Japanese	<u>Spirea japonica</u>
*Verbena, Lemon	<u>Aloysia spp.</u>
*Wild Lilac	<u>Ceanothus spp.</u>
Xylosma	<u>Xylosma congestum</u>
Yew	<u>Taxus media</u>
Yew, Japanese	<u>Taxus cuspidata</u>
Yew, Pine	<u>Podocarpus macrophyllus</u>
Yucca, Weeping	<u>Yucca pendula</u>

GROUND COVERS

<u>Common Name</u>	<u>Scientific Name</u>
Ajuga	<u>Ajuga reptans</u>
Capeweed	<u>Arctotheca calendula</u>
Coyotebrush, Dwarf	<u>Baccharis chiloensis</u>
Daisy, Trailing African	<u>Osteospermum fruticosum</u>

<u>Common Name</u>	<u>Scientific Name</u>
Iceplant, Large Leaf	<u>Carpobrotus edule</u>
Ivy, English	<u>Hedera helix</u>
Ivy, Geranium	<u>Pelargonium peltatum</u>
*Jasmine, Asiatic	<u>Trachelospermum asiaticum</u>
*Miscanthus	<u>Miscanthus spp.</u>
Mondograss	<u>Ophiopogon japonica</u>
*Morninglory	<u>Convolvulus spp.</u>
Myoporum	<u>Myoporum parviflorum</u>
Pachysandra	<u>Pachysandra terminalis</u>
Potentilla	<u>Potentilla jackmanii</u>
Potentilla	<u>Potentilla verna</u>
Red Apple	<u>Aptenia cordifolia</u>
Rosemary	<u>Rosemarnus officinalis</u>
Rose-Of-Sharon	<u>Hypericum calycinum</u>
Sand Strawberry	<u>Fragaria chiloensis</u>
*St. Johnswort, Creeping	<u>Hypericum calycinum</u>
Verbena, Peruvian	<u>Verbena peruviana</u>
Vinca	<u>Vinca minor</u>
*Wintercreeper	<u>Euonymus fortunei</u>

PERENNIALS

<u>Common Name</u>	<u>Scientific Name</u>
*Asparagus	<u>Asparagus spp.</u>
Aster, New York	<u>Aster novi-belgii</u>
*Aster, Stokes	<u>Stokesia spp.</u>
*Babys Breath	<u>Gypsophila spp.</u>
*Beard Tongue	<u>Penstemon spp.</u>
Butterfly Weed	<u>Asclepias tuberosa</u>
Canna Lily	<u>Canna generalis 'Lucifer'</u>
Carex	<u>Carex spp.</u>
Daylily	<u>Hemerocallis spp.</u>
*Fortnight Lily	<u>Morea spp.</u>
*Geum	<u>Geum spp.</u>
Hosta	<u>Hosta spp.</u>
Liriope, Green	<u>Liriope spicata</u>
Liriope, Variegated	<u>Liriope muscari</u>
*Nightshade	<u>Solanum spp.</u>
Purple Loosestrife	<u>Lythrum virgatum</u>
*Sweet Flag	<u>Acorus spp.</u>
*Wisteria	<u>Wisteria spp.</u>
*Yarrow	<u>Achillea millefolium</u>

ORNAMENTAL GRASSES

<u>Common Name</u>	<u>Scientific Name</u>
Beach Grass	<u>Ammophila breviflorata</u>
Fescue, Blue	<u>Festuca ovina</u>
Fountain Grass	<u>Pennisetum setaceum</u>

Common Name

Scientific Name

Pampas Grass
*Reed, Giant
Ribbon Grass
Tufted Hair Grass

Cortaderia selloana
Arundo spp.
Phalaris arundinacea
Deschampsia caespitosa

ANNUAL BEDDING PLANTS

Common Name

Scientific Name

*Ageratum
*Chinese Aster
Dusty Miller
Gazania
Gazania, Trailing
Marigold, African
Periwinkle
Plumosa Cockscomb

Ageratum houstonianum
Callistephus chinensis
Senecio cineraria
Gazania splendens
Gazania uniflora leucoleana
Tagetes erecta
Catharanthus roseus
Celosia cristata

WILDFLOWERS

Common Name

Scientific Name

Blackeyed Susan
California Poppy
Coreopsis, Lance Leaved
Oxeye Daisy

Rudbeckia hirta
Eschscholzia californica
Coreopsis lanceolata
Chrysanthemum leucanthemum

*Do not use in California.

WEED SPECIES CONTROLLED

PENDULUM WDG herbicide is recommended for preemergence control of the weed species listed. Applications can be made around and over the top of the ornamentals listed on this label.

GRASSES CONTROLLED

Common Name

Scientific Name

Barnyardgrass
Bluegrass, Annual
Crabgrass
Crowfootgrass
Foxtail, Giant
Foxtail, Green
Foxtail, Yellow
Goosegrass
Itchgrass
Johnsongrass (from seed)
Junglerice
Lovegrass
Panicum, Browntop

Echinochloa crus-galli
Poa annua
Digitaria spp.
Dactyloctenium aegyptium
Setaria faberi
Setaria viridis
Setaria lutescens
Eleusine indica
Pottboellia exaltata
Sorghum halepense
Echinochloa colonum
Eragrostis spp.
Panicum fasciculatum

Common Name

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

Scientific Name

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

BROADLEAF WEEDS CONTROLLED

Common Name

Burweed, Lawn
Carpetweed
Chickweed, Common
Chickweed, Mouseear
Clover, Hop
Cudweed
Fiddleneck
Filaree
Henbit
Knotweed (prostrate)
Kochia
Lambsquarters
Pigweed
Puncturevine
Purslane
Pusley, Florida
Rocket, London
Shepherdspurse
Smartweed, Pennsylvania
Speedwell, Corn
Spurge, Annual
Spurge, Prostrate
Woodsorrel, Yellow
Velvetleaf (Buttonweed)

Scientific Name

Soliva pterosperma
Mollugo verticillata
Stellaria media
Cerastium vulgatum
Trifolium procumbens
Gnaphalium spp.
Amsinckia intermedia
Erodium spp.
Lamium amplexicaule
Polygonum aviculare
Kochia scoparia
Chenopodium album
Amaranthus spp.
Tribulus terrestris
Portulaca oleracea
Richardia scabra
Sisymbrium irio
Capsella bursa-pastoris
Polygonum pennsylvanicum
Veronica arvensis
Euphorbia spp.
Euphorbia maculata
Oxalis stricta
Abutilon theophrasti